Government Policy, Foreign Direct Investment and Unemployment in Emerging Economies

Abayomi T. Onanuga¹, Olaronke T. Onanuga²

Abstract: The broad objective of this study is to determine how government policy influences FDI as well as how FDI affects the level of unemployment as a proportion of labour force in emerging economies. The techniques of analysis are a descriptive statistic and panel regression based on Ordinary Least Squares Method. Evidence from the descriptive analysis affirms that the variables of the study for each country exhibit contradictory behaviour in 1991-2016. In the same period, the foremost beneficiaries of the net inflow FDI are not experiencing the lowest unemployment rate. Panel regression results (2000-2015) suggest that net inflow of FDI has a negative influence on unemployment while government policy has no significant effect on the net inflow of FDI. The study concludes that a continuous inflow of net foreign investment is a good source of creating jobs in emerging economies. Due to the lack of influence of government policy on the net inflow of FDI, the study recommends that emerging economies should revise the regulation on the freedom to trade internationally so as to enhance the continuous flow of foreign direct investment.

Keywords: Emerging markets; Employment; Inflow of foreign investment; Regulation of foreign capital

JEL Classification: F41; E24; F21; G28

1. Introduction

In this study, an attempt is made to find answers to three broad issues relating to emerging economies that are located across the continents. First, the study explains the pattern of flow of Foreign Direct Investment (FDI) into each of the emerging economies of study as well as the growth in the level of unemployment and FDI in these countries, respectively. Second, the study determines how the inflows of FDI influence unemployment in the current and in the lead period. Finally, the paper affirms how government policies influence the flow of FDI in the current as well the lead period. The classification of the country that is qualified to be an emerging

¹ PhD, Department of Economics, Olabisi Onabanjo University, Address: P.M.B. 2002, Ago-Iwoye, Ogun State Nigeria, Corresponding Author: abonanuga@yahoo.com.

² PhD, Department of Economics, Hallmark University, Nigeria, Address: Km 65, Shagamu-Ore Expressway, Ijebu-Itele, Ogun State, Nigeria, E-mail: ronanuga@yahoo.co.uk.

economy in the literature is imprecise. However, a nation that has been experiencing significant growth in improving infrastructure is enlisted as an emerging nation by prominent international bodies like the World Bank and International Monetary Fund (IMF). This paper uses the IMF (2015) list of emerging economies as the sample for analysis.

Emerging economies undoubtedly offer business opportunities that are attractive to investors willing to set-up subsidiary firms or entirely new business identity in their domain. Investors who locate firms in emerging economies do so after considering the economic benefit of such foreign investment as well as the transparency of governance structure in dealings relating to public and private institutions in the host country. In spite of the derivable benefits from such investment decision, foreign investors also face some challenges that are brought about due to government policy shift. For example, freedom to trade in the global space and the country where the investment is located is subject to some factors such as; international control of movement of capital and immigrants, foreign investment ownership, regulatory trade barriers (tariff and non-tariff), adherence to the cost of importing and exporting as well as the exchange rate policy. (Frazer Institute, 2017)

According to UNCTAD (1999), three major factors are prominent for attracting the inflow of FDI to a host nation. These are, economic policies of the host nation in terms of rules and regulations and conditions for doing business, the enthusiasm of the host nation to attract foreign direct investment by liberalizing her economic and immigration policies as incentives for FDI, and the health of the economy as measured by major economic indicators such as income level, the size of the market, stability of prices and opportunities for expansion in growth. Foreign investment inflow into any country can be through any of the following broad means; foreign bank credit facility to an enterprise operating in a host country, the flow of foreign exchange in the form of grant or loans through Official Development Assistance (ODA), foreign direct investment and foreign portfolio investment.

Theoretical literature as discussed in the second part of this paper provides that inflows of FDI can contribute in a number of ways to the economic well-being of the host country. Such contributions include, increase in the gross domestic income and enhancement of trade flows. Others include foreign exchange inflows that enhance the balance of payments position of the host country if the cost of imports for operations is negligible, the inflow of technology especially in the area of energy and telecommunications and expectedly employment generation.

Mody, Razin and Sadka (2002), claims that FDI flows between nations have been on the increase albeit at a rate relatively higher than the World gross domestic product growth rate. Bjorvatn, Kind and Nordas (2001) also affirm that FDI flows

have been higher in developing countries as a proportion of gross domestic product compared to developed nations. UNCTAD (1999) is of the view that FDI is capable of increasing productive capacity and employment of the host country and Lin (2008) also concluded that FDI enhances economic growth, technology transfer and employment generation in developing countries. In spite of these broad views about the gains of FDI to host nations, some other empirical studies on FDI and the benefits to the emerging markets economies have provided divergent results. For example, Balcerzak and Żurek (2011) found that FDI has a significant negative relationship with unemployment in Poland, although this trend is of shortterm duration. Meanwhile, Ismail and Latif (2009) and Aktar and Ozturk (2011) found that the inflow of FDI does not reduce unemployment in Turkey. In a panel study on Central and Eastern European countries, Nucu (2011) revealed that there is an inverse relationship between the inflow of FDI and unemployment rate. Similarly, for the only African emerging economy, Bongumusa, Contogiannis and Kaseeram (2017) found that, in South Africa, the relationship between FDI and employment is significant but negative. Mucuk and Demirsel (2013) also found divergent results for Argentina and Thailand whereby the inflow of FDI increases unemployment in Argentina but reduces unemployment in Thailand. This is the deservingness of this panel study to consider all the countries of the IMF list of emerging economies to answer the following questions. Does government policy attract FDI and does FDI reduce/increase unemployment in emerging economies? What is the trend of inflow of FDI and the growth pattern of unemployment and FDI in emerging market economies considered in this study?

Relying on the theoretical exposition made by Holte (1988), this paper contributes to the literature by determining how the inflows of FDI affect the rate of unemployment and how government policy influences the inflow of FDI in emerging economies. The findings from this study suggest that the emerging economies considered in this study experienced unemployment as a proportion of the labour without the inflow of FDI. However, the net inflows of FDI have been able to create jobs thereby reducing the level of unemployment but government policy (freedom to trade internationally) has no significant effect on the inflow of FDI in emerging economies. The rest of the paper is structured as follows: section two discusses the theoretical framework for this study while section three discusses the methodology. Section four is based on the discussion of findings and section five contains the conclusion and policy recommendations.

2. Theoretical Review

In a perfectly competitive world, bilateral or unilateral foreign direct investment (FDI) would not have been a common phenomenon. (Kindleberger, 1969) Explaining the phenomenon of FDI, there is a consensus amongst scholars that for

FDI to take place one of the favourable factors is that there is an imperfect competition and foreign firms have a competitive advantage that makes their investment in a host country a more viable option. (Kindleberger, 1969)

FDI has been investigated from the macroeconomic point of view using the Gravity model on how bilateral FDI flows from home countries to host countries. (Falk, 2016) It has also been inquired from the microeconomic point of view by using the portfolio theory, production cycle, theory of exchange rates, internalization theory and the eclectic theory to explain the motivations of foreign investment in a host country by foreign investors. (Lipsey, 2002; Denisia, 2010)

At the micro level, the effect of FDI on unemployment rate depends on the features and forms of investment. FDI would have a reducing effect on unemployment rate if it is of the form of Greenfield investments (Hisarciklilar et al, 2009) while it would have no or an increasing influence on unemployment rate if FDI inflow takes the form of Brownfield investments. (Strat et al, 2015)¹ At the macro level, FDI that increases the export of goods and services and rely on highly qualified labour force in the host country positively vibrates on the labour market by resulting in decreasing level of unemployment, vice versa. (Djambaska & Lozanoska, 2015) These are because economic growth theories show that increasing net investments lead to enhanced economic activities with positive impact on employment and negative impact on unemployment rate while the replacement of worn out assets only maintain existing jobs and do not generate employment. (Iacvoiu, 2012)

According to Pigou's theory of unemployment, unemployment exists because wage-earners demand for wage rates that are higher than the equilibrium wage rate (Harrod, 1934) However, there are recent theories that argue that countries with higher unemployment rates have the advantages that foreign investors may think that such countries have an available labour force at lower wages. (Blanchard, 2011)² Meanwhile, earlier theories support Pigou's theory by suggesting that a high unemployment rate in a country can be perceived by foreign investors as a signal of macroeconomic disequilibrium and such countries are not seen as an appropriate host country for foreign investments. (Brozen, 1958)

In response to the suggestion of the earlier theories and support for the recent theories, Holte (1988) explains that if there is unemployment in a closed economy,

¹ A Greenfield investment is when FDI inflow is used to build new production facilities and/or expansion of an existing plant. (Gorg, 2000) Meanwhile a Brownfield investment is when FDI inflow is used to buy or rent an existing production facility which was inefficiently utilised, that is a management buyout. (Balcerzak & Żurek, 2011)

² That is, although the wage-earners demand for a wage rate that is higher than the equilibrium wage rate, the wage rate demanded for is still lower than the wage rate the foreign investors are willing to pay.

a large investment made in such economy will reduce the unemployment. As such, if the closed economy is opened, it is likely that a large (foreign) investment made into such an economy will reduce the domestic unemployment. The foreign investments that have been committed to the host country would expectedly affect unemployment in both the period it was made and in the subsequent periods. In order to encourage the continuous inflow of FDI into the host country, Holte (1998) proposes that the government can use the foreign direct investment to reduce high unemployment rate through its choice of economic policies. Holte (1988) explains this by assuming an economy where these are true:

- (i) Foreign investment reduces unemployment when it is made;
- (ii) Unemployment tends to increase after a foreign investment is made;
- (iii) The government's choice of economic policy can influence the size of foreign investment inflow.

Based on the aforesaid assumptions, Holte (1988) proposes that if two consecutive time periods are assumed: when the foreign investment is made can be termed period 1 and the subsequent period can be termed period 2. To avoid high unemployment in period 1, the government puts in place a policy that should lead to a high foreign investment in this period. The high foreign investment made in period 1 should reduce the unemployment of period 1 but if there is a policy shift, which leads to withdrawal or reduction of inflow of investment, this may also make the unemployment of period 2 to increase.

Holte (1988) used the conflict between ecological goals and the goal of reducing unemployment to illustrate how a foreign investment made in a specific period (period 1) may increase the rate of unemployment in a subsequent period (period 2). That is, in an effort to reduce pollution and preserve natural resources, the government can prohibit the use of a particular production method(s) which could discourage existing foreign investors (from period 1) to leave or reduce their investment in period 2, thereby, increasing unemployment in period 2. Therefore, to keep the unemployment rate in period 2 from rising, the government needs to conduct a policy that attracts more or new foreign investors that cause foreign investment in period 2 to be higher than period 1.

3. Methodology

3.1. Study Sample and Data Description

The sample of emerging economies considered for this study is twenty-three (23) and they are obtained from the IMF (2015) list. The countries are comprised of Argentina, Bangladesh, Brazil, Bulgaria, Chile, China, Columbia, Hungary, India, Indonesia, Malaysia, Mexico, Pakistan, Peru, Poland and Philippines. Others are

Romania, Russia, South Africa, Thailand, Turkey, Ukraine and Venezuela. The data used for analyses are from two sources - The World Bank database for the period (1991-2016) and the Annual Report of the Frazer Institute covering the period (2000-2015).

The variables of the study for each country are unemployment as a percentage of the total labour force, net inflows of foreign direct investment in a balance of payments (BoP) current US\$ dollars (World Bank, 2016) and the proxy for government policy is the freedom to trade internationally. (Frazer Institute, 2017) The estimated index for government policy is comprised of a weighted estimate of freedom to trade internationally, which is one of the major parts for determining the economic freedom of the world index. It covers rules and regulations dealing with contract formations, tariff compliance, and regulatory trade barriers control of the movement of capital and immigrants as well as black market exchange rate. (Frazer Institute, 2017)

3.2. Hypotheses of the Study

Applying the framework explained by Holte (1988), this study tests the following hypotheses:

H₁: FDI inflow in the current period has no significant influence on the unemployment rate in the current period in the emerging markets.

H₂: Government policy in the current period has no significant influence on the size of FDI inflow in the current period in the emerging markets.

H₃: FDI inflow in the subsequent period has no significant influence on the unemployment rate in the subsequent period in the emerging markets.

H₄: Government policy in the subsequent period has no significant influence on the size of FDI inflow in the subsequent period in the emerging markets.

3.3. Empirical Model

To test these hypotheses, the study relies on Holte (1988) proposition in formulating the empirical model in equations 3.1 - 3.4 as indicated in this section. The panel regression analysis for equations 3.1 -3.4 covers a period of 2000-2015 due to government policy data constraint.

$$UEMP_{1it} = \beta_0 + \beta_1 FDI_{1it} + \mu_{1it}$$
 . 3.1

$$FDI_{1it} = a_1 GVP_{1it} + \varepsilon_{1it} \qquad . \qquad . \qquad . \qquad 3.2$$

Where FDI is the net inflow of foreign direct investment, GVP is government policy, UEMP is unemployment rate, ϵ and μ are error terms and a and β are coefficients. Equation 3.2 is specified without a constant based on the assumption that when an economy is closed there is no FDI. There would be FDI only when

the economy is open. While equation 3.1 is specified with a constant because the study assumes there would be unemployment in an economy whether it is closed or opened.

The models in equation 3.1 and 3.2 are specified for period 1. Equations 3.3 and 3.4 are specified for period two.

$$UEMP_{2i(t+1)} = \beta_0 + \beta_1 FDI_{1it} + \beta_2 FDI_{2i(t+1)} + \mu_{2it}$$
 3.3

The coefficients a_1 and a_2 are a priori expected to be positive. β_1 is expected to be negative under equation 3.1 but positive under equation 3.3. β_2 is expected to be negative under equation 3.3.

4. Discussion of Results

4.1. Results of Descriptive Analysis

The sample for the study shows that all the countries experienced unemployment at different levels as a proportion of the workforce. The computed average unemployment level by countries is indicated in Figure 4.1. In the period 1991-2016, the highest level of unemployment rate amongst the countries considered is South Africa (24.05 percent) while the least unemployment rate was experienced by Thailand at 1.45 percent. Six countries experienced an unemployment rate that is below 5 percent (Thailand, Bangladesh, India, Malaysia, China and Mexico). Ten countries fall between 5 and 10 percent (Chile, Hungary, Indonesia, Pakistan, Peru, Philippines, Romania, Russia, Turkey and Ukraine). The unemployment rate of above 10 but below 13 percent was experienced in six countries (Argentina, Brazil, Bulgaria, Columbia, Poland and Venezuela). Out of the 23 emerging economies considered in this study, 16 of them experienced single-digit unemployment rate while others have double-digits.

Figure 4.2 shows the average growth rate of unemployment in the emerging economies for the period 1991-2016. The result of the estimated average growth rate shows that 11 of the 23 economies had a negative growth rate while 12 experienced positive growth rate. This implies that 11 countries were able to reduce the level of unemployment while unemployment increased in 12 countries. The countries that have been able to reduce their level of unemployment in the period considered also maintained a low rate of unemployment. For example, Thailand had the least average rate of unemployment it also had the highest rate of reduction in the level of unemployment during the study period. Bulgaria was able to reduce the level of unemployment next to Thailand while Russia was third in the list of those countries that were able to reduce their countries level of

unemployment. In 12 emerging economies out of the 23, the growth rate of unemployment was positive which implies that unemployment was increasing in these economies. And the highest increase was experienced by Indonesia (see Figure 4.2). The range of increase in the unemployment rate was 3.01 percent growth rate for Indonesia and 0.01 percent growth rate for Pakistan.

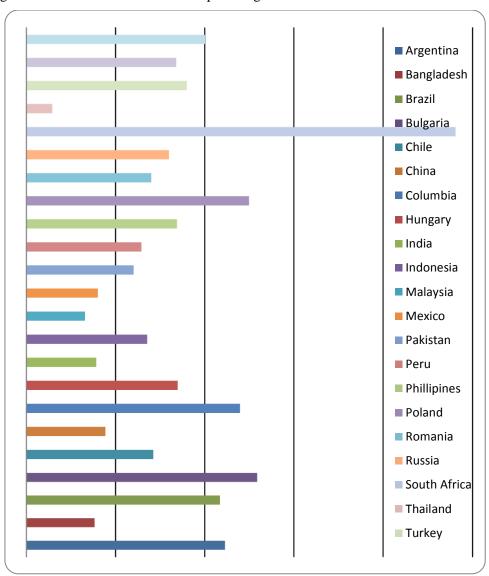


Figure 4.1. Average unemployment as percentage of labour force (1991-2016)

Source: Computed by authors, 2017

Bangladesh unemployment growth rate also increased next to Indonesia while Mexico came third. Other countries whose unemployment growth rate increased were negligible as they range below 1 percent in the period of the study. This implies that the rate of positive growth in unemployment is generally low while about 11 countries

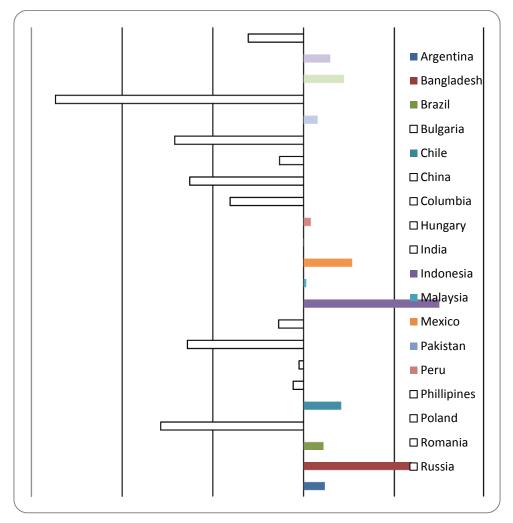


Figure 4.2. Unemployment growth rate 1991-2016

Source: Computed by authors, 2017

have been able to reduce their level of unemployment. The range of reduction in unemployment is between -0.23 percent in the case of China and -5.47 percent for Thailand during the period of the study.

In the period 1991-2016, about US\$7809.59 Billion represents the total net inflow of foreign direct investment into the 23 emerging economies considered in the study. Figure 4.3 shows the distribution of net inflow of FDI into each of the emerging economies for the period of the study. The largest recipient of FDI during the period was China (US\$2971.926 billion) followed by Brazil (US\$962.367 billion) while Russia (US\$962.367 billion) and Mexico (US\$551.231 billion) came third and fourth, respectively.

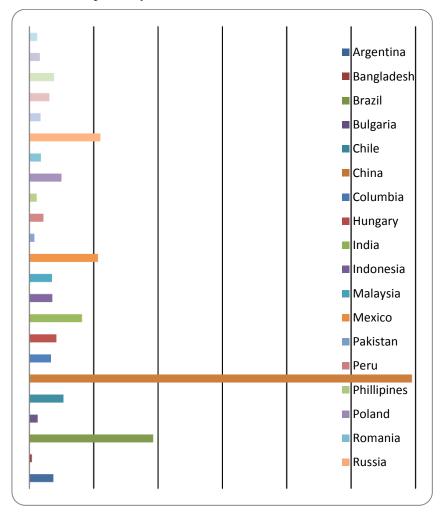


Figure 4.3. Total Net Inflow of FDI (BoP) in current US\$ (1991-2016)

Source: World Bank Development Indicator, 2017

From the rear, the recipient of the least FDI was Bangladesh (US\$19.741 billion) followed by Pakistan (US\$39.119 billion) and thereafter Philippines (US\$56.488

billion). In the same period, four countries benefited between US\$200 and US\$500 billion net inflow of FDI, six countries got between US\$110 and US\$200 billion while six countries attracted a range of US\$60 and US\$110 billion (see Figure 4.3).

The analysis of the percentage share of the total net inflow of FDI in US\$ dollars to each of the emerging economy considered in this study is shown in Figure 4.4. Findings from the study affirm that about 38 % of the total inflow of FDI to the emerging economies was invested in China, 12% in Brazil while Russia and Mexico both had 7% each proximately.

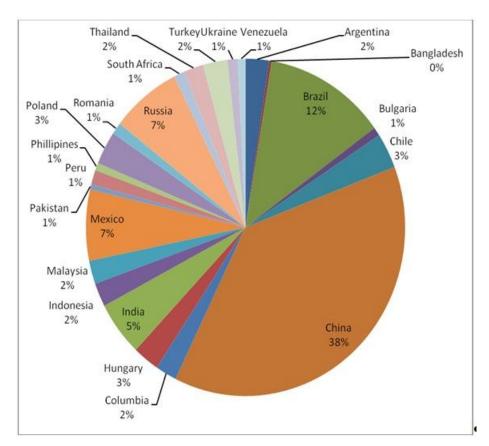


Figure 4.4. Percentage share of the total net inflow of FDI in current US\$ per country (1991-2016)

Source: Computed by authors, 2017

India is next with 5% while Chile, Hungary and Poland attracted an estimate of 3% each. Other countries were able to attract between 1-2% of the total inflow of FDI into the emerging economies.

In terms of continental boundaries (Figure 4.5), 58% of the total inflows of FDI were invested in Asia, 29% in Latin America, 12% in Europe and 1% in South Africa being the only African country in the sample for the study.

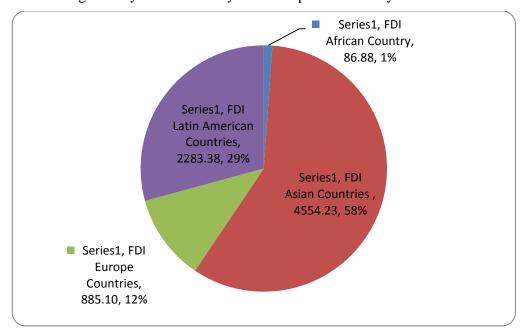


Figure 4.5. Net inflow of FDI by continents in current US\$ (1991-2016)

Source: Computed by Authors, 2017

The average growth rate of net inflow of FDI into the emerging economies during the period 1991-2016 is indicated in Figure 4.6. The analysis of the growth rates indicate that Bangladesh experienced the highest growth rate of 33.72%, Peru was 30.33% while India came third with 27.90% growth rate. Two countries (Thailand and Venezuela) experienced negative growth rate during the period of the study although FDI inflow into these two countries was relatively low during the period of the study.

China had the highest proportion of net inflow in the period covered by the study but the growth rate was 15.14% while Brazil's growth rate at 17.85% was relatively better than that of China even though China experienced a higher net inflow of FDI. Amongst the countries that experienced a positive net inflow of FDI in the period of

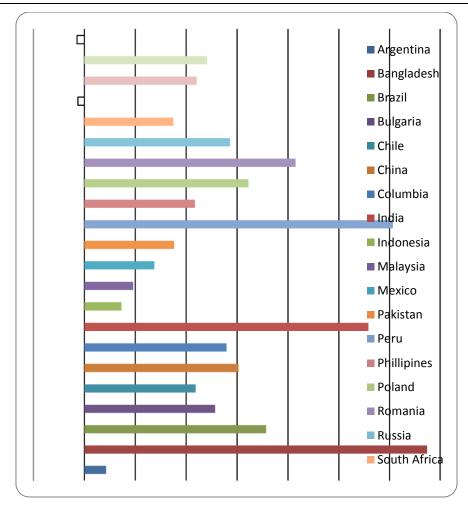


Figure 4.6. Growth rate of net inflow of FDI (1991-2016)

Source: World Bank Development Indicator, 2017

the study, Argentina (2.14%) experienced the least positive growth rate, followed by Indonesia (3.65%) while Malaysia (4.8%) came third. Romania, with a growth rate of 20.74% experienced the highest growth rate in Europe while South Africa, the only African country in the sample, experienced 8.75% growth rate.

The graphical illustration of the index of government policy is the freedom to trade internationally. This is represented in Figure 4.7 for all the countries covering 2000-2015. All the countries except Venezuela had an index of above the average score but the pattern of net inflows of FDI as earlier discussed differs at a wider range from one country to the other. The highest index was experienced by Chile

(8.41), next was Peru (8.24) while Hungary (8.01) came third. Incidentally, Peru experienced the highest FDI growth rate in line with a high index of government policy while the index of government policy in China is not the highest in line with its highest net inflow of FDI during the study period.

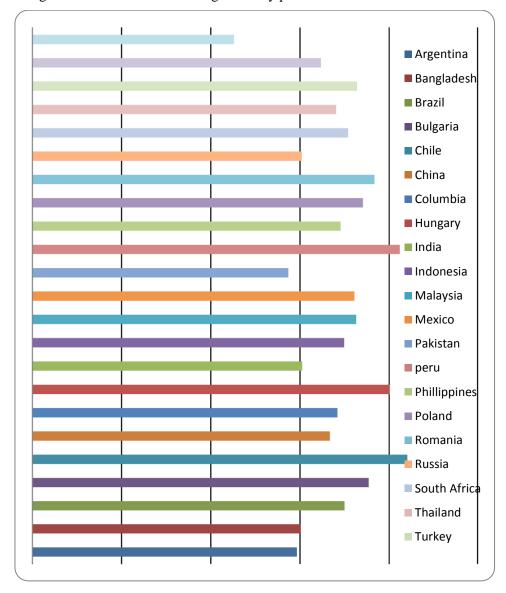


Figure 4.7. Government policy indicator (2000-2015)

Source: Frazer Institute, 2017

4.3. Panel Regression Results

4.3.1. Results of Panel Unit Roots Test

The results of the panel unit root test for the period 2000-2015 is contained in Table 4.1. Using the Levin, Lin and Chu approach, the study rejects the null hypothesis of no unit root in the cross-sectional data at 1% level of significance.

Table 4.1. Panel Unit Root Test

Variable	Method	Type of model	Lag	Order	t-statistic	p-value
FDI	LLC	Intercept and trend	01	I(0)	-3.35560	0.0004*
GVP	LLC	Intercept	01	I(0)	-6.48039	0.0000*
UEMP	LLC	Intercept and trend	01	I(0)	-2.60248	0.0046*
FDI_{2t}	LLC	Intercept and trend	01	I(0)	-3.88965	0.0001*
GVP _{2t}	LLC	Intercept	01	I(0)	-8.73303	0.0000*
UEMP _{2t}	LLC	Intercept and trend	02	I(0)	-5.73997	0.0000*

Source: Author, 2017

(*) denotes 1% level of significance

LLC denotes Levin, Lin and Chu

The order of integration from the unit root test results in Table 4.1 affirms that all the variables are stationary. This implies that the panel regression technique can rely on the Ordinary Least Square (OLS) method. (Eberhardt, 2011)

4.3.2. Panel Regression Results

The panel regression results in Tables 4.2 - 4.5 are derived after the inclusion of the autoregressive order one (AR (1)). This was considered so as to correct for the problem of autocorrelation in the parameter estimates. In Table 4.2, the panel OLS results of model 3.1 suggest that without FDI there is unemployment in emerging economies. In an open emerging economy, the relationship between net inflow of FDI and unemployment in the current period is indirect. That is, in the case of a unit increase in the net inflow of FDI into the emerging economies, current unemployment level will reduce by -1.37E-11 percentage points as a proportion of the labour force at 1% level of significance.

Table 4.2. Results of Model 3.1

Variable	Coefficient	Standard Error	t-statistic
Constant	4.9312	1.5271	3.2292
FDI _t	-1.37E-11	4.55E-12	-3.0107*

Source: Authors, 2017

Durbin-Watson statistic: 1.3788

R. Squared: 0.9553

(*) denotes 1% level of significance

The implication of the result in Table 4.2 is that the current inflow of FDI significantly reduces the current level of unemployment in emerging economies. Based on this panel regression result, the study rejects the null hypothesis of no significant relationship between the net inflow of FDI and unemployment. This affirms Holte's (1988) proposition that foreign investment reduces unemployment when it is made. The Durbin-Watson (D-W) statistic result also infers that the study fails to reject the null hypothesis of no positive or negative autocorrelation of the estimation. \(^1\)

The result in Table 4.3 shows that government policy (freedom to trade internationally) does not significantly attract the net inflow of FDI into emerging economies. The study, based on the result in Table 4.3, fails to reject the null hypothesis of no significant relationship between government policy and the net inflow of FDI in emerging economies. The D-W statistic affirms the absence of positive or negative autocorrelation² in the coefficient estimates.

Table 4.3. Results of Model 3.2

Variable	Coefficient	Standard Error	t-statistic
GVP _t	-3.37E+08	1.80E+09	-0.1871

Source: Authors, 2017

Durbin-Watson statistic: 2.3270

R. Squared: 0.8997

The inference from the results is that evidence from emerging economies considered in this study does not support Holte's (1988) argument that government policy attracts the inflow of FDI into emerging economies in terms of freedom to trade internationally.

Table 4.4 contains the results of the lead net inflow of FDI on the level of unemployment in the lead period. The result also shows that unemployment exists in the emerging economies without inflow of FDI. Second, the net inflow of FDI in the current period in this model does not explain changes in the unemployment rate in the lead period. This does not support Holte's (1988) proposition that the foreign investment made in a current period may increase the unemployment rate in a subsequent period.

 $^{^1}$ The decision rule for the D-W null hypothesis of no positive or negative autocorrelation is $d_u\!\!<\!d<\!\!4$ -du. For model 3.1, it can be interpreted as 1.086<1.379<(4 - 1.086 =2.914) therefore the study fails to reject the null hypothesis at 1% level of significance.

² Based on D-W decision rule in note 3, 1.086 < 2.37 < (4 - 1.086 = 2.914).

Table 4.4. Results of Model 3.3

Variable	Coefficient	Standard Error	t-statistic
Constant	4.6461	1.5326	3.0314*
FDI _t	-3.29E-12	4.34E-12	-0.7599
FDI_{t+1}	-1.33E-11	4.29E-12	-31004*

Source: Authors 2017

Durbin-Watson statistic: 1.3743

R. Squared: 0.9590

(*) denotes 1% level of significance

Third, the net inflow of FDI in the lead period affects the changes in unemployment in the lead period negatively. A unit increase in FDI in the lead period will reduce the lead period unemployment rate by -1.33E-11. The result affirms Holte's (1988) proposition that foreign investment made in a subsequent period would reduce the unemployment rate of the subsequent period. The test of hypothesis based on D-W statistic yardstick allows the study to fail to reject the null hypothesis of no positive or negative autocorrelation.¹

In Table 4.5 the result shows that changes in the government policy (freedom to trade internationally) in the lead period has no significant effect on the inflow of FDI in the lead period in the emerging economies. Consequently, the study fails to reject the null hypothesis that states that there is no significant relationship between government policy in the lead period and the net inflow of FDI into emerging economies in the lead period. Thus, the study fails to support Holte (1988).

Table 4.5. Results of Model 3.4

Variable	Coefficient	Standard Error	t-statistic
GVP_{t+1}	-4.11E+08	1.91E+09	-0.2152

Source: Authors, 2017

Durbin-Watson statistic: 2.3442

R. Squared: 0.8993

The result of the D-W statistic is similar to the other models, by affirming that the estimation has no positive or negative autocorrelation.² This result, as well as the one obtained for model 3.2, does not support Holte's argument that government policy especially the freedom to trade internationally could attract the inflow of FDI into emerging nations in either the current period or the lead period.

¹ See note 3. 1.252 < 1.374 < (4 -1.252 = 2.748).

² See note 3. 1.086 < 2.344 < (4 - 1.086 = 2.914).

In respect of the relationship between inflow of FDI and unemployment, the findings from this study not only affirms that inflow of FDI has a negative relationship with unemployment rate the result is also similar to the results of Nucu (2011) based on a panel study that investigated the same phenomenon for Central and Eastern European countries.

5. Conclusion and Recommendations

The study determined how government policy affects the net inflow of FDI as well as how FDI inflow influences the level of unemployment rate in emerging economies. The analysis of descriptive statistics covered 1991-2016 while the panel regression estimation for the study was for 2000-2015. The result of the descriptive analysis affirms that a total of about US\$7.8 trillion were attracted into the emerging economies during 1991-2016. All the emerging economies relatively benefited from the net inflow of FDI but China was the highest beneficiary. All the countries also experienced some degree of unemployment but the lowest level was experienced by Thailand. The growth rate of net inflow of FDI affirms that Bangladesh experienced the highest growth rate while Thailand and Venezuela had a negative growth rate. In respect of unemployment growth rate, 11 countries were able to reduce the level of unemployment while unemployment increased in 12 countries. The average rate of unemployment was highest in South Africa and lowest in Thailand. The government policy proxy is the freedom to trade internationally. The index was highest in Chile and least in Venezuela.

The panel regression results affirm that the net inflow of FDI into emerging economies has a significant negative relationship with the level of unemployment in both the current and subsequent periods. However, we found no evidence to support the argument that government policies (freedom to trade internationally) affect the net inflow of FDI into emerging economies. The study made the following conclusions. Based on descriptive statistic analysis the biggest beneficiaries of the net inflow FDI in emerging economies do not experience the lowest rate of unemployment. From the panel regression results, the net inflow of FDI contributes to the reduction of unemployment in both the current and lead period but government policy (freedom to trade internationally) is not the reason for attracting the inflow of FDI into emerging economies. The study recommends that there is need to revise the policies on the freedom to trade internationally, especially policies affecting foreign investments, in emerging economies. This is important so as to further enhance the inflow of FDI that may further reduce the level of unemployment in emerging economies.

6. Bibliography

Aktar I. & Ozturk, L. (2009). Can Unemployment be cured by Economic Growth and Foreign Direct Investment in Turkey? *International Research Journal of Finance and Economics*, p. 27.

Balcerzak A.P. & Zurek, M. (2011). Foreign Direct Investment and Unemployment: VAR Analysis for Poland in the years 1995-2009. *European Research Studies*, 14(1), pp. 3-14.

Bjorvatn, K.; Kind, H.J. & Nordas H.K. (2001). The Role of FDI in Development. Foundation for Research in Economic and Business Administration Working Paper, No 62/01.

Blanchard, O. (2011). Macroeconomics. Boston, Mass. Pearson Prentice Hall.

Bongumusa, P.M; Contogiannis, E. & Kaseeram, I. (2017). The Contribution of Foreign Direct Investment (FDI) on Employment and Economic Growth in South Africa: A Vector Autoregressive (VAR/VECM) Approach. Retrieved from: https://2017.essa.org.za/fullpaper/essa_3382.pdf, on the 12.20.2017.

Brozen, Y. (1958). Means for Maintaining Economic Stability. *Journal of Farm Economics*, 40, pp. 1069-1078.

Denisia V. (2010). Foreign Direct Investment Theories: An overview of the main FDI theories. *European Journal of Interdisciplinary Studies*, 2(2), pp. 104-110.

Djambaska, E. & Lozanoska, A. (2015). Foreign Direct Investment and Unemployment Evidence from the Republic of Macedonia. *International Journal of Economics, Commerce and Management*, 3(12), pp. 73-85.

Eberhardt, M. (2011). Panel Time Series Modelling: New tools for analyzing xt data. London, UK Stata users group meeting. Lass Business School.

Falk, M. (2016). A gravity model of foreign direct investment in the hospitality industry. *Tourism Management*, 55, pp. 225-237.

Frazer Institute (2017). *Economic Freedom of the World: 2017 Annual Report*. Retrieved from: https://www.fraserinstitute.org/studies/economic-freedom on the 12.18.2017.

Gorg, H. & Greenaway, D. (2002). Much ado about nothing? Do Domestic Firms really benefit from Foreign Direct Investment? Research Paper 2001/37, Globalisation and Labour Markets Programme, at Leverhulme Centre for Research on Globalisation and Economic Policy, Nottingham.

Harrod, R.F. (1934). Professor Pigou's theory of unemployment. *The Economic Journal*, 44(173), pp. 19-32.

Hisarciklilar, M. & Gültekin-Karakaş, Aşici, A. (2009). Can FDI Be a Panacea For Unemployment? The Turkish Case. *Joint Workshop of Economic and Social Research Centre and University of Nottingham*, Retrieved from http://www.esam.itu.edu.tr/NottinghamWorkshopPapers/Hisarciklilar-Karakas-Asici-NW.pdf on the 12.10.2017.

Holte, F.C. (1988). Four papers on the theory of unemployment. Rapporter Fra Statistisk Sentralbyra 87/11, Central Bureau of Statistics of Norway, Oslo.

Iacvoiu, V.B. (2012). Impact of Capital Investment on unemployment in the context of Economic Crisis. The case of Romania. *Economic Insights – Trends and Challenges*, 1(64), pp. 36-47.

IMF (2015). *Emerging Markets*. Retrieved from: https://en.wikipedia.org/wiki/Emerging_markets or http://www.imf.org/external/pubs/ft/weo/2015/02/pdf/text.pdf on the 12.09.2017.

Ismail, A. & Latif, O. (2009). Can Unemployment be Cured by Economic Growth and Foreign Direct Investment in Turkey? *International Research Journal of Finance and Economics*. 27, pp. 1450-2887.

Kindleberger, C.P. (1969). American Business Abroad. The International Executive, 11, pp. 11–12.

Lin, C.H. (2008). Role of Foreign Direct Investment in Telecommunication Industries: A Developing Countries' Perspective, *Contemporary Management Research*, 4(1), pp. 29-42.

Lipsey, R. (2002). Home and Host Country Effects of FDI. Lidingö, Sweden.

Mody, A.; Razin, A. & Sadka, E (2002). *The Role of Information in Driving FDI: Theory and Evidence*. Retrieved from: https://www.biu.ac.il/soc/ec/seminar/data/assaf.pdf on the 12.14.2017.

Mucuk, M. & Demirsel, M.T. (2013). The Effect of Foreign Direct Investments on Unemployment: Evidence from Panel Data for Seven Developing Countries. *Economics & Finance*, 2(3).

Nucu, A.E. (2011). The Dynamics of Foreign Direct Investments in Central and Eastern Europe under the Impact of International Crisis of 2007. *CES Working Papers*, 3(1), pp. 81-91.

Strat, V.A.; Alexandru, A.D. & Vass, A.M.P. (2015). FDI and the Unemployment – A Causality Analysis for the Latest EU Members. *Procedia Economics and Finance*, 23(2015), pp. 635-643.

UNCTAD (1999). Comprehensive Study of the Interrelationship between Foreign Direct Investment and Foreign Portfolio Investment UNCTAD/GDS/DFSB/5.

World Bank (2016). World Bank Development Indicators. Retrieved from: www.data.worldbank.org on the 12.14.2017.