THE EFFECT OF EXCHANGE RATE VOLATILITY ON FOREIGN DIRECT INVESTMENTS IN KENYA

Ochieng Duncan Elly and Anyango Scoline Ojung’a

ABSTRACT
Kenya like most developing countries has had a deficiency of investment capital which can negatively affect economic activities. Due to the decline in official development assistance (ODA) in the 1990s, most of the developing countries’ governments have put in efforts to attract foreign direct investment which not only creates employment opportunities but also contributes to economic growth and development. This study therefore investigates the effect of exchange rate volatility on foreign direct investments (FDI) in Kenya by examining the degree of relationship between the exchange rate volatility and FDI inflows.

Secondary annual data of both FDI inflows and Exchange rate fluctuation variables for the periods 1981 to 2010 were collected and analyzed in the study. This period is sampled since it captures three exchange rates regime namely fixed rates regimes, pegged rates regimes and finally floating rates regimes. The data for real effective exchange rates and FDI are obtained from the IMF and World Bank data bases on their websites and from the Central Bank of Kenya (CBK).

The findings of the study indicate that the correlation between the two variables is 0.318 implying a positive correlation which is however weak. The study recommends a more controlled macroeconomic environment in order to control the fluctuations of the macro economic variables hence attract more foreign investors in order to increase the FDI inflows into the country. It further considers future investigation on the contributions of other variables that affect FDI.

Key Words: Exchange rate fluctuations, Foreign direct investments (FDI).
INTRODUCTION
The current account balance of a host country can be viewed as an indicator of the strength of its currency. A deteriorating current account balance is likely to lead to a depreciation of the host country’s currency. It is possible that potential multinational investors view current account deficits negatively because such deficits may lead to inflation and exchange rate variations. If this is the case, then an increase in the current account deficit may lead to a reduction in FDI inflows. In contrast, if multinational companies take advantage of the current account deficits of the host country by negotiating more favorable operative terms, then the current account deficits may increase FDI inflows (Dhakal, et al., 2010).

Foreign direct investment provides potential growth attributes like, technology, specialized skills and access to the international market (McAleese, 2004). However the host country must possess structures and mechanisms that can optimally absorb and retain these benefits. However not all emerging markets possess this capability (Borensztein, et al., 1997; Seetanah and Khadaroo, 2007).

A host country’s monetary policy is vital in playing the role of attracting foreign direct investment by creating a conducive economic environment. However the characteristics of monetary policy presents the impossible trinity, that is a problem where trade-offs must be done in order to maintain economic stability. Two of these anchors are inflation autonomy and exchange rate variability. These trade-offs can impact on the FDI inflow into a country (Collier and Dollar, 2001).

The role of exchange rate in an open economy framework is important in the monetary transmission mechanism. Real exchange rates affect aggregate demand channel of the monetary transmission of the monetary policy. It affects the relative prices between domestic and foreign goods and foreign demand for domestic goods. The direct exchange channel for monetary policy transmission, affects inflation through domestic price of imported goods and intermediate inputs, which are components of consumer price inflation (Ncube and Nduo 2011).

In Kenya like most developing countries there has been a deficiency of investment capital which has had a negative effect on their economic situation. Due to the decline in official development assistance (ODA) in the 1990s, most of the developing countries’ governments have put in efforts to attract foreign direct investment which not only creates employment opportunities but also contributes to economic growth and development. Foreign direct investments (FDI) are a major
source of capital flow for emerging markets. Most of the emerging market countries are taking advantage of FDI and spillover effects. Though its contribution of economic growth has been urged, most researchers appreciate that its benefits outweigh its cost (Musila and Siguë, 2006).

After experiencing moderately high growth rates during the 1960s and 1970s, Kenya’s economic performance during the last three decades has been far below its potential. Economic stagnation in the 1980s and 1970s affected Kenya’s industrialization with consequent effects on labor productivity (Gachino and Rasiah, 2003). Further political instabilities in neighboring countries also drew away foreign investments in Kenya.

RESEARCH PROBLEM

Appropriate macroeconomic policies are significant at ensuring economic stability and growth, among the instruments that are crucial in economic management and stability of basic prices is the exchange rate (Were, 2001). As a relative price, the exchange rate is important in making spending and foreign direct investment decision (Musau, 2011). Were (2001) posits that increases in net external inflows are strongly associated with the appreciation of exchange rates. The exchange rate movements are significantly driven by events such as expectations regarding the outcomes of withholding donor funding and other intermittent changes in the economy.

Foreign investors may gain or lose from a depreciating exchange rate. For instance, a depreciating exchange rate may boost exports and provide from resource-seeking FDI. Foreign investors, however, may lose as well because they must incur cost to prevent transaction and translation losses when currencies depreciate. If they believe that depreciation will continue after they enter a country, they may conclude that the cost will be too high to justify their investments. In fact, Froot and Stein (1991) found mixed investor reactions to exchange rate depreciation. In spite of the high value of the U.S dollar during the 1980s, the United States was a net recipient of FDI. Therefore, the impact of exchange rate depreciation on FDI inflows seems to be ambiguous.

Private capital inflows are likely to respond to the interest rate differential. The policy of lowering interest rates is consistent with a depreciation of the exchange rate. This implies that a demand for low interest rate regime must lead to a relatively weak shilling internationally.
Foreign exchange rates and inflation rates in Kenya over the last two decades have been characterized by volatility which creates uncertainty in the investment market. Prediction of the future rates for these two variables is made difficult both in the short and long-run by the constant fluctuations causing uncertainty in the global investment market. This uncertainty implies that potential international businesses are naturally exposed to exchange rate risk if they are to invest in Kenya. This therefore leads to the need to answer the question: what is the effect of exchange rate volatility on foreign direct investment in Kenya?

Objective of the study
This study seeks to examine the effect of exchange rate volatility on foreign direct investment in Kenya.

METHODOLOGY
This is an exploratory study that uses time series secondary data for exchange rate fluctuations and FDI inflows for Kenya between the periods 1981 to 2010, a 30 year period. This period enables us have a representative analysis of data relating to the period when Kenya was attracting fairly high FDI inflows in the 1980s and the period of dwindling capital inflows in the last two decades. The sampling frame is based on time series annual data of the independent and dependent variables between 1981 and 2010. This period is sampled based on available data for real effective exchange rates between the Kenya shilling and the US Dollar and FDI on the IMF (regional economic outlook), the World Bank country data websites respectively and the Central Bank of Kenya.

Descriptive and inferential analysis is used to analyze data, all in an effort to investigate the relationship between exchange rate volatility and foreign direct investment in the 30-year period. A correlation is derived to establish the degree of the relationship between the dependent and independent variables.

RESULTS AND DISCUSSIONS
Correlations
A correlation is a single number that describes the degree of relationship between two variables.
Descriptive

<table>
<thead>
<tr>
<th>Descriptive Statistics</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exchange rate volatility</td>
<td>44</td>
<td>-.97</td>
<td>1.94</td>
<td>.2109</td>
<td>1.07666</td>
</tr>
<tr>
<td>The yearly average foreign direct investments</td>
<td>42</td>
<td>.40</td>
<td>729.00</td>
<td>73.9881</td>
<td>153.40381</td>
</tr>
<tr>
<td>Valid N (list wise)</td>
<td>42</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As tabulated above, the mean FDI inflows during the period 1981 to 2010 was 73.9881 and the average volatility for the same period was 0.2109

Correlations

<table>
<thead>
<tr>
<th>Correlations</th>
<th>The yearly average foreign direct investments</th>
<th>Interest rate volatility</th>
</tr>
</thead>
<tbody>
<tr>
<td>The yearly average foreign direct investments</td>
<td>Pearson Correlation</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>42</td>
</tr>
<tr>
<td>Exchange rate volatility</td>
<td>Pearson Correlation</td>
<td>.318*</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>42</td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.05 level (2-tailed).

The degree of relationship between the two variables given by the correlation coefficient is 0.318. This implies that there is a weak positive relationship between the two variables.
### Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>95.0% Confidence Interval for B</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>B</strong></td>
<td><strong>Std. Error</strong></td>
<td><strong>Beta</strong></td>
<td><strong>t</strong></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>67.769</td>
<td>22.912</td>
<td></td>
<td>2.958</td>
</tr>
<tr>
<td>Exchange rate volatility</td>
<td>46.980</td>
<td>22.168</td>
<td>.318</td>
<td>2.119</td>
</tr>
</tbody>
</table>

a. Dependent Variable: The yearly average foreign direct investments

### Collinearity Statistics

The collinearity statistics provide information to allow the analyst to detect when the independents are intercorrelated to the degree that the regression output may be adversely affected. Therefore, a high VIF value indicates high multicollinearity of that variable with other independents and instability of the regression coefficient estimation process. VIF=1 is ideal hence in our model the independent variables are not correlated and the use of the regression equation is in order. From the table we can predict the impact of foreign exchange volatility on the FDI inflow in the country as:

\[ FDI = 67.769 + 46.980 \times ER \]  

It is notable that there is a weak positive relationship between the FDI inflows and foreign exchange rate volatility. For this reason, changes in the foreign exchange rates does impact on the FDI inflows.

### SUMMARY AND CONCLUSION

This study investigates the effect of exchange rate fluctuations on foreign direct investment in Kenya. It is noted that foreign direct investment has very clear benefits especially to the host country where provision of capital, aiding local firms to become competitive, introduction of new
technology, tax revenue and increased job opportunities enable the host country to have an overall economic growth.

From the analysis, the results indicate that there is weak positive relationships between the two variables hence need to control the exchange rate fluctuations in order to increase the FDI inflows into the country. In the current years, Kenya has been losing the FDI inflows to its neighbors. Through extensive monitoring and in depth study of the neighboring countries policies on FDI and macroeconomic environment, Kenya can be able to reverse the current negative trend on this front.

LIMITATIONS OF THE STUDY
This paper considers only one factor that can impact on the FDI inflows in a country. It should be pointed out that there are other factors like government policy, inflation, openness of trade regime, infrastructure etc that also needs to be investigated in order for a conclusive conclusion to be drawn from the study. Further, there are different measures of volatility especially on introducing other currencies which all provide different results. Empirical studies should thus specify the standard measures to be used in order to provide standardized results for future references.

REFERENCES


