

The Effects of Political Risk, Macroeconomic and Country Specific Factors on FDI in Developing Countries

Anita Hasli¹, Nurhani Aba Ibrahim², Catherine S.F. Ho³

¹Faculty of Business Management, Universiti Teknologi MARA Cawangan Sarawak, 94300, Sarawak, Malaysia, ²Faculty of Business Management, Universiti Teknologi MARA Cawangan Sarawak, 94300, Sarawak, Malaysia, ³Faculty of Business Management, Universiti Teknologi MARA, 40450, Shah Alam, Malaysia.

To Link this Article: <http://dx.doi.org/10.6007/IJARBS/v9-i6/5957>

DOI:10.6007/IJARBS/v9-i6/5957

Published Date: 30 June 2019

Abstract

Background: Inadequate capital and poor governance are economic issues that concern developing countries which necessitates the need for capital such as Foreign Direct Investment (FDI) which is considered as the largest source of external funds to countries. In addition, fluctuations in the net FDI flow in developing countries has remained a major concern for policy makers. This vulnerable state of affairs warrants the motivation of this study. **Objective:** The objective is to determine the effects of political risk, macroeconomic and country specific factors on the net FDI flow per capita. **Results:** The panel regression analysis shows that political risk, GDP growth, exchange rate, gross fixed capital formation and natural resources rents have significant positive relationship with the net FDI flow per capita. In the short run error correction model, GDP growth, trade openness, exchange rate and natural resources rents are significant drivers of net FDI flow per capita. **Conclusion:** The ability of developing countries to attract FDI depends on political stability and positive sustainable economic development. In addition, the ability of developing countries to attract FDI depends on the ingenuity of policy makers to formulate policies in niche sectors to suit each country's economic development goals.

Keywords: Cointegration, Fixed Effect Model, Error Correction Model

Introduction

Economic problems of developing countries such as inadequate capital, sovereign debt, poor governance, human capital inadequacies as well as unequal distribution of income and wealth warrants the need for additional capital investment. In order to overcome these economic challenges, developing countries depend on not only internal but also external sources of funds. Inadequate internal sources of funds would lead to developing countries utilization of external sources to minimize their economic issues. The external sources of funds include

international borrowings, private capital flows (foreign direct investment, foreign portfolio investments, foreign institutional investments and other investments), official development assistance (ODA) and international remittances. On that note, foreign direct investment has remained the largest source of external financial funds to developing countries according to (UNCTAD, 2016). The presence and growth of FDI is clearly important for the sustainable growth and social welfare of a developing country. Importance of FDI to the host country includes increase in trade, business cycle synchronization, employment, technology diffusion and transfers, knowledge transfers, quality managerial and labor skills, more equality and social welfare, innovation and financial development, catalyst to development of local industries in terms of efficiency, rise in productivity and competition. Nevertheless, the net FDI flow in developing countries has been inconsistent in the last few decades as shown in Figure 1. Consequently, FDI is a major concern of many developing countries in need of capital. The appropriate governance of a developing country is a potential significant factor in attracting FDI as high level of political risk could possibly discourage the inward FDI. This governance scenario faced by developing countries sets the tone for this study in which the objective is to determine the effects of political risk, macroeconomic and country specific factors on the net FDI flow. The empirical findings from studies conducted on different parts of the world with different methodologies and time period have generated mixed results with regard to the effect of political risk, macro-economic and country specific factors on the inflow of FDI. A number of research on the effect of political risk on the inflow of FDI found that low level of political risk or higher degree of political stability has positive significance on inward FDI flow as shown in studies conducted by Jadhav (2012), Jimenez (2011), Liargovas and Skandalis (2011), Serin and Caliskan (2010), and Hattari and Rajan (2009). On the other hand, high level of political risk has a negative effect on the inward FDI flow as shown in studies conducted by Wolff (2007), Sokchea (2007) and Quazi (2007). As for the influence of macro-economic factors, it was found that GDP has significant positive relation with the inward FDI flow in studies by Jimenez (2011), Liargovas and Skandalis (2011), and Serin and Caliskan (2010). GDP size and GDP growth rate had a significant positive effect on FDI as found by Mottaleb and Kalirajan (2010). Trade openness has positive significance on inward FDI flow as reported by Jiang, Liping and Sharma (2013), Jadhav (2012), Serin and Caliskan (2010) as well as Ho and Rashid (2010). Growth in money supply leads to economic stability and progress which should attract FDI and was found to have a positive influence on inward FDI flow as shown in studies conducted by Shahrudin, Yusof and Satar (2010), Oladipo (2013), Vita and Kyaw (2008) and Bond (1998). Exchange rate has significant positive relation with the inward FDI flow in studies by Jimenez (2011), Liargovas and Skandalis (2011), Ho and Rashid (2010), and Vijayakumar, Sridharan and Rao (2010). Studies on the influence of country specific factors show that Gross fixed capital formation has positive significance on inward FDI flow as reported by Jiang, Liping and Sharma (2013), Jimenez (2011), Kok and Ersoy (2009) and Ang (2008). Natural resources rents have positive significance on inward FDI flows in studies by Aleksynska and Havrylchyk (2013), Ezeoha and Cattaneo (2012), Jadhav (2012) and Vogiatzoglou (2007). The inconclusive and contradictory findings of drivers of FDI research found in different parts of the world is an issue that validates the motivation for this study. In addition, the minimal number of studies on the effect of political risk on the net FDI flow justifies the purpose of this study.

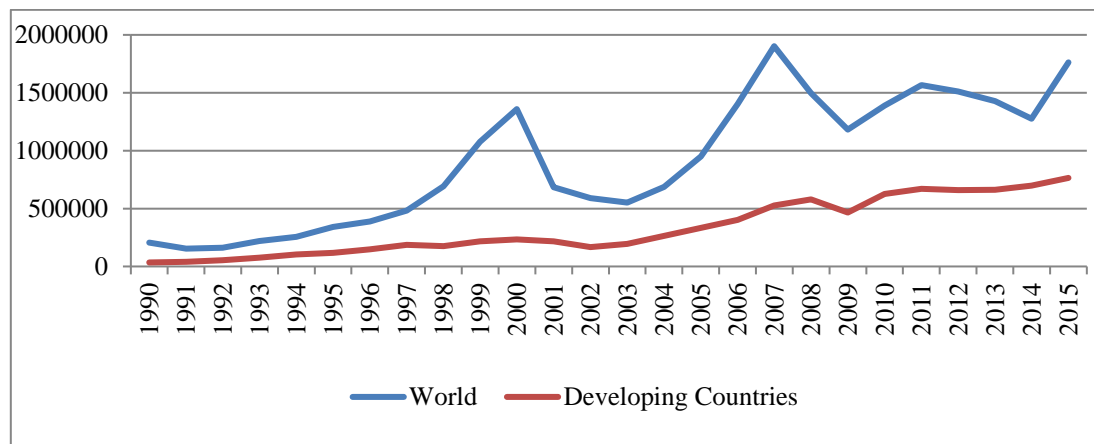


Figure 1: Trend of net FDI flow in Developing Countries and the World 1990-2015 (USD Million); Source: UNCTAD (2016)

Methodology

Historical data of 20 countries from 1993 until 2014 are collected from various databases including the International Financial Statistics (IFS) and Balance of Payment (BOP) of the International Monetary Fund (IMF), the World Bank Open Data, and the United Nations Conference on Trade and Development (UNCTAD). The political risk rating data is obtained from the Political Risk Service (PRS) database. The political risk rating is the aggregate points based on 12 sub-components which are government stability, socioeconomic conditions, investment profile, internal conflict, external conflict, corruption, military in politics, religious tensions, law and order, ethnic tensions, democratic accountability, bureaucracy quality. The panel of developing countries consists of China, Hong Kong, India, Kuwait, Malaysia, Pakistan, the Philippines, Thailand, Argentina, Chile, Colombia, Guatemala, Mexico, Peru, Uruguay, Venezuela, Bulgaria, Czech Republic, Hungary and Poland. The macro-economic data which are considered as control variables include GDP growth, trade openness, exchange rate, and money supply. The country specific data are gross fixed capital formation and natural resources rents. The macro-economic data (with the exception of trade openness and money supply) are transformed by natural logarithm to ensure there is no stationarity problem or presence of a unit root (Table 2). A highly skewed variable can be transformed into one that is more approximately normal by using logarithmic transformations. Preliminary analysis which includes the descriptive statistics and correlation test are conducted on the net FDI flow per capita, macro economic and country specific factors included in the panel regression model as shown in Table 3 and Table 4. The net FDI flow per capita, macroeconomic, country specific factors and political risk included in the model were determined by the Pesaran's Cross-section Augmented Im-Pesaran-Shin (CIPS). The econometric methodology implemented in this study applies the panel regression model and the error correction model. Following the procedure set by Ibrahim (2011), the inferential procedure begins with the test for stationarity using Pesaran's CIPS (2007) test for each quantitative variable. The testable variables are first subjected to the stationarity test at level in which it was found that not all the variables are stationarity. Further stationarity tests at first difference are conducted in order to fulfil the requirements of the panel cointegration test which is stationarity at first difference and the results are shown in Table 5. The next step is to implement a panel cointegration test developed by Westerlund (2008) to cater for the cross-sectional dependence characteristics of the panel in this study and results are as shown in Table 6. The

Westerlund's test carries a null hypothesis of no cointegration (H_0 = no cointegration). There are two test statistics generated which are the group-mean test statistics (G_t and G_α) and the panel test statistics (P_t and P_α). Rejection of H_0 using the group-mean test is taken as evidence of co integration of at least one of the cross- sectional units (country). Rejection of H_0 using the panel test is taken as evidence of co integration for the whole panel. A multicollinearity test for macro economic and country specific factors show that the variance inflation factor of each variable is less than 10 and therefore there is no multicollinearity problem. The Wald test for coefficient validity is applied and the test carries the null of each parameter where $\beta=0$. A rejection of the null hypothesis is found and the results show that the Wald test chi square (X^2) is 8.43 with p-value < 0.01 for political risk, GDP growth, exchange rate, gross fixed capital formation and natural resources rents. The long run model is established based on Equation 1 and the results is shown in Table 7. The next step is to estimate the error correction model (Equation 2). The Engle-Granger (1987) two step procedure is applied to specify the appropriate error correction model for heterogeneous panel. Once the residual is obtained (ω_{it}), the next step is to generate the lagged residual (one period lag of the residual) which acts as the error correction term (ECT) to estimate the dynamic error correction model (ECM) as stated in Equation 2. Also, the variables are transformed to first difference to satisfy the condition when estimating the ECM. λ is found to be significant and contains a negative sign, as stated in the results in Table 8, validates the short run equilibrium relationship among variables. The coefficient for GDP growth, trade openness, exchange rate and natural resources rents are valid (not zero) as the Wald test results chi square (X^2) is 5.38 with p-value < 0.01.

(i) Panel regression model:

$$Y_{it} = \alpha_{it} + \beta_1 PR_{it} + \beta_2 GDP_{it} + \beta_3 TO_{it} + \beta_4 ER_{it} + \beta_5 MS_{it} + \beta_6 GFCF_{it} + \beta_7 NRR_{it} + \varepsilon_{it} + \mu_{it}$$

Equation 1

(ii) Error Correction Model:

$$\Delta Y_{it} = \alpha_{it} + \beta_1 \Delta PR_{it} + \beta_2 \Delta GDP_{it} + \beta_3 \Delta TO_{it} + \beta_4 \Delta ER_{it} + \beta_5 \Delta MS_{it} + \beta_6 \Delta GFCF_{it} + \beta_7 \Delta NRR_{it} + \lambda_8 \omega_{it-1} + \varepsilon_{it}$$

Equation 2

Table 1

Terminologies of symbols in Equation 1 and Equation 2

Panel Regression Model	Error Correction Model
α = constant term	α = constant term
β = coefficient of the variables	β = coefficient of the variables
Y = net FDI flow per capita	ΔY = 1 st difference of net FDI flow per capita
PR = Political risk	ΔPR = 1 st difference of political risk
GDP = GDP growth	ΔGDP = 1 st difference of GDP growth
TO = Trade openness	ΔTO = 1 st difference of trade openness
ER = Exchange rate	ΔER = 1 st difference of exchange rate
MS = Money supply/GDP	ΔMS = 1 st difference of money supply/ GDP
$GFCF$ = Gross fixed capital formation/GDP	$\Delta GFCF$ = 1 st difference of gross fixed capital formation/GDP
NRR = Natural resources rents/GDP	ΔNRR = 1 st difference of natural resources rents/GDP
ε_{it} = idiosyncratic term	ω_{it-1} = Error Correction Term

μ_{it} = unit specific error term/random error component i = country t = 1993 to 2014	λ = coefficient of the error correction term ε_{it} = idiosyncratic term i = country t = 1993 to 2014
---	--

Table 2

Variables included in the Regression Model

Variables	Measurement	Data Transformation	Expected results
Net Foreign Direct Investment flow per capita (FDI)	Net FDI flow per capita (USD mil)	Natural Logarithm	
Political risk (PR)	Aggregate points	Natural Logarithm	Positive
GDP growth (GDP)	Changes in annual GDP	Ratio	Positive
Trade openness (TO)	(Import + Export)/ GDP	None	Positive
Exchange rate (ER)	USD	Natural Logarithm	Positive
Money supply (MS)	Money supply/GDP	None	Positive
Gross fixed capital formation (GFCF)	GFCF/GDP	None	Positive
Natural resources rent(NRR)	Natural resources rent as a percentage of GDP	Natural Logarithm	Positive

Note: *Political risk indicator is sourced from the International Country Risk Guide (ICRG) methodology of the PRS database; 0 (very high risk)-100 points (very low risk).

Results

Descriptive Analysis

The standard deviation indicates a moderate variation in the net FDI flow per capita among the countries as shown in Table 3. There is a small variation in the level of political risk indicating that these countries are ranged from moderate to very low political risk. The variation in the GDP growth is expected due to differences in each countries' economic progress. With regard to trade openness, most of the countries adopted similar liberalization policies in attracting FDI. The exchange rate variation is expected due to the heterogeneity of the developing countries domestic currency against the USD. The variation in money supply is expected indicating the difference in monetary policies exercised by each developing country. The high variation in the gross fixed capital (GFCF/GDP) indicates the differences in the infrastructure of each country. High variations in the natural resources rents/GDP is expected as each developing countries' natural resources endowment is different.

Table 3

Descriptive Analysis

Statistics	Net FDI flow per capita (USD mil)	PR (points)	GDP (%)	TO	ER (USD)	MS	GFCF/GDP	NRR/GDP (%)
Mean	503.49	67.72	11.17	0.89	0.52	0.69	0.34	8.05
Min	-129.47	43	-283.20	0.14	0.0003	0.11	0.01	0.0007
Max	14046.87	86.58	4381.38	4.58	30.57	3.61	4.47	62.62
Std.Dev.	1677.94	9.33	212.71	0.74	1.95	0.56	0.62	11.97

Note: Number of observation for 20 countries is 440

3.2 Correlation Analysis

The correlation tests apply the transformed data of the FDI, macro-economic and country specific factors and as shown in Table 4. Political risk, trade openness and money supply has significant positive association with FDI. However, natural resources rents have significant negative association with FDI.

Table 4

Correlation Test Results of Macro-economic factors, Country Specific factors and inflow of FDI

Variables	Net FDIPC	PR	GDP	TO	ER	MS/GDP	GFCF/GDP	NRR/GDP
Net FDI flow per capita	1							
Political risk	0.28 ^a	1						
GDP growth	0.02	0.07	1					
Trade openness	0.74 ^a	0.43 ^a	0.03	1				
Exchange rate	-0.03	0.05	-0.02	-0.00	1			
MS/GDP	0.72 ^a	0.28 ^a	0.00	0.80 ^a	-0.03	1		
GFCF/GDP	-0.02	0.09 ^b	0.00	0.08 ^c	-0.06	0.04	1	
NRR/GDP	-0.13 ^a	-0.10 ^b	0.03	0.09 ^c	0.30 ^a	0.07	-0.10 ^b	1

Note: The Pearson Product Moment test is used for the correlation test; Number of observation for each of the variable is 440; ^a, ^b and ^c denotes significance at 1 per cent, 5 per cent and 10 per cent respectively;

Stationarity Test

The stationarity tests as shown in Table 5 indicate that all the testable variables are significant at 1 per cent significant level and therefore stationarity at 1st difference to be considered for Equation 1 and Equation 2.

Table 5

Cross-section augmented Im, Pesaran and Shin (CIPS) test at 1st Difference

Variable	No Constant No Trend (i)*	Constant (i)	Constant and Trend (i)	No Constant No Trend (ii)**	Constant (ii)	Constant and Trend (ii)
Net FDI flow per capita	-5.346 ^a (1)	-5.395 ^a (1)	-5.426 ^a (1)	-5.346 ^a (1)	-5.395 ^a (1)	-5.427 ^a (1)
Political risk	-3.775 ^a (1)	-3.759 ^a (1)	-3.790 ^a (1)	-3.775 ^a (1)	-3.759 ^a (1)	-3.790 ^a (1)
GDP growth	-5.503 ^a (1)	-5.433 ^a (1)	-5.388 ^a (1)	-3.774 ^a (1)	-5.417 ^a (1)	-5.291 ^a (1)
Trade openness	-4.123 ^a (1)	-4.208 ^a (1)	-4.271 ^a (1)	-5.503 ^a (1)	-4.065 ^a (1)	-4.140 ^a (1)
Exchange rate	-4.599 ^a (1)	-4.677 ^a (1)	-4.775 ^a (1)	-4.599 ^a (1)	-4.568 ^a (1)	-4.648 ^a (1)
MS/GDP	-4.762 ^a (1)	-4.782 ^a (1)	-4.773 ^a (1)	-4.762 ^a (1)	-4.885 ^a (1)	-4.761 ^a (1)
GFCF/GDP	-3.911 ^a (1)	-3.840 ^a (1)	-3.880 ^a (1)	-3.911 ^a (1)	-3.840 ^a (1)	-3.880 ^a (1)
NRR/GDP	-4.537 ^a (1)	-4.545 ^a (1)	-4.595 ^a (1)	-4.537 ^a (1)	-4.545 ^a (1)	-4.595 ^a (1)

Note: the Pesaran's Cross-section Augmented Im-Pesaran-Shin (CIPS) 2007 test is used for the stationarity test; rejection of the H_0 (non stationarity at p value < 0.001) is to be taken that the variable is stationarity; ^a denotes cv1 (significance at 1 per cent), ^b denotes cv5 (significance at 5 per cent) and ^c denotes cv10 (significance at 10 per cent); the figure in parenthesis denotes the maximum lag; $N, T = (23, 16)$ with 368 observations; the $Z[t\text{-bar}]$ statistic parallel to IPS(2003) $Z[t\text{-bar}]$ is distributed standard normal under the null hypothesis of non-stationarity; the dynamics is lags criterion decision general to particular, based on F joint test; (i) denotes the dynamics in Wald test of composite linear hypothesis about the parameters of the model; (ii)** denotes the dynamics in lags criterion decision Portmanteau (Q) test for white noise;*

3.4 Panel Cointegration test

The panel cointegration test results as shown in Table 6 indicates that the variables to be included in Equation 1 and Equation 2 are political risk, GDP growth, trade openness, exchange rate, money supply, gross fixed capital formation and natural resources rents. These variables are co-integrated with net FDI flow per capita at lag 1.

Table 6

Panel Cointegration results: cointegration with dependent variable net FDI flow PC at Lag 1

Statistics	PR	GDP	TO	ER	MS/GDP	GFCF/GDP	NRR/GDP
G_t	- 1.751 ^b	0.033 ^b	-0.813	-1.542 ^b	-0.609	-0.749	-0.604 ^b
G_α	- 4.931 ^a	-0.015 ^b	- 1.461 ^a	-4.652 ^a	-0.486 ^b	-0.735 ^b	-0.438 ^b
P_t	- 9.114 ^a	-0.556	- 2.302 ^b	-5.402 ^a	-1.472 ^b	-2.802 ^b	-1.009 ^b
P_α	-5.390	-0.021	-0.482	-2.950	-0.327	-0.447	-0.086

Note; The Westerlund (2007) error correction based test for cointegration is used to test for cointegration; rejection of H_0 (no cointegration) is to be taken as cointegration; ^a denotes the rejection of the null hypothesis at the 1 per cent significance level, ^b denotes the rejection of the null hypothesis at the 5 per cent significance level, ^c denotes the rejection of the null hypothesis at the 10 per cent significance level.

3.5 Panel regression results

Table 7 shows the panel regression model based on Equation 1 which shows that Political risk, GDP growth, Exchange rate, Gross fixed capital formation and Natural resources rents have a significant effect on the net FDI flow per capita.

Table 7

The Panel Regression results

Variables	Robust standard error	Coefficient
Political risk	0.3155	0.8664 ^a
GDP growth	0.0099	0.0173 ^c
Trade openness	0.1285	0.1694
Exchange rate	0.1116	0.4146 ^a
Money supply/GDP	0.1800	0.2023
Gross fixed capital formation/GDP	0.0673	0.1260 ^c
Natural resources rents/GDP	0.0311	0.1087 ^a
Constant		1.2159
F statistics		12.75 ^a

Note: Based on the Hausman test the Fixed Effect Model is used; ^{a, b, c} denotes significance at 1 per cent level, 5 per cent level and 10 per cent level respectively; higher political risk ratings means lower levels of political risk based on the International Country Risk Guide (ICRG) methodology of the PRS database; number of observations is 420.

The political risk factor has significant positive relation with net FDI flow per capita at 1 per cent level which indicates that low level of political risk has a positive effect on the net FDI flow per capita as higher ratings of political risk meant lower levels of political risk. A 1 per cent increase in the political risk ratings (low political risk) leads to a 0.86 per cent increase in net FDI flow per capita. Foreign investors are attracted to the host country's good governance which provides a stable institutional environment for foreign enterprises to flourish. GDP growth has a positive significance on FDI at the 10 per cent significant level and the coefficient indicates that a 1 percent increase in economic growth will lead to a 0.01 per cent increase in net FDI flow per capita. A positive growth in the host country's economy would attract the net FDI flow per capita as the economic environment is conducive to encourage foreign investors to setup or maintain their businesses through either one of the modes of FDI which are merger, acquisition or greenfield. Exchange rate also has positive significance on net FDI flow per capita at 1 per cent significant level. A 1 per cent increase in exchange rate leads to a 0.41 per cent increase in net FDI flow per capita. A stable exchange rate of the host country would attract the FDI as growth of FDI is dependent on a stable exchange rate of the host country. A stable or a depreciation of the local currency against the USD offers a lower cost for foreign businesses to flourish. Gross fixed capital formation has positive relation with net FDI per capita at the 10 per cent significant level and the coefficient indicates that a 1 percent

increase Gross fixed capital formation will lead to a 0.12 per cent increase in net FDI flow per capita. Increased investments in the infrastructure of the host country would significantly attract the inflow and growth of FDI as more technologically advanced and sustainable network of infrastructure enables the host country to operate at a more effective and efficient pace especially for FDI from developed countries that requires advanced technology in its business operation. Natural resources attract resource-seeking FDI at the 1 per cent significance level in which the results indicate that a 1 per cent increase in natural resources rents leads to an increase of 0.10 per cent in net FDI per capita.

Error Correction Model (ECM)

Table 8 shows the short run (ECM) regression model based on Equation 2 which shows that GDP growth, trade openness, exchange rate and natural resources rents have a significant effect on the net FDI flow per capita. The speed of adjustment in which the coefficient of the ECT corrects the disequilibrium is at a rate of 40.71 per cent annually.

Table 8

The Panel Error Correction Model results

Variables	Robust Standard Errors	Coefficient
Δ Political risk	0.4333	0.1728
Δ GDP growth	0.0059	0.0127 ^b
Δ Trade openness	0.2175	0.6398 ^a
Δ Exchange rate	0.0920	0.4107 ^c
Δ Money supply/GDP	0.2058	0.0687
Δ Gross fixed capital formation/GDP	0.1652	-0.1360
Δ Natural resources rents/GDP	0.0421	0.0872 ^b
Error Correction Term (ω_{t-1})	0.0612	-0.4071 ^a
Constant		-0.0089
F statistics		12.75 ^a

Note: ^{a, b, c} denotes significance at 1 per cent level, 5 per cent level and 10 per cent level respectively; higher political risk ratings means lower levels of political risk based on the International Country Risk Guide (ICRG) methodology of the PRS database; number of observations is 400; $\Delta=1^{st}$ difference of variables

In the ECM results, GDP growth has significant positive relation with net FDI flow per capita at the 5 per cent significant level. GDP growth is a common and recurring factor as stated in the literature in attracting FDI as this factor offers confidence and encourage foreign investors' sentiments as it implies the strength and sustainability of the host country's economy. The 1 per cent increase in GDP growth leads to a 0.01 per cent increase in inflow of net FDI flow per capita. Trade openness also has positive significance on net FDI flow per capita at the 1 per cent significant level. Economic openness of a developing country attracts FDI as this element provides less restrictive entry and more liberal trade policies into a host country. A 1 per cent increase in trade openness leads to a 0.63 per cent increase in net FDI flow per capita. Exchange rate has positive significance on the net FDI flow per capita at the 10 per cent significant level. Depreciation of the host country's exchange rate against the USD offers a lower cost business environment for foreign investments to thrive. Natural resources rents/GDP have a significant positive relation with net FDI flow per capita at the 5 per cent

significant level. A 1 per cent increase in the natural resources rents leads to a 0.08 per cent increase in net FDI flow per capita. It is highly possible that these investors are resource-seeking foreign investors who are attracted by the abundance of natural resources endowments of these developing countries.

Discussion

To summarize the empirical evidence from this investigation, political risk, GDP growth, exchange rate, gross fixed capital formation and natural resources positively affect net FDI flow per capita in the long run. Whereas, GDP growth, trade openness, exchange rate and natural resources rents positively affect net FDI flow per capita in the short run. These results confirm that political risk, macro-economic and country specific factors have significant effects on FDI and should provide positive implications to the current policies adopted and practiced by developing countries. Generally, developing countries should ensure low political risk by applying appropriate political stability strategies to attract FDI. Developing countries should also focus on policies to sustain economic stability and growth by increasing real GDP in order to drive FDI. Increasing trade openness through tax incentives and avoiding administrative blocks should also attract FDI. Stabilizing the domestic exchange rate against the USD and ensuring that the currency is not overvalued is recommended to entice FDI. Improving the existing infrastructure through digitalization and ensuring an integrated logistic system should support more FDI. Safeguarding a continuous supply of natural resources endowment should induce resource seeking FDI too. According to the UNCTAD (2017), multinational enterprises (MNEs) had over the years gradually shifted their foreign investments from resource-seeking and efficiency-seeking to market-seeking and strategic-seeking. However, probably this is not the case for investors investing in these developing countries in the dataset of this study based on the positive significance of natural resources on the inflow of FDI.

Conclusion

It is apparent from the results in Table 7 and Table 8 that the ability of developing countries to attract FDI depends on low political risk (political stability and good governance) and positive sustainable economic development of a particular country. Nevertheless, competition among developing countries in attracting FDI leads to a more divergent, complex and uncertain investment environment. A developing country's ability to encourage FDI therefore would depend solely on the ingenuity of policy makers to determine other niche elements that could be developed to attract and maintain FDI. It is plausible that growth in quality FDI would be able to assist developing countries achieve economic development goals. As no one policy fits all, with regard to attracting quality FDI, policy makers would have to formulate policies in niche sectors to suit their particular country's economic development goal. It is suggested that a monitoring and controlling system be setup to account for foreign investors activities and progress so as to ensure that quality FDI is able to bring benefit to developing countries. It is suggested that future studies be conducted on other factors not observed in the model based on different sets of countries and period. It is also suggested that future studies be conducted on the determinants of foreign institutional investments of developing countries.

References

Aleksynska, M., and Havrylchyk, O. (2013). FDI from the South: The Role of Institutional

- Distance and Natural Resources. *European Journal of Political Economy*, 29:38-53.
- Ang, J. B., (2008). Determinants of Foreign Direct Investment in Malaysia. *Journal of Policy Modeling*, 30:185-189.
- Bond, T. J. (1998). Capital Flows to Asia: The Role of Monetary Policy. *Empirica*, 25:165-182.
- Engle, R. F. and Granger, C. W. (1987). Co-integration and error correction: representation, estimation, and testing. *Econometrica: Journal of the Econometric Society*, 55:2
- Ezeoha, A. E., and Cattaneo, N. (2012). FDI flows to sub-Saharan Africa: The impact of finance, institutions, and Natural resource endowment. *Comparative Economic Studies*, 54:597-632.
- Hattari, R., and Rajan, R. S. (2009). Understanding bilateral FDI flows in developing Asia. *Asian-Pacific Economic Literature*, 23:73-93
- Ho, C. S., and Rashid, H. A. (2011). Macroeconomic and country specific determinants of FDI. *The Business Review*, 18: 219-226.
- Ibrahim, N. A. (2011). Causality between Exports and Productivity in the Malaysian Economy. *The Singapore Economic Review*, 56:377-395.
- Jadhav, P. (2012). Determinants of Foreign Direct Investment in BRICS economies: Analysis of economic, institutional and political factor. *Procedia-Social and Behavioural Sciences*, 37:5-14.
- Jiang, N., Liping, W., and Sharma, K. (2013). Trends, patters and determinants of Foreign Direct Investment in China. *Global Business Review*, 14: 201-210.
- Jiménez, A. (2011). Political risk as a determinant of Southern European FDI in neighbouring developing countries. *Emerging Markets Finance and Trade*, 47:59-74.
- Kok, R. and Ersoy, B. A. (2009). Analyses Of FDI Determinants In Developing Countries. *International Journal of Social Economics*, 36:105-123.
- Liargovas, P. G. and Skandalis, K. S. (2011). Foreign Direct Investment and Trade openness: The Case of Developing Economies. *Social Indicators Research*, 106:323-331.
- Mottaleb, K. A., and Kalirajan, K. (2010). Determinants of foreign direct investment in developing countries: A comparative analysis. *Margin: The Journal of Applied Economic Research*, 4: 369-404
- Oladipo, S. O. (2013). Macroeconomic determinant of Foreign Direct Investment in Nigeria (1985-2010): A GMM approach. *Journal of Emerging Issues in Economics, Finance and Banking*, 2: 801-817.
- Pesaran, M. H. (2007). A simple panel unit root test in the presence of cross-section dependence. *Journal of Applied Econometrics*, 22(2):265-312.
- Quazi, R. (2007). Economic freedom and Foreign Direct Investment in East Asia. *Journal of the Asia Pacific Economy*, 12: 329-344.
- Serin, V., and Çaliskan, A. (2010). Economic liberalization policies and Foreign Direct Investment in South-eastern Europe. *Journal of Economic and Social Research*, 12: 81-100
- Shahrudin, N., Yusof, Z. and Satar, N. M. (2010). Determinants of Foreign Direct Investment in Malaysia: What matters most. *International Review of Business Research Papers*, 6: 235-245.
- Sokchea, I., (2007). Bilateral Investment Treaties, Political Risk and Foreign Direct Investment, *Asia Pacific Journal of Economics & Business*, 11:6-24
- Vijayakumar, N., Sridharan, K. S. P., and Rao, K. C. S. (2010). Determinants of FDI in BRICS Countries: A panel analysis. *International Journal of Business Science & Applied Management*, 5:1-13

- Vita, G.D. and Kyaw, K. S. (2008). Determinants Of Capital Flows To Developing Countries: A Structural VAR Analysis. *Journal of Economic Studies*, 35:304-322.
- Vogiatzoglou, K. (2007). Vertical specialization and new determinants of FDI: evidence from South and East Asia. *Global Economic Review*, 36:245-266.
- Westerlund, J. (2008). Panel cointegration tests of the Fisher effect. *Journal of Applied Econometrics*, 23:193-233.
- Wolff, G. B. (2007). Foreign direct investment in the enlarged EU: do taxes matter and to what extent? *Open Economies Review*, 18: 327-346.
- World Investment Report, (2016). United Nations Conference on Trade and Development (UNCTAD).
- World Investment Report, (2017). United Nations Conference on Trade and Development (UNCTAD)