

## An Analysis of Factors Affecting Foreign Direct Investment in Zimbabwe (1980-2011)

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### ABSTRACT

*The research analyses the factors that affect Foreign Direct Investment in Zimbabwe. The study was prompted by the low levels of foreign direct investment in Zimbabwe. This has caused low levels of economic growth and standards of living and hindered efforts to promote economic prosperity and sustainable development. The research used historical data of period 1980 to 2011 and the variables studied are foreign direct investment inflows, market size (measured by Gross Domestic Product), inflation rate (Consumer Price Index), real interest rates, trade openness and political instability. Yearly data was used to make a total of 32 observations. The data was analyzed using the linear regression model and ordinary least squares approach in Statistical Product and Service Solutions (originally known as Statistical Package for Social Sciences) version 14.0 and E-Views version 3.1. Trade openness and political stability are very crucial in determining the level of foreign direct investment in Zimbabwe. All the variables were found to be insignificant in explaining the level of foreign direct investment in Zimbabwe except for trade openness and political stability. Trade openness and political stability critically affect foreign direct investment inflows in Zimbabwe. There was unidirectional causality from trade openness to foreign direct investment and there was independence between political stability and foreign direct investment. The study recommends that Zimbabwe should increase trade liberalization by getting involved in regional and international economic integration and should ensure political stability in the country in order to attract for foreign direct investment.*

**Keywords:** Foreign Direct Investment, Political Stability, Trade Openness, Economic Integration, Gross Domestic Product and Sustainable Development

### INTRODUCTION

At independence, Zimbabwe inherited an economic structure that was relatively well developed, by African standards. The country was almost self-sufficient with a booming diverse export industry of agriculture, mineral and manufacturing. Colonialists, initial interests in Zimbabwe, then Southern Rhodesia, were based on the assumption that Zimbabwe had large deposits of gold and diamonds (Gore *et al.*, 1992). As a result, the manufacturing industry boomed in Southern Rhodesia as most investment was channelled in the country. However, Britain followed by the United Nations Security Council then imposed mandatory economic and diplomatic sanctions on Rhodesia.

The Gross Domestic Capital Formation rose sharply and reached US\$941 million and the success of this import substitution turned Rhodesia into one of the largest manufacturing

producers in Sub-Saharan Africa after South Africa (Gore *et al.*, 1992). After the Internal Settlement Agreement of 1978, Zimbabwe then got its independence in 1980 and FDI rose by 1500% and 125% in 1980 and 1981 respectively. From that period, Zimbabwe's FDI has been fluctuating up to the current day where the level of FDI is very low.

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 (Robertson, 2009). As a country avoided deliberately by many countries and deprived of foreign direct investment mainly because of its controversial land reform and economic policies during the hyperinflation era, the Zimbabwe government's new empowerment drive is questionable on its level to attract foreign direct investment.

### **OBJECTIVES OF THE STUDY**

- (i) To examine how foreign direct investment is affected by market size, inflation rate, real interest rate, trade openness and political stability in Zimbabwe.
- (ii) To determine the direction of causality and the significance of these explanatory variables in determining foreign direct investment.
- (iii) To determine relationship among the independent variables that affect the FDI.

### **SIGNIFICANCE OF STUDY**

The study will help the Government of Zimbabwe in crafting policies that are investor friendly and will serve as a guide in the way policy makers in Zimbabwe view and understand the economic and political variables. In addition, it will help foreign investors in their bid to consider Zimbabwe as an investment destination, and it will contribute to the existing literature.

### **LITERATURE REVIEW**

#### **The Eclectic Theory/OLI Paradigm**

This FDI theory was developed by Dunning in a series of publications during 1980, 1981, 1988, 1992. According to this theory, three conditions must be met if a firm is to engage in FDI. There is need for comparative advantage over other firms which can arise from ownership advantages (O) which can include production processes, patents and knowledge. The internalization advantages (I) refer to the choice between accomplishing expansion within the firm and selling the rights to the means of expansion to other firms.

Locational advantages (L) may include access to foreign markets and favourable tax treatments. These advantages pertain to the question whether expansion is best accomplished at home or abroad. If this is not the case, then exports would do and FDI may not occur (Moosa, 2009). Therefore, this theory suggests that MNCs develop competitive ownership advantages and then transfer these abroad, depending on locational advantages, through FDI, which allows the firm to internalize the ownership advantages (Rugman, 2010).

Recent studies have also shown that Dunning and Lundan (2009) developed the four motives for FDI which are natural-seeking, market-seeking, efficiency-seeking and strategic asset-seeking. These four go on further to explain the "L" in OLI i.e. locational advantages. As a result, Rugman (2010) combined Dunning's OLI paradigm with the FSA/CSA matrix. FSA means Firm Specific Advantages and CSA means Country Specific Advantages.

## **Justification of Variables**

### ***Foreign Direct Investment***

This is the dependent variable, which is the centre of the study. It has been noted in the literature review that there are a number of factors that are responsible for the fluctuations of this variable, therefore this study aims to analyze a set of variables that have been affecting FDI inflow in Zimbabwe.

### ***Inflation***

In this study, the consumer price index (CPI) was used to measure the level of inflation. Level of inflation in Zimbabwe has moved from a low level to a hyperinflationary level, all of which are believed to have contributed to the low level of FDI in the country.

### ***Market Size***

Market size is also another explanatory variable that is believed to have an impact on the level of FDI inflows. Market size can be reflected by the level of GDP, and in this study, GDP was the measure of market size. Gwenhamo (2009) stated that the market size of the host country, usually measured by GDP, is considered an important determinant of horizontal FDI and is consistently statistically significant in empirical work.

### ***Real Interest Rates***

According to Gross and Trevino (1996) a relatively high interest rate in a host country has a positive impact on inward FDI and this however may depend on the whether investors depend on the host country's finance to raise their fund. There might be a negative relationship if investors depend on the host country for funding.

### ***Trade Openness***

Trade openness has been found to be a significant determinant of FDI. The view of FDI and trade openness being complements applies to vertical FDI where a liberal trade environment is a prerequisite for international division of labour at the firm level (Gwenhamo, 2011).

### ***Political Stability***

The study used political stability as a dummy variable where periods where there was absence of the variable, a zero was put and periods where there was presence of a variable, a one was put. The study simplified this by generalizing presence of political stability in the period 1980 to 1999. Absence of political stability was mainly noticed from the 2000 elections up to 2011.

## **RESEARCH METHODOLOGY**

### **Research Design**

The research was quantitative, based on historical time series data. The research was non-experimental because the researcher did not control the capturing of data used for research. The values in the variables under study are affected by factors such as the tax rates, government spending, fiscal policy and monetary policy. A regression analysis was used.

### **Data Collection Methods**

The research used secondary data collected by means of secondary data collection method (also known as desk research). In terms of secondary research, documentary analysis of written documents such as reports, diaries, transcripts of speeches and administrative and

public records, books, journals, magazine articles, newspapers, browsing of the internet and analysis of literature from organizations who deal with the topic in question was done.

### Tools Used to Collect Data

Microsoft Word 2007 was used in the typing of the document. Calculations necessary were made using Microsoft Excel 2007 and calculator Advanced D.A.L Sharp EL-509W. SPSS version 14.0 and E-Views version 3.1 were used for the data analysis.

### Data Analysis and Analytical Models

The researcher used the descriptive study approach. This approach is ideal when describing the features of the study as well as providing a simple set of summaries about the findings. Descriptive research is meant to portray an accurate profile of a person's events or situations (Robson, 1993). This probes the researcher to develop evaluation skills and synthesise ideas.

### Model Specification

One of the assumptions of the classical linear regression model (CLRM), Assumption 9, is that the regression model used in the analysis is correctly specified. If the model is not correctly specified, we encounter the problem of model specification error or model specification bias (Gujarati, 1995). The model proposed was as follows:

$$FDI = \alpha + \beta_1 GDP + \beta_2 IR + \beta_3 INFL + \beta_4 OP + \beta_5 PT + \mu \quad (3.3)$$

Where FDI is foreign direct investment;  $\beta_1, \beta_2, \beta_3, \beta_4$  and  $\beta_5$  are parameters to be estimated which measure the slope of the regression equation; IR is the interest rate; GDP is measuring the market size; OP is the openness to trade; INFL is inflation; PT is political stability and  $\mu$  is the error term or the random residual term. The error term 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).

### Testing for Autocorrelation

Autocorrelation may be defined as correlation between members of series of observations ordered in time (as in time series data) or space (as in cross-sectional data). The classical linear regression model assumes that such autocorrelation does not exist in the disturbances  $\mu_i$ . Therefore, we do not expect such dependence to exist in our data because it causes autocorrelation.  $\rho$  is the autocorrelation co-efficient and is a number between -1 and 1, such that if  $\rho = 0$ , then there is no autocorrelation, if  $\rho = 1$ , then there is positive autocorrelation and  $\rho = -1$ , then there is perfect negative correlation. In short, this means that  $-1 \leq \rho \leq 1$ . To calculate  $\rho$  we use:

$$\rho = \frac{E(\mu_t, \mu_{t-1})}{Var \mu_{t-1}} \quad (3.4)$$

In this study, the Durbin-Watson (DW) test was employed to test the following hypothesis:

$H_0$ : The data is not autocorrelated

$H_1$ : The data is autocorrelated

The D-statistic is defined as:

$$d = \frac{\sum_{t=2}^{t=n} (\hat{\mu}_t - \hat{\mu}_{t-1})^2}{\sum_{t=2}^{t=n} (\hat{\mu}_t)^2} \quad (3.5)$$

Which results in  $d = 2(1 - \rho)$ , and this follows that  $0 \leq d \leq 4$ . The acceptable DW-statistic is 2 or around 2. The goodness of fit test

The co-efficient of determination ( $R^2$ ) was used to measure the proportion of variation in the dependant variable being explained by the explanatory variables.  $R^2$  is calculated as:

$$R^2 = \frac{ESS}{TSS} = 1 - \frac{RSS}{TSS} = 1 - \frac{\sum \hat{u}_i^2}{\sum y_i^2} \quad (3.6)$$

Where TSS is the total variation about the mean, ESS is the sum of squared least squares residual in the portion of the variation in the dependant (Y) variable not explained by the model and RSS is the residual sum of squares.

$R^2$  falls between 0 and 1, where a value closer to 1 represents more reliable results of the model. As the number of regressors increases,  $R^2$  almost invariably increases and never decreases. Stated differently, an additional X variable will not decrease  $R^2$  (Gujarati, 1995). It should be added that in order to remove the effect of the number of the explanatory variables, we need to adjust the co-efficient of determination. This process is known as “removing the noise.” When we take the value of the explanatory variables into account, the adjusted  $R^2$  is computed which is denoted by  $\bar{R}^2$  calculated as:

$$\bar{R}^2 = 1 - (1 - R^2) \frac{n-1}{n-k} \quad (3.7)$$

Where n is the number of the observations, k is the number of parameters in the model and  $R^2$  is the co-efficient of determination.

It is good practice to use  $\bar{R}^2$  rather than  $R^2$  because  $R^2$  tends to give an overly-optimistic picture of the fit of the regression, particularly when the number of explanatory variables is not very small compared with the number of observations (Henri Theil, 1978)

**Testing the Significance of a Coefficient**

The value of the t-statistic is computed using the following form:

$$t_{\text{calculated}} = \frac{\hat{\alpha}}{se} , \frac{\hat{\beta}_1}{se_{\beta_1}} , \frac{\hat{\beta}_2}{se_{\beta_2}} \dots \dots \dots \frac{\hat{\beta}_i}{se_{\beta_i}} \quad (3.8)$$

We formulate hypotheses such that:

$H_0$ :  $\beta_i = 0$ ; the explanatory variable has no effect on FDI

$H_1$ :  $\beta_i \neq 0$ ; the explanatory variable has an effect on FDI

Decision criterion is that we reject  $H_0$  if, and only if,  $t_{\text{calculated}}$  is greater than  $t_{\text{critical}}$  i.e.  $t_{\text{calc}} > t_{\text{crit}}$  at significance level 5%

$$t_{\text{critical}} = t_{n-k, \frac{\alpha}{2}} \quad (3.9)$$

Where n is the number in the sample, k is the number of estimated parameters in the model, n-k is the degrees of freedom and  $\alpha$  is 1 minus the level of significance

**Testing For the Significance of the Model**

The F-test is employed to test the overall significance of the model.

$$F = \frac{R^2(n-k)}{1-R^2} \quad (3.10)$$

Where n is the number in the sample, k is the number of estimated parameters in the model, n-k is the degrees of freedom and  $R^2$  is the co-efficient of determination. In testing the model, the following hypothesis will be suggested:

$H_0$ : The model is not significant

$H_1$ : The model is significant.

We reject the null hypothesis if, and only if,  $F_{\text{calculated}}$  is greater than  $F_{\text{critical}}$  i.e  $F_{\text{cal}} > F_{\text{crit}}$

$$F_{\text{statistic}} = F_{n-1, \frac{\alpha}{2}}^{n-k} \quad (3.11)$$

Where  $n$  is the number in the sample,  $k$  is the number of parameters to be estimated and  $\alpha$  is the level of significance.

### **The Granger Causality Test**

The standard Granger causality test was used to investigate this causal link between our set of macroeconomic variables and FDI.

The Granger test that  $X$  does not Granger cause  $Y$  is the F-test that the  $X$ s may be excluded from the equation:

$$Y_t = \beta_0 + \sum_{i=1}^k \beta_i Y_{t-1} + \sum_{i=1}^k \gamma_i X_{t-1} + \epsilon_t \quad (3.12)$$

The research lets  $X$  be the explanatory variables such that  $X_1$  is real interest rates,  $X_2$  is openness to trade,  $X_3$  is inflation level,  $X_4$  is the market size and  $X_5$  is political instability and  $Y$  be FDI. Thus, applying the test requires three steps:

1. Estimation of the unrestricted model given by the above equation i.e.  $RSS_{UR}$ .
2. Estimation of the restricted model by regressing  $Y$  just on the lagged  $Y$ s i.e.  $RSS_R$ .
3. Test the restriction with the F-test. The null hypothesis is that  $X$  does not Granger cause  $Y$ . In this study case, the null hypothesis is that real interest rates, trade openness, market size, political stability and inflation do not Granger cause FDI.

$$F = \frac{RSS_R - RSS_{UR} / m}{RSS_{UR} / n - k} \quad (3.13)$$

This procedure will be repeated by swapping the variables to investigate if FDI Granger causes real interest rates, trade openness, market size or inflation. Excluding trade openness, market size, political stability and inflation and considering FDI and real interest rates only, there are four possible outcomes:

- a) No causal relationship between real interest rates and FDI i.e. independence.
- b) Unidirectional causality from real interest rates to FDI.
- c) Unidirectional causality from FDI to real interest rates.
- d) Bidirectional causality which means that FDI causes real interest rates and in turn real interest rates cause FDI (Chandan Mukherjee, Howard White and Marc Wuyts, 1998).

## **DATA PRESENTATION AND ANALYSIS**

### **Examine How Foreign Direct Investment Is Affected By Market Size, Inflation Rate, Real Interest Rate, Trade Openness and Political Stability in Zimbabwe**

#### **Estimation Equation**

The estimated regression equation for FDI for the period 1980-2011 was as follows:

$$FDI = -310.4402 - 0.0013GDP - 0.0000525INFL + 0.0232IR + 46.0812OP + 101.0451PT \quad (4.1)$$

As computed by appendix 2, the above fitted regression equation suggested that Foreign Direct Investment in Zimbabwe for the period 1980 to 2011 was:

- i. Negatively related to market size as measured by GDP, which meant that if market size increases, the FDI would also decrease such that a 1% increase in GDP would decrease FDI by 0.0013%.
- ii. Negatively related to rate of inflation as measured by the Consumer Price Index, which meant that as inflation increases, FDI would decrease such that a 1% increase in inflation would decrease FDI by 0.0000523%.
- iii. Positively related to real interest rates.

Apriori expectations were a positive relationship to exist between real interest rates and FDI. A positive relationship between real interest rates and FDI was observed and this meant that if real interest rates increase, FDI would also increase such that a 1% increase in real interest rates would increase FDI by 0.0232%.

- iv. Positively related to trade openness. This meant that FDI would increase as trade openness increase. This model revealed that a 1% increase in trade openness would result in an increase in FDI of 465.0812%.
- v. Positively related to political stability

Expectations of this study were of a positive relationship between FDI and political stability, meaning that FDI would increase as political stability increases. The model showed that a 1% increase in political instability would increase FDI by 101.0451%

- vi. The above fitted regression equation also revealed that the minimum value for FDI was negative. The constant in the study was revealed to be negative meaning that when all the variables are equal to zero, the value of FDI will be zero.

### ***Precision of Estimators***

To test for the precision of the estimator, the standard squared difference between the dependant variable's figure and the explanatory variables was calculated. The value obtained above for the standard error was 65.2874. A standard deviation of 65.2874 meant that the average expected unit difference is about 65.2874.

### ***Significance of the Model***

The F- test was performed to show the significance of the whole model. The hypothesis was as follows:

$$H_0: \beta_1 = \beta_2 = \dots = \beta_i = 0$$

$$H_1: \beta_1 \neq \beta_2 \neq \dots \neq \beta_i \neq 0$$

The result for the  $F_{calc}$  was 11.05396. The significance value of the F-statistic was 0.000009, which meant that the variation explained by the model is not merely by chance. The study revealed that there is sufficient evidence to show that the model is significant and that at least one of the explanatory variables co-efficient is non-zero. Therefore, a change in one of the explanatory variables will result in a change in foreign direct investment. In this case, the study rejects the null hypothesis.

### ***The Goodness of Fit of the Model***

$R^2$  was calculated to test the goodness of fit. The value for  $R^2$  was 0.6801 (68.01%). In addition to  $R^2$ , adjusted  $R^2$  ( $\bar{R}^2$ ) was also computed and the value was found to be 0.6186 (61.86%). It is good practice to use  $\bar{R}^2$  the  $R^2$  because  $R^2$  tends to give an overly optimistic picture of fit of the regression (Theil, 1978, p. 135). This meant that 61.86% of the variations in FDI are explained by this model.

It should be noted that though the value of  $R^2$  is 68.01%, it is not the objective of the regression analysis to find a model with the highest  $R^2$ . The success of the model cannot be completely judged on the magnitude of  $R^2$  values. Even if the value is low, the estimated parameters may still contain useful (Hill, Griffiths and Judge, 1977).

### ***Autocorrelation Test***

To determine if auto-correlation exist in our data, the Durbin-Watson (DW) test was employed in this research. The null hypothesis was:

$H_0$ : The data is not autocorrelated

$H_1$ : The data is autocorrelated

The value for DW as shown in figure 4.1 was 2.2658.  $n= 32$  and  $k= 6$ , therefore from the Durbin Watson d-table,  $dL = 1.041$ ,  $dU = 1.909$ ,  $4-dU= 2.091$  and  $4-dL = 2.959$ . The data shows that the D-W statistic lies within the zone of indecision. Since the test was trying to test if the data is auto-correlated, the presence of auto-correlation is therefore rejected by the study since the test did not show any presence of auto-correlation. This meant that the data or the series of observations used in this study are not correlated, ordered in time.

## **DISCUSSION**

The study was successful in determining the effects of rate of inflation, real interest rates, trade openness and political stability on FDI by showing that relationships actually exist between FDI and these explanatory variables. It also showed that, the regression equation has a standard error of 65.2874 and that the model estimated is significant. This meant that the regression equation the explanatory variables in this study are able to sufficiently explain the dependent variable, FDI. The study revealed  $\bar{R}^2$  to be 61.86% and this therefore this meant that 38.14% of the variations in FDI were not explained by this model and may be due to variations in the error term or variations in other variables which form part of the error term. These variables may include exchange rates, infrastructural facilities, labour costs and corporate taxes, among a lot of other variables.

This study supported the differential rates of return hypothesis by proving that there is a positive relationship between FDI and real interest rates in Zimbabwe. FDI flows to where there are high real interest rates.

The study showed that inflation is negatively related to FDI in Zimbabwe. The rate of inflation has been very high in Zimbabwe and in some years, it was actually at hyperinflation. Inflation is a huge deterrent for FDI. Inflation is believed to have tax effects on the rate of return. Returns are reduced in countries where inflation is eroding away the value of money in the economy. The profits made by the foreign company will be worth very little and this means that little money will be remitted to their foreign country (Erramilli and D'Souza, 1995). The results revealed that the rate of inflation is insignificant in explaining the flows of FDI in Zimbabwe.



This research revealed an interesting aspect of a negative relationship between market size and FDI. This research proposed that as the market increases, the level of FDI will be decreasing. This result implied that the size of the market may not really matter in explaining FDI, but rather, the characteristics of the market of the host country should be used in explaining the flow of FDI. As seen in most economies including Zimbabwe, there is maldistribution of income and this affects the attractiveness of the country as an FDI destination. Therefore, even if the market is large, if only a few people are only able to afford the products of the firm, then this does not bring any benefit to the foreign firm. This can also be explained by the GDP per capita which is observed to be very low in Zimbabwe, showing that as the GDP was slightly growing over the years, level of population was growing faster. Therefore, in the end, the country experiences a low GDP per capita.

The results of the study were in contrast with the market size hypothesis that larger markets lead to high FDI. Since market size may include the ability of the buyers to buy the products or services of the MNC, this study showed that measuring market size in this context using GDP might be a limitation. The results showed that the market size hypothesis does not hold in Zimbabwe. The market size variable was also found to be statistically insignificant.

Apriori expectations were that there should be a positive relationship between political stability and FDI. The model in this study satisfied this expectation. The model showed that political stability was very significant in explaining FDI in Zimbabwe from 1980 to 2011. The country of Zimbabwe has been facing politically instable periods mainly during periods which involved any type of elections. This might have contributed to the low FDI in Zimbabwe.

As expected, trade openness revealed a positive relationship with FDI. Trade openness was found to be highly significant in explaining FDI in Zimbabwe from 1980 to 2011.

The research revealed that there is no auto-correlation in the data. This implied that the results obtained in this research were not spurious.

### **Significance of These Explanatory Variables in Determining Foreign Direct Investment**

#### **The T-Test**

##### *Analysis*

In testing for the significance of the explanatory values, the t-test was used at 5% significance level (see Figure 1). The probabilities of the coefficients were used to determine the significance of the explanatory variables.

### **RESULTS**

#### **GDP (Market Size)**

Market size as measured by GDP was found not to be insignificant. Probability or p value was 0.9192 which was greater than 0.05 i.e.  $p > 0.05$ . This meant that market size as measured by GDP does not influence FDI in Zimbabwe and foreign investors may be influenced by the other variables in the study.

#### **Constant**

The constant was found to be significant. The probability (p value) was 0.0024 which was less than 0.05 i.e.  $p < 0.05$ . This meant that when all the explanatory variables are equal to zero or non-existent, FDI will be negative.

### **Inflation**

Inflation as measured by the Consumer Price Index was found to be insignificant. p value was 0.7203 which was greater than 0.05 i.e.  $p > 0.05$ . This meant that the decisions of foreign investors might be explained by other explanatory variables in the study, such that inflation does not play a great role.

### **Real Interest Rates**

Real interest rates were found to be insignificant in the model. p value was 0.0931 which was greater than 0.05 i.e.  $p > 0.05$ . Therefore, the study revealed that the foreign investors are not influenced by the rate of interest in Zimbabwe.

### **Trade Openness**

Trade openness was found to be very significant in the model with a p value of 0.0000. The p value was less than 0.05 i.e.  $p < 0.05$ . This meant that trade openness influences the decisions of the foreign investors and therefore FDI inflows in Zimbabwe.

### **Political Instability**

The p value for political stability was found to be 0.0104 which is less than 0.05 i.e.  $p < 0.05$ . The test for political instability was found to be significant in the model. The study revealed that political stability influences foreign investors and therefore FDI.

## **DISCUSSION**

The study was successful in determining the significance of the explanatory variables. The results revealed imply that only political stability, trade openness and the constant are significant in explaining FDI in Zimbabwe. Therefore, this study proposed an FDI regression equation of this nature after dropping GDP, inflation rate and real interest rates:

### **Suggested Regression Equation**

The regression equation can be suggested to be:

$$FDI = -300.8271 + 435.1771OP + 100.2953PT \quad (4.2)$$

As shown in appendix 2 above, all of the explanatory variables and the co-efficient are significant as all their probabilities are less than 0.05. The  $R^2$  and  $\bar{R}^2$  are at 0.631185 and 0.605749 respectively. The Durbin Watson statistic is 2.253379, therefore the DW statistic is within the zone of indecision (therefore the researcher chooses that there is no auto-correlation since both positive and negative auto-correlation were not found in the data). The F statistic is 24.81507 and its probability is 0.000001.

## **CONCLUSIONS**

The study concluded that FDI is low in Zimbabwe and this is attributed to the economic and political conditions. The attractiveness of Zimbabwe has been impeded by the policies and the current economic conditions. The presence of political instability in the country has resulted in foreign investors deterring from investing in the country. However, political stability was implied to be a necessary but not a sufficient condition for FDI inflows in Zimbabwe.

Trade openness was found to be very significant in determining FDI inflows in Zimbabwe. Trade openness in Zimbabwe has not been sufficient to draw FDI into the country. Due to attractiveness of trade liberalization to foreign investors, trade restrictions are believed to

deter foreign investment. Trade openness is a very critical point in attracting foreign investment.

Inflation rates have been mounting for the past decade and this discouraged foreign investors. Inflation has tax effects on the rate of returns for investors therefore, has a negative effect with FDI. High inflation rates exacerbated the real interest rates which are believed to have a negative relationship with inflation. As inflation increases, this impairs the real interest rates.

The growth in the GDP of Zimbabwe has been astonishing. Even though Zimbabwe has been experiencing growth in the GDP, the research concluded that maldistribution of this income may be the cause of the low FDI inflow. Low GDP per capita shows that the growth of GDP is not synonymous with the growth of population.

The research also concluded that there are other variables which explain FDI inflows. These were explained by the relatively low explanatory power of the model.

## **RECOMMENDATIONS**

1. National economic policies should be aimed towards regional economic integration and even global economic integration thereby reducing barriers to trade and investment. Due to economic integration, thereby trade openness, foreign investors are assured of comparative advantages and economies of scale in the host country which accrue as the firms expand. The effects of regional integration can also be political in nature as it promotes peace by encouraging trade and investment. Regionalism can promote political stability by restricting membership to democratically elected governments.
2. Government of Zimbabwe should modify the one-stop shop (OSS). Currently Zimbabwe Investment Authority has adopted the Rwandan one-stop shop as a concept for investment promotion. The one-stop shop therefore, has been a very good move in Zimbabwean policies towards promotion of foreign investment and this may improve the country's Ease of Doing Business Index. However, Zimbabwe should aim to adopt models like the Egyptian model of one-stop shop as the Rwandan model has limitations of being inefficient and ineffective.
3. The Reserve Bank of Zimbabwe should maintain relatively high lending rates.
4. The African Development Bank (AfDB) reported that the lending rates have been considerably high in Zimbabwe. Though this has posed negative effects on domestic investment, foreign investment is positively related to the lending rates in Zimbabwe. Lending rates should be maintained high enough to promote foreign investment and low enough to promote domestic investment. Government of Zimbabwe and the political leaders should aim to achieve political stability.
5. Transparency, non corruption, observation of democratic rights and reduced violence should be the aim of the Zimbabwean government. Political leaders should aim to work together and maintain peace.
6. A dichotomy between government and economic activities should be put in place. This means independence of individual institutions like the Central Bank from the government and setting up of political boundaries between government and economic development. The monetary policy implemented in the country should be in line with the overall economic welfare and not just the good of certain government bodies.

7. Fiscal policies should also not affect the viability of businesses in Zimbabwe. However, there is likely no chance of finding a purely independent Central Bank.

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**APPENDIX 1 : REGRESSION ANALYSIS RESULTS**

Included observations: 32

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-310.4402	92.26021	-3.364833	0.0024
GDP	-0.001304	0.012736	-0.102417	0.9192
INFL	-5.23E-05	3.00E-05	-1.743036	0.0931
IR	0.023224	0.135999	0.170764	0.8657
OP	465.0812	67.85914	6.853627	0.0000
PT	101.0451	36.56180	2.763678	0.0104
R-squared	0.680078	Mean dependent var		57.59385
Adjusted R-squared	0.618555	S.D. dependent var		105.7092
S.E. of regression	65.28735	Akaike info criterion		11.36283
Sum squared resid	110823.4	Schwarz criterion		11.63766
Log likelihood	-175.8053	F-statistic		11.05396
Durbin-Watson stat	2.265803	Prob(F-statistic)		0.000009

Estimation Command:

=====  
 LS FDI C GDP INFL IR OP PT

Estimation Equation:

=====  
 $FDI = C(1) + C(2)*GDP + C(3)*INFL + C(4)*IR + C(5)*OP + C(6)*PT$

Substituted Coefficients:

=====  
 $FDI = -310.4402251 - 0.001304344121*GDP - 0.00005230240046*INFL + 0.02322363376*IR + 465.0812379*OP + 101.0450501*PT$

**APPENDIX 2: SUGGESTED REGRESSION RESULTS**

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Included observations: 32

<i>Variable</i>	<i>Coefficient</i>	<i>Std. Error</i>	<i>t-Statistic</i>	<i>Prob.</i>
C	-301.8271	59.21161	-5.097431	0.0000
OP	435.1771	63.48530	6.854769	0.0000
PT	100.2953	31.66542	3.167346	0.0036
R-squared	0.631185	Mean dependent var		57.59385
Adjusted R-squared	0.605749	S.D. dependent var		105.7092
S.E. of regression	66.37418	Akaike info criterion		11.31755
Sum squared resid	127760.4	Schwarz criterion		11.45497
Log likelihood	-178.0808	F-statistic		24.81507
Durbin-Watson stat	2.253379	Prob(F-statistic)		0.000001

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