

THE IMPACT OF SELECTED MACROECONOMIC VARIABLES ON FOREIGN DIRECT INVESTMENT IN ZIMBABWE

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Abstract

The paper attempts to examine the impact of the exchange rate, inflation rate and GDP on Foreign Direct Investment inflows in Zimbabwe. Secondary data for these macroeconomic variables were collected from World Bank and ZIMSTATS covering a period of 38 years from 1980 to 2018. To examine the long-run relationship between foreign direct investment and the macroeconomic variables the Johansen Cointegration test and VECM was used in this paper. The findings reveal that GDP, Exchange rate and Inflation have no effect on FDI inflows in Zimbabwe and that other factors not included in the study could have impacted inflows of FDI. The study recommended that the government should implement policies that boost productivity and as well as to reduce inflation levels in the economy. We also recommended the use of fixed exchange rates to attract FDI.

Keywords: Exchange rate, FDI inflows, GDP, Inflation rate, VECM, Zimbabwe.

1. Introduction

Zimbabwe economy has large endowments of Africa's natural resources and seeks to diversify the economy to attain sustainable growth. Foreign direct investment (FDI) can only be a useful and valid route to achieving this macroeconomic objective. The current levels of foreign direct investment are not sufficient to promote growth and the quality of life in Zimbabwe and also the capacity to develop and create wealth (Chingarandee et al 2012).Hosein and Maryam (2012) confirmed that capital accumulation is a necessary condition for continued economic development and growth.

Foreign direct investment has the potential to bring in additional capital, market access, new technology and transfer of managerial skills that uphold the efficiency and productivity of domestic firms. It can be argued that Zimbabwe as a developing nation endeavours to attract FDI to benefit from technological advancement, poverty eradication, economic growth and improved standards of living (Samal, 2018). In addition, FDI improves the balance of payments of a country through the promotion of imports (Enu et al 2013). However, countries with high inflation rates, country risk and political instability experience low levels of FDI inflows (Khamis Hareb et al 2015). It is because these factors pose business uncertainty in the future thus, they influence decision making by foreign investors who may be interested in making profits.

Therefore, economic and social development is attainable if authorities in Zimbabwe's economy harmonize investment policies, political stability, infrastructure development and engagement in investment promotion activities (Mahiti, 2012).

Many studies have focused on investigating determinants of FDI and its impact on growth in Zimbabwe and stayed away from examining the impacts of macroeconomic variables namely gross domestic product, exchange rate and inflation on FDI inflows. Therefore, the paper makes significant contributions to the literature regarding the subject matter.

Objectives

Main Objective

The main purpose of this paper was to examine the impact of Gross Domestic Product (GDP), Exchange rate and Inflation rate on Foreign Direct Investment (FDI) inflows in Zimbabwe.

Specific Objectives

1. To establish the relationship between GDP and FDI in Zimbabwe
2. To examine the impact of the exchange rate on FDI in Zimbabwe
3. To determine the impact of inflation on FDI in Zimbabwe

The paper is organized as follows. Section 2 gives a brief survey of the theoretical and empirical literature on FDI, GDP, Exchange rate and Inflation rate. Section 3 provides the Methodology and data sources. In section 4 we present data analysis and the results. The paper gives conclusions and recommendations in the final section.

2. Literature review

2.1 Theoretical literature

Macroeconomic theory gives factors that attract foreign investors to expand investment activities to other countries than their only investing in their mother country. Musabeh (2018) explained that theories on FDI comes in various approach from different economists and researchers and the theories can be classified into two broad classes: (i) theories that examine FDI from a macroeconomic perspective and (ii) those that explain FDI at a micro-level. This is in support of the view made by Faeth (2009) and Densia (2010) that there is no single theory that can justify reasons on location choice decision making by foreign investors.

2.1.1 Industrial Organisation Theory

Hymer (1976) in his work, the industrial organisation theory explained possible motives behind the expansion of domestic firms to international corporations. He developed the notion that domestic firms expand their activities abroad to benefit from a monopolistic advantage brought by competing with domestic firms in foreign countries, taking advantage of the legal frameworks and their ability to meet consumer tastes. This monopolistic advantage cannot be attained in their home country in environments that do not exhibit these

advantages. Rugman et al (2011) noted that foreign investors are exposed to risk because of their decisions to invest abroad due to government policies that include exchange rates, taxes, interest rates and tariffs that can cause distortions in markets.

2.1.2 Product Life Cycle Theory

The product life cycle as described by Vernon (1996) is a process from innovation, growth, and maturity to the decline of the product in the market. The theory uses the comparative advantage approach to explain the possible link between foreign direct investment and the product life cycle. Foreign investors engage in the innovation of new products in a market. Innovation mainly is done to meet the demands of products in both domestic and local markets. Thus, the surplus of products from the local markets is exported to foreign markets. After launching the product in the local market, it reaches growth where demand for the product rises, and the product saturates the market. Producers start to export surplus from saturated markets. In the long run, the product reaches maturity and to attract sales the producer has to make a price adjustment; therefore, the product starts to decline. The cycle mainly describes phases of production in manufacturing and value addition industries that end up expanding the production capacities to foreign countries.

2.1.3 Capital Market Theory

The capital market theory is an old theory of capital accumulation that explains the push and pull factors of foreign direct investment. Foreign direct investments are pulled by lower costs of borrowing in foreign countries and are pushed by the stable and strong purchasing power of their own currency to invest abroad. Thus, the theory describes FDI as a result of lower interest rates, favourable exchange rates and stability in purchasing power of its own currency. Boddewyn (1985) notice major factors in the capital market theory for engaging in foreign direct investment. He argued that the presence of undervalued exchange rates reflects lower production costs in the foreign country thus it attracts FDI. The absence of organized securities markets and information asymmetry about securities markets are the key drivers of FDI because as a long-term objective foreign direct investment is supported than the purchase of securities. FDI will flow from countries of low profits to countries that allow the ability to make higher profits.

2.2 Empirical literature

2.2.1 Foreign Direct Investment

Foreign direct investment is highly regarded for its ability to transform economies of emerging economies through different channels of growth. FDI are a source of capital for long-term investments, technological advancement and employment creation. Abala (2014) suggested that FDI improves the production of local industries they venture into as they come up with efficient ways of production, new technology and training of labour and thus promote growth. In less developing nations, the government work to promote FDI by implementing policies that accommodate foreign direct investment such as tax holidays, grants and exports

incentives. In addition, FDI is believed to introduce new management skills and a new production process as discussed in Azam et al (2014).

However, critics of FDI revealed an adverse impact on the economic growth of low developed nations. The dependency school theory explains that the flow of FDI from developed nations towards developing economies can hinder long-term growth in these economies (Srinivasan et al, 2011). Multinational corporations are run with a profit motive so can cause unintended consequences and problems in the host country such as exploitation of labour and high rates of pollution. In the local industry argument, UNCTAD (2005) argued that FDI can undermine the production of domestic firms by bringing inappropriate technology that affects the comparative advantage of the host country and mergers and acquisitions of local industries can shut the existence of the local company.

Nevertheless, the negative effects of FDI on the growth of the host country can be controlled and governed by government policies aimed to regulate the actions and behaviour of FDI (Kinuthia, 2010). The government can actively contribute by developing suitable policies, providing institutions, legal frameworks, incentives and related services that facilitate benefits and advantages from FDI.

2.2.2 Inflation and Foreign Direct Investment

The theoretical link between inflation and FDI can be depicted from Popkin (1965) explained the different rate of return hypotheses indirectly reveal the relationship between inflation and FDI. The hypothesis emphasizes the flow of FDI as coming from countries with low investment returns moving towards countries with a higher rate of investment return. Therefore these phenomena happen taking into account inflation levels.

Nnadi and Soobaroyen (2015), observed that inflation is a proxy for macroeconomic stability that can impact inflows and growth of foreign direct investment in a host country. In Ghana, a study by Andinuur (2013) on the relationship between FDI, inflation and economic growth. The researcher revealed that internal economic stability can be explained by low rates of inflation and that reflects the profitability of foreign investment in Ghana. Chingarande et al (2011) supported the view that more stable economies with low inflation environments encourage foreign direct investment.

A study by Vrachewa and Mason (2017) in comparison of inflation targeting policies between developed and developing countries employed panel data analysis and found out positive impact inflation targeting on FDI in developed than developing countries. Simultaneously, inflation targeting had a more positive impact in middle income developing countries as compared to upper middle income developing countries.

Obiamaka and Omankhanlen (2011) employed a linear regression analysis approach to establish the relationship among foreign direct investment, exchange rate, inflation and economic growth in Nigeria. Their findings show that the effects of inflation on foreign direct investment is insignificant and that economic growth is positively related to foreign direct

investment. Also, research by Masih and Valli (2014) found no causality between FDI and inflation when analyzing time-series data for South Africa.

However, in the ASEAN region, a study conducted by Xaypanya et al (2015) found a negative impact of inflation on FDI. They analysed annual time series data using multiple regression techniques to examine the relationship among FDI, inflation, GDP, real exchange rate, net official development assistance, infrastructure facility and level of openness. The results also found an insignificant impact of the real exchange rate, net official development assistance and gross domestic product on FDI. The level of openness and infrastructure facility had a positive impact on FDI.

2.2.3 Gross Domestic Product and Foreign Direct Investment

Gross domestic product (GDP) is the total value of all goods and services produced within the borders of a country at a given period of time usually a period of one year. GDP can be used to measure economic growth. Thus GDP is an important factor that can be used by investors looking at the performance of a country they intend to invest in. Countries with positive and stable growth rates attract inflows of long-term investment capital as it reflects certainty of investment positive returns.

Tsuchiya (2015) found a positive relationship between foreign direct investment and gross domestic product and other market size variables in India. Siddiqui and Aumeboonsuke (2014) conducted a study to analyse the effects of an economic variable on FDI in Thailand, Indonesia and Malaysia. The findings show a significant impact of GDP, exchange rate and interest rate on FDI flows. In contrast, Nyarko et al (2011) found variables such as gross domestic product, market size variable and exchange rates to have no influence on foreign direct investment. Faron and Shen (2015) ruled out GDP, inflation and interest rate as determinants of foreign direct investment.

2.2.4 Exchange Rate and Foreign Direct Investment

Exchange rates are an important factor in explaining movements in foreign direct investment from one region to another. Exchange rates are determined by forces of demand and supply of money in foreign exchange markets as noted by Oude (2013). During international trade an increase in exports over imports causes the exchange rate to depreciate whilst an increase in imports over exports causes the exchange rate to appreciate. Thus, forces of demand and supply for money depending on the prices of exported and imported goods as well as inflows of long-term capital; foreign direct investment.

Kwoba and Kibati (2016) explained the important role of the exchange rate in determining the competitiveness of a country and provides a link between domestic markets and world markets for goods and assets. In a study done by Okafor (2012) who examined the effects of macroeconomic variables on foreign direct investment in Nigeria, the findings show that exchange rate, gross domestic product and interest rates are significant determinants of foreign direct investment. To sum, Goldberg (2011) supports the view that exchange rate volatility affects the location decision making of international corporations. In a study

Kizilkaya, Ulcer and Ay (2015) concluded that exchange rates, trade openness and inflation significantly impact foreign direct investment flows.

Another study by Parajuli (2012) investigated the possible effects of trade, exchange rate and volatility on foreign direct investment flows in Mexico. The findings revealed a positive relationship between exchange rate and FDI and that the volatility of exchange rates pushed FDI to flow from the Organisation for Economic Corporation and Development (OECD) countries to Mexico. However, a study done by Bett (2017) in Kenya, found an insignificant effect of exchange rates, inflation rate and gross domestic product in determining foreign direct investment. The study results complement the findings by Mbui (2017) who concludes that exchange rates and interest rates are not significant factors of FDI whereas economic growth and inflation are significant factors.

2.3 Conceptual Framework

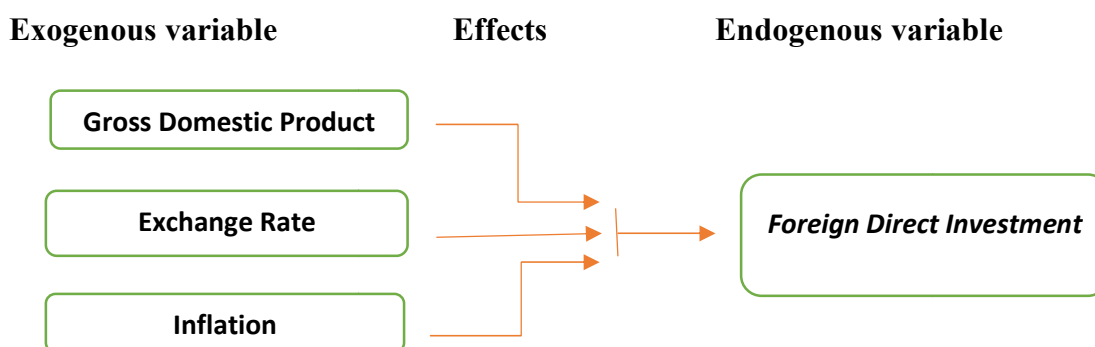


Figure 1: Conceptual framework

3. Methodology and Data

The paper set out to analyse the effects of selected macroeconomic variables namely gross domestic product, exchange rate and inflation on foreign direct investment inflows in Zimbabwe. The paper uses the Vector Error Correction Model and Johansen cointegration approach to analyse the existence of short-run and long-run relationship among gross domestic product, exchange rate, inflation and foreign direct investment. Secondary data for analysis was collected from the ZIMSTAT and World Bank development indicators, time series for the period 1990 to 2018.

3.1 Model Specification

In the paper to analyse the relationship amongst FDI, GDP, Exchange rate and Inflation, a model of the form outlined below was used. Economic theory revealed that exchange rates, inflation and gross domestic product affect foreign direct investment inflows in a certain country. Therefore, the study specifies the model as follows:

$$FDI = f(GDP, EXR, INFL) \quad (1)$$

Where: FDI = Foreign Direct Investment inflow (as a % of GDP)

GDP = Gross domestic Product (annual %)

EXR = Exchange rate (annually)

INFL = Inflation (measured by annual % change in Consumer Price Index (CPI))

The econometric model can be expressed as:

$$FDI = \beta_0 + \beta_1 GDP + \beta_2 EXR + \beta_3 INFL + \mu_t \quad (2)$$

Where: β_1 to β_4 are parameters, β_0 is a constant and μ_t is the error term.

4. Empirical Analysis

4.1 Descriptive Analysis

Descriptive analysis helps to describe and summarize data during data analysis. It involves calculations of the mean, median, standard deviation, maximum and minimum values of a series.

Table 1 below provides a summary of descriptive statistics.

Table 1: Descriptive Statistics

	FDI	GDP	INFL	EXR
Mean	0.978462	2.438974	211801.4	6678160
Median	0.500000	2.10000	3.96000	2.270000
Maximum	6.940000	19.7000	4414931	2.300000
Minimum	-0.450000	-17.7000	-5.20000	0.630000
Std. Dev.	1.363802	8.109553	857244.5	37043464
Observations	39	39	39	39

Source: Author's calculations

From the results presented in Table 1 above, the average net inflows of FDI in Zimbabwe were 0.98 approximately, between the periods 1980 to 2018. The average values for the macroeconomic variables were 2.44 for GDP, 211801 for inflation rate and 6678160 for the exchange rate. The least FDI net inflows were -0.45 in Zimbabwe by 2018. This revealed the macroeconomic environment prevailing in Zimbabwe failed to attract new inflows of FDI but rather discouraged the continuation of the existing investments by foreigners. The results showed a higher rate of inflation during the period under study indicated by the high large variability of data by the standard deviation of inflation value of 857244.5. The country experienced hyperinflation during 2008 that caused uncertainty in business investment due to instability in the economy, therefore this could have contributed to negative inflows of FDI

4.2 Correlation Analysis

The correlation matrix was used to depict the degree of multicollinearity between any two explanatory variables in the model. If the value of correlation is less or equal to 0.8 we reject the Null hypothesis that there is perfect multi-collinearity in favour of the alternative hypothesis, we conclude that there is no perfect multi-collinearity between the variables.

Table 2: Correlation Matrix

	FDI	GDP	INFL	EXR
FDI	1.0000			
GDP	0.0771	1.0000		
INFL	0.0424	-0.3565	1.0000	
EXR	0.0280	-0.4222	0.6597	1.0000

Source: Author's calculations

The results in table 2 above show no problems of multi-collinearity in the model coefficient values for all variables are less than 0.8 which implies a low and not significant degree of association between any two variables. To sum, the results indicate that FDI is positively correlated with all the explanatory variables since their coefficients are positive. Therefore, we can say that the variables are significantly important in determining inflows of foreign direct investment in Zimbabwe.

4.3 Test for stationarity

Before we do cointegration testing of the variables the paper makes use of the Augmented Dickey-Fuller test for a unit root. If the result of the ADF test statistic is greater than the critical value at 5% we reject the null hypothesis that there is a unit root. The results obtained from the ADF test show that all the variables included in the model are stationary (have no unit root) at levels and thus are integrated of order zero I(0).

4.4 Long-run Analysis

We continue to test the existence of a long-run relationship between gross domestic product, exchange rate and inflation to foreign direct investment. The paper employed the Johansen Cointegration test to verify the long-run relationship of the variable in the model.

Table 3: Results of the long-run relationship of the variables

Hypothesised No. of CE(s)	Trace Test			Maximum Eigen Value		
	Statistic	0.05 critical value	Prob.***	Statistic	0.05 critical value	Prob.***
None*	170.6036	47.85613	0.0000	131.4425	27.58434	0.0000
At most 1*	39.16102	29.79707	0.0031	28.36137	14.26460	0.0040
At most 2	10.79965	15.49471	0.2241	6.979017	3.841466	0.4916

Source: Author's calculations

The Trace test statistic value of 39.16102 and the Maximum Eigenvalue of 28.36137 are statistically significant to determine the existence of two cointegration vectors in the model. The two cointegration vectors can be modelled as follows:

$$\text{Coint.eq1} = \text{FDI} + 2.5566 \text{ GDP} + 8.6162 \text{ INFL} \quad (4)$$

$$\text{Coint.eq2} = \text{EXR} - 267.98 \text{ GDP} - 31.532 \text{ INFL} \quad (5)$$

Therefore, given the two presented co integration equations, the paper chose the first equation that is in line with the theory and includes the explained variable in the expression. Thus, based on the findings, it is verified, and we can conclude that a positive long-run relationship exists between gross domestic product growth, inflation rate and foreign direct investment inflows in Zimbabwe.

4.5

Table 4: Short-run Dynamics (Error Correction Model)

ECT variables	Coefficients	Std. error	t-statistic	Prob.***
Foreign Direct Investment inflows	0.017368	0.02463	0.70524	0.0367
Gross Domestic Product	0.110822	589.851	16.3443	0.5581
Inflation	-5754.652	0.11797	0.93943	0.4883
Exchange rate	9640.722	370.294	-15.5408	0.4872

Source: Author's calculations

From the results shown in table 4 above, the adjustment coefficients of the error correction term (ECT) are statistically insignificant. Thus it indicates the inability or failure of the model to adjust back to the long-run equilibrium if there are short-run changes in the explanatory variables. The negative coefficient value of ECT with inflation shows that inflation is inversely related to FDI whilst GDP and the Exchange rate have a positive impact on FDI inflows.

4.6 Modelling FDI with OLS

Table 5: OLS estimation results

	Coefficient	Std. error	t-statistic	Prob.***
Long-run coefficient (C1)	0.017368	0.024627	0.705237	0.4884
Foreign Direct Investment inflows	-0.511232	0.229184	-2.230662	0.0367
Gross Domestic Product	0.025555	0.042942	0.595118	0.5581
Inflation	0.007149	0.010134	0.705431	0.4883
Exchange rate	-0.000241	0.000341	-0.707302	0.4883

Source: Author's calculations

The results found are reverse of the prior expectations, the long-run coefficient is positive and not significant thus there is no evidence of a long-run relationship between the variables included in the model. Changes in gross domestic product and FDI itself have a negative effect on foreign investment inflows. However, since the probabilities for all the explanatory variables are statistically insignificant at the 5% level we can conclude that GDP, Exchange rate and Inflation are not important in explaining the reasons behind changes in foreign investment in Zimbabwe for the period 1980 to 2018. The macroeconomic variables fail to capture changes in FDI thus has no effect. These findings are complementary to the study findings by Bett (2017), Mbui (2017), Nyarko et al (2011).

4.7 Residuals Diagnostic tests

Table 6: Diagnostics test for VECM residuals

Test	Null Hypothesis	F-ststistic	Prob.***
ARCH	No conditional Heteroscedasticity	279.5312	0.0142
Breusch-Godfrey	No serial correlation	89.34215	0.00007
Jarque-Bera	There is a normal distribution	204.2455	0.00030

Source: Author's calculations

The Jarque-Bera test statistic value is 204.25 and is statistically significant at a 5% level to indicate that the error correction term is normally distributed. The Breusch-Godfrey test result of 89.34 is statistically significant so we reject the null hypothesis and conclude that there are no problems of serial correlation in the model. Finally, the result of the ARCH test for heteroscedasticity value of 279.53 is statistically significant to indicate no heteroscedasticity.

5. Conclusion and recommendations

The focus of the paper was to examine the impact of selected macroeconomic variables on the inflow of foreign direct investment in Zimbabwe for the period covering 1980 to 2018. To meet the research objectives the paper utilized the Johansen cointegration test and the Vector Error Correction Model to verify the existence of a long-run relationship between the FDI and the explanatory variables. Based on the findings of the study the explanatory variables included in the model such as gross domestic product, exchange rate and inflation measured by the consumer price index are statistically insignificant factors of FDI. This reveals that GDP, exchange rate and inflation rate have no effect on the inflow of foreign direct investment in Zimbabwe. The research established that changes in FDI are determined by other factors outside the model thus other factors like trade openness, politics and other government policies aimed to protect local firms may be the influencers of FDI inflows in Zimbabwe.

The findings show a positive link between FDI and GDP this is complementary to the results found by Aumeboonsuke (2014) who noted a positive link between FDI and GDP in Thailand, Indonesia, and Malaysia. Economic growth rates were used by foreign investors to see how profitable it is to invest in the Zimbabwean environment. That is in cases where economic growth was shrinking FDI inflows were falling and on the other side an increase in growth would reflect more viability of business hence attracting more foreign investment. FDI inflows are also positively related to exchange rates in Zimbabwe. When the exchange rate in Zimbabwe appreciates in value as a result of increased imports against exports, foreigners with a stable currency and a constant purchasing power found the value of their currency more valuable in Zimbabwe and are attracted to come and invest. However, the inflation rate is negatively related to FDI in Zimbabwe, this can be referred to as the case during 2008 when the experience of hyperinflation in the country caused uncertainty in business that affected further investments. Thus, an environment with high inflation discourages foreign direct investment inflows as inflation wipes away gains from investing in capital.

Therefore, based on the findings of the study discussed above, we recommend the government implement policies that boost productivity in the country to increase output (GDP). The government can also control the exchange rates through a fixed exchange rate regime, this can positively attract FDI through certainty of business. Finally, policies that target to reduce levels of inflation need to be implemented in Zimbabwe to create a favourable business environment.

References:

- Abala, D. (2014), Foreign Direct Investment and Economic Growth: An Empirical Analysis Of Kenyan Data, DBA Africa Management Review, Vol 4 No 1. Pp. 62-83.
- Andinuur, J. (2013). Inflation, Foreign Direct Investment and Economic Growth in Ghana, the University of Ghana.
- Azam, M., Ibrahim, Y. (2014). Foreign direct investment and Malaysia's stock market: using ARDL bounds testing approach, Journal of Applied Economic Sciences, 9 (4) (30), pp. 591-601.
- Bett, L. (2017). The effect of interest rates on foreign direct investment in Kenya. Unpublished MSC Project. University of Nairobi.
- Boddewyn, J. J. (1985). Theories of foreign direct investment and divestment: A classificatory note. Management International Review, 57-65.
- Chingarande, A., Karambakuwa, T. Et al (2011). The Impact of Interest Rates on Foreign Direct Investment: A Case Study of the Zimbabwean Economy (February 2009-June 2011), International Journal of Management Sciences and Business Research, 2012, Vol. 1, No. 5. (ISSN: 2226-8235)
- Densia, V. (2012). Foreign direct investment theories: an overview of the main FDI theories. European Journal of Interdisciplinary studies.
- Faeth, I. (2009). Determinants of Foreign Direct Investment-A Tale of Nine Theoretical Models, Journal of economic Surveys, 23 (1), pp. 165-196 (32).

- Hymer, S. H. (1976). *The international operation of national firms: a study of foreign direct investment*. Cambridge: Massachusetts Institute of Technology Press.
- Kizilkaya, O., Ucler, G. & Ay, A., (2015), the Interaction between Exchange Rate and Foreign Direct Investments: Evidence from Turkey. *Journal of Business and Economics*, pp. 337-347.
- Kinuthia. (2010). *Determinants of Foreign Direct Investment in Kenya: Evidence Annual*, African International Business and Management. Leiden: African studies Centre.
- Khimis. H. A. Mohd R bin H. (2015). The impact of inflation, GDP per capita on foreign direct investment: the case of United Arab Emirates. *Investment Management and Financial Innovations*, 12(3-1), 132-141.
- Mahiti, F (2012). *Determinants of Foreign Direct Investments (FDIs) In East Africa Countries of Tanzania And Kenya*. (Unpublished MBA Paper). Mzumbe University.
- Mbui. P. (2017). *The effect of interest rates on foreign direct investment inflows in the energy and petroleum sector in Kenya*. Unpublished MSC Project. University of Nairobi.
- Muhammad, A., Gavrilă, L. (2015). Inward foreign capital flows and economic growth in African countries, *Journal of Applied Economic Sciences*, 3 (33), pp. 362-371.
- Musabeh. A. (2018). *Main theories of foreign direct investment*. <https://www.researchgate.net/publication/342529872>
- Nnandi, M. & Soobaroyen, T. (2015). International financial reporting standards and foreign direct investment: The case of Africa. *Advances in accounting*, Vol. 31, No. 2, pp. 228-238.
- Nyarko, P. A., Nketiah-Amponsah, E. & Barnor, C., (2011), Effects of Exchange Rate Regimes on FDI Inflows in Ghana. *International Journal of Economics and Finance*, pp. 277-286
- Obiamaka P.E., Onwumere, J.U., Okpara, G.C. (2011). Foreign direct investment and economic growth in Nigeria: A granger causality analysis, *International Journal of Current Research*, 3 (11), pp. 225-232.
- Okafor. H. O. (2012). Do domestic macroeconomic variables matter for foreign direct investment inflow in Nigeria? *Research Journal of Finance and Accounting*. 3, 9-21.
- Oude M. K. (2013). *The Effect of Exchange Rate Fluctuations on Gross Domestic Product in Kenya*. Research Project,
- Popkin, J. (1965) 'Interfirm differences in direct investment behaviour of U.S. Manufacturers', Ph.D Thesis, University of Pennsylvania.
- Rugman, A. M., Verbeke, A., & Nguyen, Q. T. (2011). Fifty years of international business theory and beyond. *Management International Review*, 51(6), 755-786
- Tsuchiya, Y., (2015). *Determinants of Foreign Direct Investment in India: Region Sector.Wise Analysis*, Tokyo: Tokyo University of Foreign Studies.
- Srinivasan, P. and Ibrahim, P. (2010). FDI and Economic Growth in the Asian Countries Evidence from Cointegration Approach and Causality Test, *The IUP Journal of Management Research*, 9 (1), pp. 38-63.
- Valli, M. and Masih, M. (2014) 'Is there any causality between inflation and FDI in an inflation targeting regime? Evidence from South Africa', Munich Personal RePEc Archive Paper Number 60246.
- Xaypanya, P., Rangkakulnuwat P., and Paweenawat, S.W. (2015). The Determinants of Foreign Direct Investment in ASEAN. The First Differencing Panel Data Analysis, *International Journal of Social Economics*, 42 (3), pp. 239-250.
- Unctad (2015). *World Investment Report, Transnational Corporations, Extractive Industries and Development*. http://unctad.org/en/PublicationsLibrary/wir2015_en.pdf