The impact of interest rates on foreign direct investment: A case study of the Zimbabwean economy (February 2009-June 2011)

Chingarande Anna  
Economics Department  
Blessing Machiva- Bindura University  
Roseline T. Kambakwvwa- Economics Department  
Denhere Webster -Economics Department  
Tafirei Felex-Economics Department  
Onias Zivanai- Accountancy Department  
Muchingami Lovemore- Economics Department  
Victoria Mudavanhu – Economics Department  

(Faculty of Commerce Bindura University of Science Education, P Bag 1020 Bindura, Zimbabwe)

ABSTRACT

Foreign direct investment (FDI) is very low in Zimbabwe and this is resulting in low levels of economic growth and standards of living and has hindered efforts to promote economic prosperity and sustainable development for the country. Hence this research seeks to find the relationship and impact of interest rates on FDI inflows. It also sought to find out other determinants that significantly affected FDI inflows in Zimbabwe in the period February 2009 to June 2011.

The research tested the hypothesis that high interest rates have a positive impact on FDI inflows. Secondary data was collected from various institutions like Reserve Bank of Zimbabwe, International Monetary Fund reports, World Bank reports, Ministry of Finance, Failed Nations. Monthly data was used to make a total of 29 observations. Data was analysed using the classical linear regression model, ordinary least squares approach.

The paper found that interest rates had no significant impact on FDI inflows and hence cannot be used for policy making purposes. The research discovered that risk factors are the major determinant of FDI in Zimbabwe.
Policies that reduce country risk levels and campaigns that promote peace, anti-corruption and transparency should be encouraged if the economy is to realize long term inflows of FDI.

Key Words: Foreign Direct Investment, Interest rates, Investment

Introduction

Is Zimbabwe cursed? This could be the question money market analysts ask themselves everyday as international investors continue giving Zimbabwe a wide berth despite the country offering the best investments rates in the world (Ndamu Sandu, 2010). “Investment rates on the local money market are apparently way above regional and international investment rates, but the menacing underlying economic and political fundamentals of the nation have scared potential foreign investors, even those with a high tolerance for risk,” observed Kingdom Financial Holdings (KFHL) market report, 2011. “With securitised placements with a tenor of 30 to 90 days now attracting investment rates ranging from 20% to 35%, this makes returns on the local money market the best in the world”, quoted the paper. In South Africa securitised 90-day paper is being quoted at below 8% while in United Kingdom and United States of America the same paper is quoted at below 1%. Naturally with Zimbabwe’s high investment rates, there should have been a stampede of investors capitalising on the enticing rates. Zimbabwe’s financial markets are paying the heavy price for the disproportionate sovereign risk the nation carries, a development that inhibits the flow of foreign capital into the country, John Robertson (2009).

At the time of independence in 1980, the new Zimbabwean government adopted a highly controlled and inward looking economy. Foreign capital constituted about 70% of the total capital stock and FDI dominated foreign capital inflows, Clarke (1980). In the first ten years of independence, the new government continued with highly interventionist economic policies inherited from the colonial regime. The business environment was highly regulated through a system of price controls, labour market restrictions and investment control procedures. Approvals of foreign investor's proposals involved an
excessively long process. Foreign firms were required to get permission from the Foreign Investment Centre for the development of any new enterprises in Zimbabwe. Ownership restrictions in some sectors required at least 30% local participation in an enterprise. Policies on repatriation of profits also remained restrictive. Because of the policy environment, which was unfavourable to foreign investors, FDI inflows were very low during the first decade of independence.

In 1992, as part of a structural reform program under the International Monetary Fund's (IMF) Enhanced Structural Adjustment Facility (ESAF), the Zimbabwe Investment Centre (ZIC) was established as a one-stop shop for investment approval. In 1995, disbursements under the ESAF program were suspended for failure to meet IMF targets, and in 1996, the government substituted a second plan, the Zimbabwe Program for Economic and Social Transformation (ZIMPREST), whose operations investors have found much less satisfactory. By the late 1990s, political turbulence and the government's defiance of the IMF had greatly increased investor risk, and brought foreign direct investment flows to a standstill (http://www.nationsecyclopedia.com/Africa/Zimbabwe, 2008).

In 1998, foreign direct investment (FDI) in Zimbabwe totalled over $444 million; by 2001, FDI in-flow had fallen to $5.4 million. There has been a comparable decline in foreign portfolio investment, reflected in the transformation of Zimbabwe's capital account balance, from a surplus in 1995 equal to 7.1% of Gross Domestic Product (GDP) to a deficit in 2002 equal to 6.5% of GDP. The sharp surge in FDI inflows in 1998 was partly driven by the privatization and liberalization wave in the Zimbabwean economy. This saw substantial flows of foreign capital particularly from South African firms into various sectors of the Zimbabwean economy. In the late 1990s, the country began to experience political instability and macroeconomic imbalances. Investor confidence was further rattled in 2000 when compulsory farm acquisitions enabled by an Act of parliament began. The sudden reversal of FDI flows coupled with falling domestic investment had depressing effects on
the gross fixed capital formation which fell from a record high of 25% of GDP in 1995 to only 17% of GDP by 2005. On average in 2001 FDI inflow was around US$3.8 million. From 2006 up to the dollarization period, Zimbabwe has continued to face negative real interest rates and these rates have discouraged investment and production but aid undesirable levels of speculation and in turn aid and abet inflation.

Zimbabwe’s interest rate outlook, as was noted during this period, continued to be controlled and directed towards a low interest rates policy through subsidised credit facilities designed to support the productive sectors of the economy. These facilities whose rates were as low as 25% include the Agricultural Mechanisation Program (AMP), the Agricultural Sector Productivity Enhancement Facility (ASPEF) and the Basic Commodities Supply-Side Intervention Facility (BACOSSI). The unsound interest rate policy leaded to rapid money supply expansion. There was a need to make interest rates market determined and let the private sector play a leading role. This was supposed to be done through commercial banks and other privately owned financial institutions. These facilities, while implemented with good intentions, end up fuelling inflation. This was mainly because of loop holes and other factors which encouraged speculative behaviour at the expense of long term investment. Facilities such as this worked if accompanied by a stable macro-economic environment which allows for long term planning. There was need for predictable policies and consistent application of the rule of law which builds investor confidence to invest with a longer term view, nation’s encyclopaedia (2008).

After dollarization, Zimbabwe continued to give high lending of 30% and this means the country is facing liquidity challenges and in itself scares away investors, Monetary Policy statement 2010.

**Statement of the research problem**

Foreign direct investment is very low in Zimbabwe and this is resulting in low levels of economic growth and standards of living and has hindered efforts to promote economic prosperity and sustainable development for the country.
Zimbabwe is currently ranked the lowest on FDI performance among its regional competitors in the World Economic Forum's (WEF) Global Competitiveness Report, (2009-2010). Interest rates are reported to be high enough to attract FDI but their effect is not clear, Tapfuma, (2011).

Research questions

1. To what extent do high interest rates determine the level of foreign direct investment in Zimbabwe?
2. What are the effects of pegging interest rates too high on foreign direct investment?
3. What are the effects of pegging interest rates too low on foreign direct investment?
4. What is the impact of other determinants of FDI namely GDP, corporate taxes, inflation rate, risk factors, labour cost and exchange rates in Zimbabwe for the period being studied?

Statement of the hypothesis

This paper intends to test the hypothesis that:
Null hypothesis (Ho): Interest rates have no effect on FDI.
Alternative hypothesis (H₁): High interest rates have a positive impact on foreign direct investment.

Literature Review

Theoretical literature
Extant literature review reveals that there are effectively two ways of thinking about investment, namely the Hayekian and Keynesian perspectives. The Hayekian perspective conceives of investment as the adjustment to equilibrium and thus the optimal amount of investment is effectively a decision on the optimal speed of adjustment. A firm may decide it needs a factory (the capital stock decision), but its decision on how fast to build it, how much to spend each month building it, effectively is the investment decision.
The Keynesian approach places far less emphasis on the adjustment nature of investment. Instead, they have a more behavioural take on the investment decision. Namely, the Keynesian approach argues that investment is simply what capitalists do meaning businesses are more concerned as to what is the optimal amount of investment for some particular period. According to Keynesians, then, optimal investment is not about optimal adjustment but rather about optimal behaviour.

Much of the research on the determinants of investment is based on the neoclassical theory of optimal capital accumulation pioneered by Jorgenson (1963, 1971). In this framework, a firm's desired capital stock is determined by factor prices and technology, assuming profit maximization, perfect competition and neoclassical production functions. This theory was a deliberate alternative to views expressed initially by Keynes (1936) and Kalecki (1937) that fixed capital investment depends on firms' expectations of demand relative to existing capacity and on their ability to generate investment funds, Fazzari and Mott (1986). Several studies have challenged the neoclassical assumption that any desired investment project can be financed. Asymmetric information about the quality of a loan could lead to credit rationing, implying that not all borrowers seeking loans at the prevailing cost of capital may be able to obtain financing (Greenwald, Stiglitz and Weiss, 1984). Consequently, firms tend to rely on internal sources of funds to finance investment, and to prefer debt to equity if external financing is required.

Marginal efficiency of capital is the first and most crucial theory that have given light to economists to understand the determinants of private investment. The classical theory of investment states that investment depends on the rate of interest (marginal efficiency of capital) and it is a discount rate that will make the expected flow of income equal to supply. Furthermore, in his General Theory, John Maynard Keynes (1936) proposed an investment (I) function of the sort \( I = I_0 + I(r) \) where the relationship between investment and interest rate was of a rather naive form. Firms were presumed to rank various investment projects depending on their internal rate of return (or marginal efficiency of investment-MEI) and thereafter, faced with a given rate of interest \( r \), choose those projects whose internal rate of return exceeded the rate of
interest. With an infinite number of projects available, this amounted to arguing that firms would invest until their marginal efficiency of investment was equal to the rate of interest, i.e. MEI = r. Keynes claimed that marginal efficiency of capital could be defined as being equal to the rate of discount which would make the present value of the series of annuities given by the returns expected from the capital asset during its life just equal its supply price (Keynes, 1936, page 135). Supply price of the capital asset is the price which would just induce a manufacturer to newly produce an additional unit of such assets, i.e. what is sometimes called its replacement cost (Keynes 1936, page135). He further said that the relationship between the prospective yield of a capital asset and its supply price or replacement cost, i.e. the relationship between the prospective yield of one more unit of that type of capital and the cost of producing that unit, furnishes us with the marginal efficiency of capital of that type, Keynes General theory (1936 page135). Marginal efficiency of capital can also be defined as an annual percentage yield earned by the last additional unit of capital. It is also known as marginal productivity of capital, natural interest rate, net capital productivity, and rate of return over cost. The significance of the concept to a business firm is that it represents the market rate of interest at which it begins to pay to undertake a capital investment. If the market rate is 10%, for example, it would not pay to undertake a project that has a return of 9.12%, but any return over 10% would be acceptable. In a larger economic sense, marginal efficiency of capital influences long-term interest rates. This occurs because of the law of diminishing returns as it applies to the yield on capital. As the highest yielding projects are exhausted, available capital moves into lower yielding projects and interest rates decline. As market rates fall, investors are able to justify projects that were previously uneconomical. This process is called diminishing marginal productivity or declining marginal efficiency of capital.

Irving Fisher (1930), in his theory of investment, stated that the optimum condition for the firm's investment decision is that marginal efficiency of investment is equated with rate of interest (MEI = r) and he added a condition that investment in any time period yields output only in the next period. When the rate of interest rises, then to equate r and MEI, it must be that investment
declines, thus there is a negative relationship between investment and interest rate.

Empirical literature review

Hooda, (2009) conducted a research on FDI on the economy of India from 1991-2008 using simple and multiple regression techniques. He specified his model as follows:

$$\text{FDI} = f [\text{TRADEGDP}, \text{RESGDP}, \text{R&DGDP}, \text{FIN. Position}, \text{EXR}].$$

Where:
- **FDI** = Foreign Direct Investment
- **FIN. Position** = Financial Position
- **TRADEGDP** = Total Trade as percentage of GDP.
- **RESGDP** = Foreign Exchange Reserves as percentage of GDP.
- **R&DGDP** = Research & development expenditure as percentage of GDP.
- **FIN. Position** = Ratio of external debts to exports
- **EXR** = Exchange rate

Hooda found out that the main determinants of FDI in developing countries are inflation, infrastructural facilities, exchange rates, stable political environment, interest rates, labour costs and corporate taxes.

Bende-Nabende (2002) found that FDI liberalization is among the most dominant long-run determinants of FDI in Africa. The results from Asiedu (2003) also indicate that a good investment framework promotes FDI to Africa, i.e. investment restrictions deter investment flows to Africa, Asiedu, (2003). According to Basu and Srinivasan (2002), excessive market regulations, i.e. domestic investment policies on profit repatriation and on entry into some sectors of the economy were not conducive to the attraction of FDI in Africa. Ghana, for example, has expanded the scope for foreign investment by reducing the sectors previously closed to foreign investment, Basu and Srinivasan, (2002). In general, from the 1980s to the 1990s, the pace of liberalization for African countries as measured by three types of indexes
(capital controls; restrictions on trade and investment; FDI policy), was slow compared with other developing countries, Asiedu, (2004).

Cheap labour and the quality of the labour force are other important determinants of FDI in Africa, Krugell, (2005). Lower labour cost reduces the cost of production; all other factors remaining unchanged, for example Schneider and Frey, (1985). However, rather than just low wages, it is important that wages reflect productivity Krugell, (2005). It is generally believed that highly educated personnel are able to learn and adopt new technologies faster, and the cost of retraining is also less, Pigato (2001).

**Research Methodology**

**Theoretical framework**

In order to find out the relationship between FDI and interest rates, a theoretical model of the form outlined below was used. According to Fedderke (2002) the core drivers of FDI fall into two categories that are rate of return \( A \) and risky factors \( B \) for which there is a positive response of FDI to interest rates and a negative response to the risk factors.

\[
FDI = f(A, B) \tag{1}
\]

Where \( A \) is a collection of factors affecting the rate of return on FDI that includes interest rates \( IR \), inflation \( INFL \), GDP growth rates \( GDP \), exchange rates \( ER \), corporate taxes \( CT \), labour cost \( LC \) and \( B \) stands for the risk factors \( RF \) associated with FDI which include political instability, war and failure to observe democratic rights. The result is a theoretical model of the form:

\[
FDI = f(IR, INFL, GDP, ER, CT, LC, RF) \tag{2}
\]

One of the assumptions of Classical Linear Regression model (CLRM) is that there should be variability in the X-variable. However, corporate tax rate has
been constant over the period of study hence it violates this assumption of the model as a result CT is being dropped.

**Empirical model to be estimated**
The CLRM Ordinary Least Squares (OLS) was used to determine the relationship between FDI and interest rates. The model was specified as follows:

$$ FDI = \alpha + \beta_1 GDP + \beta_2 IR - \beta_3 INFL - \beta_4 ER - \beta_5 LC - \beta_6 RF + \mu $$

Where FDI is foreign direct investment; $\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6$; are parameters to be estimated and they measure the slope of the regression equation. IR is the interest rate; GDP is the gross domestic product; INFL is inflation; ER is the exchange rate; LC is labour cost; RF are risk factors and $\mu$ is the error term or the random residual term. It is composed of two components which are errors of sampling and purely disturbance random error (other factors which affect the dependent variable but not included in the model).

Diagnostic tests for multicollinearity and autocorrelation were performed using correlation analysis and Durbin-Watson statistic respectively. No multicollinearity nor autocorrelation were found in this model.

**Justification of Variables**

**Foreign Direct Investment (FDI)** - For purposes of this research FDI stocks were used rather than it being a flow specifically for two reasons. FDI stocks are much less volatile than flows which are sometimes dependant on one or two large takeovers. Secondly the long-term contribution of FDI to domestic investment (and therefore policy stance towards FDI) may be better reflected in accumulated FDI stock data (Read, 2007)

**Gross domestic product (GDP)** - As confirmed by various studies from Veugelers, (1991); Grosse and Trevino, (1996), there is a positive effect of host country’s economic growth on FDI. In fact growth rates are positively related to foreign capital stocks, FDI flows to countries with increasing GDP and it leads to an increase in economic activity in the recipient country. Therefore there is a positive sign between GDP and FDI.
**Interest rates (IR)**- The interest rate is the rate which is charged or paid for the use of money or more precisely the cost of borrowing. According to Gross and Trevino (1996) a relatively high interest rate in a host country has a positive impact on inward FDI. However the direction of the impact could be in a reverse if the foreign investors depend on host countries capital market for raising FDI fund. The researcher has used prime lending rates because investors are lenders and borrowers.

**Exchange rates (ER)**- According to Froot and Stein (1991) exchange rates can affect FDI through an imperfect capital market channel. In this case a real depreciation of the domestic currency raises the wealth of foreign investors relative to that of domestic investors and thereby increases FDI. Overvalued exchange rates are associated with shortages of foreign currency, rent-seeking and corruption, unsustainably large current account deficits, BOP crises, and stop and go macroeconomic cycles all of which are damaging FDI. In addition, high levels of exchange rate volatility can be disruptive to exports and investment. However because Zimbabwe is currently using the multicurrency system but particularly the United States (US) dollar and the South Africa (SA) Rand, hence the exchange rate is going to be of SA Rand per US dollar for the period under study. In addition, SA Rand was cited as the reference currency on the adoption of multicurrency system in 2009 and in the Short Term Emergency Recovery Plan (STERP). The expected sign of the exchange rates with respect to FDI is likely to be negative.

**Inflation (INFL)** - According to Akinboade, (2006) “low inflation is taken to be a sign of internal economic stability in the host country. Any form of instability introduce a form of uncertainty that distort investor perception of the future profitability in the country. Wint and Williams (1994) show that a stable economy attracts more FDI thus a low inflation environment is desired in countries that promote FDI as a source of capital flow. Therefore the study expects a negative relationship in the regression analysis.

**Labour Cost (LC)**- Since labour cost are the cost of production, the higher the labour cost the greater it will impact a negative effect on FDI. Average salaries paid to by the government of Zimbabwe to its employees were used,
that is total wage bill per month divided by the total employment base and was expressed as labour cost per capital.

**Risk factors** - In the model, risk factors include political instability, war and failure to observe democratic rights. However since there has never been war in Zimbabwe in recent past years, the variable risk factors represented other risk factors like political instability, failure to observe democratic rights as evidence by events like land reform programme, the current indigenisation bill, corruption and lack of transparency in conducting economic activities. Since risk is a disincentive to investment, this is going to carry a negative sign in our model. Data on failed nations index and rankings to find the effect of risk on FDI in Zimbabwe was used.

**DATA PRESENTATION ANALYSIS AND DISCUSSION**

**Unit root tests for stationarity**

Test for stationarity using the Augmented Dickey- Fuller unit root test results are reported in table 4.1 below.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Intercept</th>
<th>Intercept and trend</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical value 1% 5%</td>
<td>-3.6959 -2.9750</td>
<td>-3.6959 -2.9750</td>
<td>-3.6959 -2.9750</td>
</tr>
<tr>
<td>FDI</td>
<td>-3.740195</td>
<td>-4.995154</td>
<td>stationary</td>
</tr>
<tr>
<td>GDP</td>
<td>-4.794260</td>
<td>-5.221861</td>
<td>stationary</td>
</tr>
<tr>
<td>IR</td>
<td>-5.547066</td>
<td>-5.476731</td>
<td>stationary</td>
</tr>
<tr>
<td>ER</td>
<td>-4.937185</td>
<td>-4.929301</td>
<td>Stationary</td>
</tr>
<tr>
<td>INFL</td>
<td>-3.997863</td>
<td>-4.362913</td>
<td>Stationary</td>
</tr>
<tr>
<td>LC</td>
<td>-5.162122</td>
<td>-5.253089</td>
<td>Stationary</td>
</tr>
<tr>
<td>RF</td>
<td>-0.701638</td>
<td>-2.607035</td>
<td>Non-stationary</td>
</tr>
</tbody>
</table>
All the variables are stationary since the Augmented Dickey-Fuller unit root test statistics are greater than their critical values both at 1% and at 5% level of significance.

**Table 4.2: Descriptive statistics**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Obs</th>
<th>Mean</th>
<th>Median</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDI</td>
<td>29</td>
<td>32.49</td>
<td>28.0</td>
<td>18.25427</td>
<td>8.8</td>
<td>67.7</td>
<td>0.270490</td>
</tr>
<tr>
<td>GDP</td>
<td>29</td>
<td>456.03</td>
<td>344</td>
<td>278.6213</td>
<td>90</td>
<td>991</td>
<td>0.259669</td>
</tr>
<tr>
<td>IR</td>
<td>29</td>
<td>27.32</td>
<td>27.2</td>
<td>5.167093</td>
<td>15.2</td>
<td>34.4</td>
<td>0.283433</td>
</tr>
<tr>
<td>ER</td>
<td>29</td>
<td>7.5</td>
<td>7.43</td>
<td>0.360520</td>
<td>6.6</td>
<td>7.78</td>
<td>0.009826</td>
</tr>
<tr>
<td>INFL</td>
<td>29</td>
<td>1.99</td>
<td>2</td>
<td>0.620306</td>
<td>0.98</td>
<td>3</td>
<td>0.549120</td>
</tr>
<tr>
<td>LC</td>
<td>29</td>
<td>2071.5</td>
<td>2102</td>
<td>852</td>
<td>780</td>
<td>3564</td>
<td>0.324045</td>
</tr>
<tr>
<td>RF</td>
<td>29</td>
<td>107.5</td>
<td>107.76</td>
<td>3.189018</td>
<td>102.</td>
<td>113</td>
<td>0.668708</td>
</tr>
</tbody>
</table>

*Source: E views software package, (2010)*

The table 4.2 above shows the generally used descriptive statistics consisting of the mean, maximum, standard deviation among other known measures of dispersion. For the measures, the minimum and maximum values help in checking outliers in the data. The number of observations is 29 for each and every variable. FDI has a low standard deviation of 18.25427 and this indicates that there is low variability in the data. Exchange rates have the lowest standard deviation of 0.360520 indicating a high degree of its reliability on its contribution towards explaining variations in FDI. Labour cost has a high standard deviation of 852 indicating that there is great variability in the data. GDP has the second highest standard deviation followed by interest rates with values of 278.6213 and 5.167093 respectively indicating the ranking of these variables in explaining variability in the dependant variable.

**Diagnostic Tests**

**Table 4.3: Correlation matrix**
Multicollinearity is a situation where the explanatory variables are highly correlated. In the table above interest rates and GDP show the presence of multicollinearity with a value of 0.830411. All the other variables have values far less below 0.8 meaning that no strong relationship exists between the variables and that there is no multicollinearity.

### Model Estimation

The results of the Ordinary Least Squares (OLS) are presented in the table below:

Dependant variable: FDI

**Table 4.4: OLS results**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Standard Error</th>
<th>T-statistic</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>192.8425</td>
<td>48.87702</td>
<td>3.945463</td>
<td>0.0007*</td>
</tr>
<tr>
<td>GDP</td>
<td>0.027385</td>
<td>0.008051</td>
<td>3.401376</td>
<td>0.0026*</td>
</tr>
<tr>
<td>IR</td>
<td>0.782590</td>
<td>0.501445</td>
<td>1.560670</td>
<td>0.1329</td>
</tr>
<tr>
<td>ER</td>
<td>-0.256996</td>
<td>3.125503</td>
<td>-0.082225</td>
<td>0.9352</td>
</tr>
<tr>
<td>INFL</td>
<td>0.307567</td>
<td>1.919418</td>
<td>0.160240</td>
<td>0.8742</td>
</tr>
<tr>
<td>LC</td>
<td>-0.005033</td>
<td>0.002733</td>
<td>-1.841604</td>
<td>0.0791***</td>
</tr>
<tr>
<td>RF</td>
<td>-1.697360</td>
<td>0.396827</td>
<td>-4.277333</td>
<td>0.0003*</td>
</tr>
</tbody>
</table>

Note: *, **, and *** means that the variable is significant at 1%, 5% and 10% levels respectively.
An R squared of 0.922838 means that 92.2823% of the variation in FDI is being explained by the independent variables in the model and there is a strong relationship between FDI and the independent variables. A test for autocorrelation has been carried out using the Durbin Watson statistic and it has recorded a value of 2.264. This shows us that there is no autocorrelation since D-W statistic is around 2. An F-statistic of 53.8524828 (0.00000) shows that the model is correctly specified and this means that the independent variables correctly explains the dependent variable.

**Interest rate (IR)**
The statistic of this variable is significantly not differently from zero at 1% significant level with a coefficient value of 0.782590 and a P-value of 0.1329. The impact of high interest rates in Zimbabwe has been found to be insignificant in explaining the variability of FDI flows. This means that these high interest rates are failing to attract FDI in Zimbabwe.

**Gross Domestic Product (GDP)**
This variable has been found to be significant in explaining the variations in FDI at 1% significance level. A coefficient of 0.027 means that a one unit percentage increase in GDP will cause a 0.027 increase in FDI hence there is a positive relationship between FDI and GDP. The results of the study are in line with Gross and Trevino’s studies (2002) that FDI flows to countries with increasing GDP and it leads to an increase in economic activity in the recipient country. GDP has therefore proven to be an important determinant of FDI Zimbabwe.

**Inflation (INFL)**
The statistic of this variable is significantly not differently from zero at 1% significant level with a coefficient value of 0.307567 and a P-value of 0.8742. The variability of inflation rate in Zimbabwe is insignificant that it is not affecting the variability in FDI. The results are in contrast with what Ehimare (2010) found in Nigeria; he found a positive impact of exchange rates to FDI.
Exchange rate (ER)
The statistic of this variable is significantly not differently from zero at 1% significant level with a coefficient value of -0.256996. The variability of exchange rate in Zimbabwe is insignificant that it is not affecting the variability in FDI.

Labour Cost (LC)
Labour cost significantly affects FDI inflows negatively in Zimbabwe as tested at 1% significant level with a probability value of 0.0791 and a standard deviation of 0.002733. The coefficient of -0.005033 on labour cost means that an increase in labour cost by one percent will lead to a decline of FDI by 0.005033. Hence there is a negative relationship between labour cost and FDI.

Risk factors (RF)
Risk factors have proven to be the most significant factor testing at 1% significance level and with a P-value of 0.0003. An elasticity of -1.697360 between FDI and RF means that a percentage change in RF will cause FDI to fall by 1.697360. These results are in line with what Bleaney, (1993) as he used the proxies for political instability and he found them to be significant in affecting the variability in FDI. In his analysis of FDI in South Africa, Bleaney found out that political uncertainty has a significant negative impact on investment and that loss of investment is permanent than temporary. Hence this research has found out that FDI is being lowered because of higher rates of risk either occurring currently or that had occurred years before.

Conclusions

The purpose of this research was to determine the impact of interest rates on FDI in Zimbabwe. The results of the study accepts the null hypothesis that interest rates do not affect FDI and it rejects the alternative hypothesis that high interest rates affects the variability in FDI in Zimbabwe for the period under study.

The objectives of this study were achieved through the use of CLRM econometric model. The findings revealed that high interest rates
insignificantly affect FDI in Zimbabwe. The CLRM model used had high explanatory power and properly predicted the negative relationship between FDI and risk factors.

The study was also able to found out that FDI have got other important variables that affect its variability in Zimbabwe. It concluded that FDI is negatively affected by labour cost and that GDP affects FDI positively. Inflation rate and exchange rate have been found to be insignificant in explaining the variability in FDI in Zimbabwe.

The study also pointed the effect of risk factors as the main determinant that negatively affects FDI in Zimbabwe for the period under review.

**Recommendations**

High external debt of US$6.9 billion is affecting Zimbabwe’s credit worthiness and increases the country’s disproportionate risk that will further negatively affect FDI. However the government should find ways to reduce this external debt in order to reduce the amount of risk that the nation carries.

The study found a major discovery that risk factors are the most important determinant of FDI in Zimbabwe. These are suppressing the levels of FDI and this action is hindering growth and development of the nation leading to poor standards of living. The government should try to promote transparency on all macroeconomic issues, should fight corruption in all sectors of the economy and should launch campaign of promoting peace and unity for the outside world to gain confidence to invest in our country. Investment policies should be practised with extreme caution, passing of sensitive bills like indigenisation and land reform should be done in a way that do not harm investors and terms of such bills should be transparent, stated and explained clearly so that everyone will understand.

The main policy implication of the study is that the political elite should ensure that the institutional structure protects the property rights of the broad cross-
section of the society so as to promote FDI. Another policy suggestion is that neither institutional reforms nor macroeconomic adjustment alone can effectively induce FDI. Rather, policy should be aimed at achieving macroeconomic, institutional and political stability to improve the attractiveness of the country to foreign investors.

This study does not take into account the sources or origins of FDI for example different countries take a different view of sovereign risk in Zimbabwe and there are countries that are known to have imposed investment sanctions against the country. Therefore to promote FDI in Zimbabwe, the government must launch targeted campaigns to increase FDI from those countries or institutions that do not have sanctions against Zimbabwe. The government must also encourage the removal of sanctions imposed against Zimbabwe.

Performance of the host country in terms of its GDP is an important factor that boosts investor confidence, the government should find ways to promote local production. Many local companies are currently operating below capacity because of the dilapidated state of machines and equipment; the government can intervene to boost production of those companies. The government can also help to promote local production through research and gathering of essential information that can affect the performance of industries. This can also help to reduce research and information cost to local companies.

Inflation has a negative impact on investment only if it riches a certain threshold. Usually a certain level of inflation, especially a single digit, is desirable to stimulate investment in an economy. Negative inflation rates discourages investors due to lower rate of return in profits, hence the government of Zimbabwe should control and regulate inflation rate around levels that stimulate investment.

FDI should be targeted to strategic sectors like mining agriculture, tourism manufacturing, health and education. FDI in retail sector are not a priority and
are harmful to local players, especially when the foreign companies do not sell locally produced goods but imports from their countries.

The one-stop shop is expected to shorten the investment approval processes and eradicate system bottlenecks and would reduce the time taken to process investment applications from 96 to five working days. This would result in the streamlining of such processes as company registration, getting construction permits and resident permits, completion of immigration formalities, enhanced aftercare and investment facilitation as well as registration of mining titles, among others. However, although this policy was launched in 2010, its implementation and effectiveness is not clear. Hence the government should ensure tight implementation of passed bills and assess whether they are performing as initially planned.

The government should try and reduce labour cost in the country as per IMF policy advice that it agreed to adopt in the Short Term Emergence Recovery Plan (STERP) launched in 2009.

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