THE EFFECTS OF TARIFF BARRIERS ON ZIMBABWE'S INTERNATIONAL TRADE PERFORMANCE

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Abstract

The study explored the effects of tariff barriers on Zimbabwe's international trade performance for the period 1980 to 2014. The Ordinary Least Squares (OLS) technique was employed for the analysis. The results obtained showed that tariffs positively affect the trade performance whilst gross domestic product and foreign direct investment had insignificant effects on the trade performance. Furthermore trade openness and exchange rate were found to have a positive effect on the trade performance of Zimbabwe. Hence the overall results showed that tariff barriers had a positive effect on the trade performance of Zimbabwe. Therefore the study recommends that Zimbabwe can improve the trade performance through policies that restrict trade like an increase in tariffs.

Keywords: - International Trade Performance, Tariff Barriers, Trade Openness

1.0 INTRODUCTION

The importance of trade has spread over nations with most developing nations introducing trade liberalization policies. The extent to which an economy is liberalized depends on how developed and vulnerable their industries are. Trade barriers are used to protect infant, vulnerable and strategic industries. Trade barriers include tariffs, quotas, barns, embargoes and many others. Most trade barriers have the effect of increasing the product price upon entering the importing country making it uncompetitive in the foreign market. Trade barriers are important since they can be used to control exports and imports. There have always been conflicts in theory whether trade is beneficial to an economy and whether stringent controls are the best. Neo-classical and classical economists like Hecksher (1919), Olin (1933), Mill (1829), Smith (1776) and Ricardo (1817) all moved the idea that international trade was vital for the improvement of factor productivity, product diversity and increasing of demand for domestic products which would stimulate domestic production, therefore increasing the GDP

1.1 Relevance of the Study

Theoretically trade barriers are supposed to increase the output of a nation since domestic production would have to meet all the demand. In Zimbabwe these trade barriers have been

implemented but the output did not increase as per expected. Various trade agreements like the Zimbabwe/South Africa trade agreement, Zimbabwe/ Namibia trade agreement. Zimbabwe/Botswana trade agreement, customs union, COMESA TFTA among others have also been put in place but the nation did not seem to benefit much from them. A couple of barriers were also put in place which includes a ban on exports of unprocessed chrome which resulted in a fall in the exportation of chrome, it was later removed in 2015 when the exports of the mineral fell by a huge percentage. Surtax on second hand five years and older was increased from 25% to 35% and this also resulted in the significant fall in the importation of second hand cars. The government also put a ban on importation goods that can be produced locally like maize, sugar, flour and meat so as to reduce the imports and increase the net exports. A few months after the government predicted a drought in the 2016 farming season and called for extensive imports of maize, the ban however is not working due to factors beyond the government's control but this has the effect of reducing the trade balance. Despite all these policies the nation's output has not been rising as per expected. There is need to examine the reason behind the negative trade balance despite all the trade efforts that have been put in place.

1.2 Objectives

The main objective of the study is to examine the effects of tariff barriers on Zimbabwe's international trade performance.

The specific objective:

- i. Identifying the relationship between tariffs and trade performance
- ii. Identifying the relationship between trade openness and trade performance

1.3 Research Questions

- i. What is the relationship between tariffs and trade performance?
- ii. What is the relationship between trade openness and trade performance?

2.0 LITERATURE REVIEW

2.1 Theoretical Literature

2.1.1 Mercantilism

Mercantilism (1500-1750) is a doctrine of trade which had the basic idea that trade is a zero sum game. It emphasized on government control over foreign trade it was to be highly regulated to make sure a positive trade balance meaning excess of exports over imports was maintained. Precious metals like gold and silver were regarded indispensable to a nation's wealth they measured the power and strength of the economy. In general the mercantilists were against free trade and advocated for regulated trade.

2.1.2 The Absolute Advantage

Later Adam Smith (1976) argued on the mercantilists' theory and developed the theory of absolute advantage. He had the idea that trade is a positive sum game and free trade was the key to developing a nation's economy and trade performance. The good which a nation has an absolute advantage is the one which it can produce more with the same amount of effort and resources than others. It is not a question of who produces the best of it but rather who produces it efficiently. He advocated for free trade, specialization and division of labour which would in turn lead to industrialization. Hume (1752) also criticized the mercantilists' idea of wealth accumulation in the form of gold and silver without any changes on its international competitive position. He argued that the accumulation of wealth by means of a trade surplus would lead to an

increase in the money supply which will increase inflation and not output and employment as stated by the mercantilists. He stated that despite the quantity of money a country has trade can still be carried on effectively for prices will adjust to the quantity of money in circulation. He also stated that a country's wealth consisted of its industry and its people. A nation would by natural forces and without effort get the money it required for its activities economically.

2.1.3 Theory of the Comparative Advantage

Ricardo (1817) theory of comparative advantage stated that nations benefited from trade through variations in opportunity costs of production. He assumed that each nation has fixed endowments. Trade performance would be enhanced by exporting the goods which that country had a comparative advantage that is a lower production opportunity cost. He also added that the technological level is fixed in the trading partners but it can be different between them. Ricardo advocated for free trade between countries since trade emanates from the fact the nations have different levels of technology. Mill (1848) pointed out that the actual location of the equilibrium terms of trade between two nations is determined by the comparative strength and elasticity of demand of each country for the others production. He also said that an economy should specialize or focus much on the production of those commodities in which it is more efficient and compromise the output of those commodities it cannot easily or efficiently produce. However the model did not include transport costs and is limited to only one resource which is labour and it is only driven by maximization of production and consumption

2.1.4 Factor Proportions Theory

Heckscher (1919) - Ohlin (1933) theory supported the idea of free trade. In this theory a country exports goods that use intensively the factor endowments that are in abundance locally. Trade patterns are solely determined by differences in factor endowments and not productivity. Ohlin (1933) proposed that relative resource prices between trading nations with assumed identical technical qualities will move in the same direction. The proposition led to the development of the factor price equalization theory by Samuelson (1949) in which relative factor prices will be equalized through an increase in price of the abundant factor and a decrease in the price of the scarce factor. Heckscher and Ohlin believed that open economies derived more benefits from free trade through increased international product competitiveness

2.1.5 New Trade Theory

Krugman (1979) drew on Smith's idea that division of labour does lower unit costs; economies of scale within firms are not compatible with the perfect competition assumed by traditional theory. A more applicable assumption is that many markets have monopolistic competition. The theory implies that free trade expands market size beyond national boarders and so permits firms to reap larger economies of scale to the benefit of consumers and stakeholders. Free trade in this aspect actually enhances welfare. Helpman and Krugman's theory states the changes in income distribution among industrialized nations as their theory's principal mechanism for accounting for the observed expansion of trade relative to income. As distribution of national income become more equal their model predicts that trade volumes should raise. They support the idea of unregulated trade.

2.2 Empirical Literature

A study was done by Zakaria (2014) on the effects of trade liberalization on exports, imports and trade balance in Pakistan. The study used time series data to analyze the effects of trade liberalization on exports, imports and trade balance in the period 1981/2 to 2007/8. The results

showed that trade liberalization stimulate both exports and imports with the effect being much greater on the latter than on the former therefore worsening the trade balance. The study found a negative relationship between a reduction in tariffs and imports and a positive relationship between tariffs and exports. The study also found that market distortions affect exports, imports and the trade balance in the theoretically expected directions, inclusion of interaction terms indicate that liberalization stimulates both price and elasticities of exports, imports and trade balance. The study found the exchange rate to be negatively related to trade balance. The study concluded that trade liberalization made Pakistan worse off since the imports rose by a greater proportion to the exports he saw the need for a very little level of liberalization. A study was done by Pacheco-Lopez (2005) on the effects of trade liberalization on exports, imports and balance of trade. The study was focusing on the liberalization involved in the North American Free Trade Agreement (NAFTA) in the mid-1980s. The results proved that trade reforms had a significant impact on exports, imports and trade balance. However the effects of NAFTA on exports were negligible since in that period the propensity to import exceeded the propensity to export and this worsened the growth rate consistent with balanced trade which was the major explanation of the slowdown of Mexico's growth in that period. NAFTA did not deliver the expected growth performance that was anticipated. The study concluded that trade liberalization should be coupled with governmental policies that co-ordinate the industrial and trade policy to achieve simultaneous internal and external equilibrium. The study failed to look at the linkage between exports and trade balance, the study denounced a relationship between exchange rate and trade balance saying real exchange rate does not affect trade balance.

Santos-Paulino (2006) carried out a study in the Dominican Republic (DR) on trade liberalization and trade performance using data from 1990-2001. In the 1990's The DR opened its trade regime by eliminating non-tariff barriers, simplifying the tariff structure and reduced the rates of duties, using this information he studied the impact of trade liberalization on the Dominican Republic's trade dynamics. The research found that import and export growth increased as a result of trade liberalization even though export's response was somewhat higher. The paper estimated a 1% point improvement in the trade balance to GDP ratio following liberalization. The encouraged the liberalization of the DR although the growth percentage was very little and almost insignificant in an economy. A study was done by Wassad (2012) examined the impact of trade liberalization on trade balance in Arab countries. Supporting evidence was presented on the impact of liberalization of trade on imports, exports and the trade balance in 20 Arab countries over the period 1995-2010. The paper used dynamic panel data techniques based both on fixed effects and Generalized Methods of Moments (GMM) and employs two measures of trade liberalization. The results suggested that trade liberalization was statistically and positively correlated with imports and trade balance. However if fuel exports were to be excluded trade liberalization would be deleterious to trade balance. The research concluded that results had serious policy implications for Arab countries given the unsustainable nature of fossil fuel resources and the weak manufacturing base of these countries. It also argued that results might not be surprising in light of institutional weakness poor physical infrastructure and the lack of skilled labour available at an internationally competitive cost.

Chen *et al* (2014) did a study on the effects of trade liberalization on exports and imports in Sri Lanka. The study analysed the impact of liberalization of trade on exports and imports in the period 1970-2011 and used secondary data. The study divided the time period into two (1970-1977) before trade liberalization and (1977-2011) after the liberalization. The study employed

regression models to disentangle trade effects. The results suggested that growth rate of total exports and imports are higher during the closed economic period than in the open economic period. The study lacked the overall assessment of the impact of trade liberalization on the trade balance. Kassim (2013) did an empirical paper on the impact of trade liberalization on export growth in Sub Saharan Africa. The paper investigated 20 Sub Saharan African countries in the period 1981-2010. Panel data methodology was used and the results suggested that trade liberalization increases the growth of exports however imports grew faster by approximately two percentage points which gives evidence at first look that trade balance in the region deteriorated in the post liberalization era. Furthermore results also showed that trade liberalization significantly affect income elasticity of demand for exports and imports. However it did not significantly affect income elasticity of demand. The study concluded that trade reforms should be accompanied by efficient export incentives schemes which may be in the form of exempting exporters from transportation taxes and duties on their inputs.

Impacts of trade liberalization on export performance in Bangladesh, the empirical study was done by Yusop et al (2012). The article empirically examined the impacts of trade liberalization on export performance in Bangladesh following the country's extensively liberalizing trade since 1992 in order to achieve higher export performance and GDP growth. However despite the liberalization imports grew faster than exports increasing trade deficit. The ARDL "Bounds Test" approach with annual time series data was used. Main results indicated that trade liberalization had statistically significant but low impact on aggregate exports. Exports were stimulated by GDP, the interaction of trade liberalization with GDP increased exports a little hence improving the trade balance. However the liberalization enhances imports compared to exports hence the trade deficit. The research concluded that a combined and consistent policy to promote GDP growth, technology transfers and domestic price stability including education, infrastructure and backward linkage industries is essential in order to attain higher export performance in Bangladesh. However the study failed to show the relationship between trade liberalization and GDP. A study was done by Thirwall et al (2004) on the impact of trade liberalization on exports, imports and the balance of payments in developing countries. The study used panel data and time series/cross section analysis to find the effect of trade liberalization on import growth, export growth, the balance of trade and the balance of payments. A sample of 22 developing countries was used that had trade liberalization policies since the mid 1970's. Results proved that liberalization stimulated export growth but raised import growth by a higher degree, worsening the balance of trade and payments to such an extent that it constrained the growth of output and living standards, the findings had serious implications for the sequencing and degree of liberalization.

Stirbu *et al* (2004) conducted a study on the relationship between trade liberalization, economic growth and the trade balance. The econometric investigation was a study of 42 developing countries of Asia, Africa and Latin America in which they first examined the impact of trade liberalization on economic growth, investment, share of GDP. Panel data and country to country data are used to measure the impact of liberalization on domestic economic growth measured by PPP terms, the data available in Heston, Summers and Aten (2001) study. The impact of growth on trade balance and current account was also examined to see whether higher economic growth due to liberalization leads to unfavourable effects on balance of trade. Country by country OLS regression was conducted. Results suggested that liberalization promotes growth but growth itself has negative effects on trade balance for a large majority of countries. The study concluded

that trade balance deteriorates with liberalization and economic growth and hence countries would have difficulty in reaching potential or planned growth in subsequent periods after liberalization. Deterioration in trade balance could impact economic growth in subsequent periods. Zeng *et al* (2008) did a study on the impact of trade liberalization on the trade balance in developing countries. The study looked on the impact of trade liberalization on imports, exports and overall trade balance for a large sample of developing countries. Supporting evidence showed that trade liberalization leads to higher imports and exports. However in contrast Santos-Paulino and Thirwall (2004) who found robustly negative impact of trade liberalization on trade balance, the study only found mixed evidence of such a negative impact in particular little evidence of statistically negative impact using their first measure of liberalization Li (2007) and a second measure of liberalization by Wac Ziarg and Welch (2003). The study found evidence that liberalization worsened the trade balance though that evidence was not robust across different estimation specifications and the estimated impact is much smaller than the reported by Santos-Paulino and Thirwall (2004).

A study done by Allaro (2012) investigated the impact of trade liberalization on Ethiopia's trade balance over the period 1974-2009. The country undertook trade reforms either as a part of macroeconomic reforms or decisions driven by a process of internal adjustments. The argument on which this expectation was based was tested in the research. The Johannes co-integration procedure showed that trade liberalization worsened trade balance due to too fast of an increase in imports. With the application of the export equation of Santos-Paulino and Thirwall (2004) evidence that trade liberalization worsened trade balance was found. The paper concluded that the trade balance had a significant and positive impact on export performance implying policy makers should generate such policies for attracting exports from Ethiopia which will focus on the country's resource endowments in terms of developing new technologies and improving national capabilities. Even though trade liberalization worsened trade balance the study still advocated for trade liberalization policies. The empirical study by Akpokodje et al (2010) on the impact of trade reforms on Nigeria's trade flows covered the period 1973-2006. Ordinary Least Squares (OLS) and the General Method of Moments (GMM) techniques were used in the analysis, they found that all categories of exports except oil performed better during the liberalization era than before the liberalization era. Furthermore results suggested that while the impact was significant enough to produce positive growth of manufactured exports, it was not so significant in the case of agricultural and aggregate non-oil exports. Results also suggested that all categories of import experience improved performance during the trade liberalization compared to the preliberalization period. However the impact in most cases was not strong enough to turn the mean growth imports positive. The conclusion stated that trade liberalization had not produced an impact that was big enough to boost Nigeria's trade flows. The study saw the need to intensify trade liberalization policies and other reforms to make them more effective so as to promote exports but the implementation process had to be addressed. From empirical studies done restriction on trade improves the trade balance. The study will apply this knowledge to find the effects of tariff barriers on the trade balance in the Zimbabwean context.

3.0 METHODOLOGY

3.1 Empirical Model Specification

The root of the study is theories and empirical studies discussed beforehand. The theoretical model was built on theories such as the comparative advantage theory and the absolute

advantage theory. The theories assert that liberalizing trade improves trade performance. The model will follow Zakaria (2014) effects of trade liberalization on exports, imports and trade balance on Pakistan the study consisted of variables; terms of trade, exchange rate, average tariffs, liberalization dummy, foreign exchange rate, market distortions and relative income and price elasticities. However the study is not going to take all the variables, it will drop some and add some to make the research relevant to the study. The model to be estimated is as follows:

 $TB = \beta_0 + \beta_1 TAR + \beta_2 GDP + \beta_3 EXC + \beta_4 TO + \beta_5 FDI + C$

Where:

TAR

TB Trade Balance (measured by subtracting imports from exports)

GDP Gross Domestic Product

Average Tariffs

EXC Exchange rate

- TO Trade Openness (measured as the ratio of the sum of imports and exports to GDP)
- FDI Foreign Direct Investment
- \mathcal{E} Error Term (other variables not included in the model)

 β_s The parameters to be estimated

4.0 RESULTS PRESENTATION, ANALYSIS AND INTERPRETATION

4.1 Descriptive Statistics

The summary of the descriptive statistics for the variables in the model are shown in the table below.

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	DTB	DTAR	DGDP	DEXC	DTO	DFDI
Mean	0.655362	0.404706	2.21E+08	0.020303	0.009571	15977950
Median	0.202038	-0.470000	1.54E+08	0.590000	0.014251	3310802.
Maximum	17.98578	15.50000	3.74E+09	21667.00	0.371045	3.09E+08
Minimum	-7.530136	-6.000000	-2.13E+09	-29999.00	-0.385997	-3.85E+08
Std. Dev.	4.698311	3.827550	1.09E+09	7774.224	0.139643	1.02E+08
Skewness	1.485556	1.853033	0.526019	-0.792010	-0.350225	-0.839060
Kurtosis	7.005382	8.474831	4.920311	10.32677	4.941480	10.37979
Jarque-Bera	35.23334	61.92066	6.792034	77.26215	6.034966	81.14300

Table 1: Descriptive Statistics

Probability	0.000000	0.000000	0.033506	0.000000	0.048924	0.000000
Sum	22.28231	13.76000	7.52E+09	0.670000	0.325407	5.43E+08
Sum Sq. Dev.	728.4461	483.4546	3.95E+19	1.93E+09	0.643501	3.41E+17
Observations	34	34	34	33	34	34

As indicated by the table above the standard deviations, variations of gross domestic product (GDP), exchange rate (EXC), foreign direct investment (FDI) were large whilst trade balance (TB), tariffs(TAR), trade openness (TO) were quite small. The differences in variations reflect the presence of outliers in the variables. Exchange rate (EXC), foreign direct investment (FDI) and trade openness (TO) are negatively skewed meaning most of the observations of the variables were at the left side of the median. As indicated by the Jarque-Bera probabilities values GDP and TO are normally distributed.

4.2 Multi-collinearity test

The results from the multi-collinearity test carried on explanatory variables are shown in the table below.

	DTAR	DGDP	DEXC	DTO	DFDI
DTAR	1.000000		1		
DGDP	0.017168	1.000000	,		
DEXC	0.273344	-0.342875	1.000000		
DTO	-0.014848	-0.351521	-0.093150	1.000000	
DFDI	-0.172061	-0.062692	-0.054516	0.325069	1.000000

Table 2: Multi-collinearity test

The results indicate that the absolute values of partial correlation coefficients are less than 0.8 which implies that there is no serious multi-collinearity among variables. Correlation tests are done to remove collinearity which indicates that economic variables would be moving together systematically. From the above results it shows that individual effects of explanatory variables on the explained variable can be isolated.

4.3 Heteroscedasticity Test

The Breusch-Pagan test was applied to test for heteroscedasticity, the results obtained support the null hypothesis that errors are homoscedastic. The probability value was 0.7227 which is greater than 0.05, therefore based on the information we have we may fail to reject the null hypothesis

that errors are homoscedastic at 5% level of significance. This implies that the results reported are valid for reliable interpretation since the disturbances have constant variances.

4.4 Reset test

Using the results from the Ramsey Reset Test, the model is correctly specified as the F-probality value of 0.119881 is greater than 0.05. We may fail to reject the null hypothesis that there are no omitted squares of fitted values at 5% level of significance. Therefore the functional form is correctly specified.

4.5 Unit Root Tests

The Augmented Dickey Fuller (ADF) test was used to test for stationary and the results are shown in the table below.

Original Variable	ADF level (p-value)	Altered Variable	ADF First Difference	Order of Intergration
1			(p-values)	
ТВ	0.5451	DTB	0.0000	I(1)
TAR	0.6279	DTAR	0.0000	I(1)
GDP	0.9892	DGDP	0.0001	I(1)
EXC	1.0000	DEXC	0.0000	I(2)
ТО	0.1488	DTO	0.0000	I(1)
FDI	0.5702	DFDI	0.0000	I(1)

Table 3: Unit Root Tests

D means differenced and I() shows order of integration.

Basing on the null hypothesis that there is a unit root against the alternative that there is no unit root, it was found that the trade balance (TB), gross domestic product(GDP), tariffs (TAR), trade openness (TO), foreign direct investment (FDI) and exchange rate (EXC) were not stationary. TB, GDP, TAR, TO, and FDI were differenced once to make them stationary whereas the exchange rate was differenced twice to make it stationary. To test for existence of a unit root the Augmented Dickey Fuller Test was used. The existence of non-stationary series results in spurious regressions.

4.6 Normality Test

To test for normality the Jarque-Bera was used and the statistic found was 3.092797 with a probability value of 0.213014 hence we fail to reject the null hypothesis that the errors are normally distributed at 5% level of significance as the probability was greater than 0.05. The skewness coefficient was closer to 1 implying that errors are normally distributed and the kurtosis coefficient was closer to 3 also implying that errors are normally distributed the summary will be shown in the table below.

Table 4: Normality test

Test	J-B value	3.092797	Skewness	0.471472	Decision	at
					rule	

Normality	Probability	0.213014	Kurtosis	4.166260	Normally
(Jarque-Bera)					Distributed

4.7 Regression Results Table 5: Regression Results

Dependent Variable: TB

Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	0.153749	0.570545	0.269478	0.7896
DTAR	0.318560	0.154032	2.068146	0.0483
DGDP	1.16E-09	6.01E-10	1.934144	0.0636
DEXC	0.000259	8.25E-05	3.139422	0.0041
DTO	24.88151	4.589869	5.420964	0.0000
DFDI	-1.04E-08	5.81E-09	-1.791787	0.0844

R-*Squared* = 0.629914*F*-*Statistic* = 9.191189

Adjusted R-squared = 0.561379Prob (F-Statistic) = 0.000034

Durbin Watson = 2.220410

From the above table the results show that R-squared is 0.629914 and the Adjusted R-squared is 0.561379. The R-squared of the model shows that about 63% of the variation in the trade balance (TB) is explained by the combined variations in the regressors. This implies that the model is a good fit since more than 50% of the variations are explained in the model. The F-test probability value is 0.000034 which is less 0.01 implying that the overall regression is significant at 1% level of significance. The Durbin Watson statistic is approximately 2 which indicates the absence of autocorrelation. Exchange rate and trade openness were found to be significant at 1%, tariffs were found to be significant at 5% whereas GDP and FDI were found to be significant at 10%.

4.8 Interpretation of results

4.8.1 Tariffs (TAR)

The coefficient of tariffs was found to have a negative effect on the trade balance (TB) and statistically significant at 5% as the p-value was 0.0483. A unit increase in tariffs will result in a unit increase in the trade performance by 0.318560. As the tariff levels of Zimbabwe becomes more restrictive, the net exports fall. Zakaria(2014) found results similar to the study in Pakistan.

4.8.2 GDP

The gross domestic product was found to have a positive effect on the trade balance (TB) of Zimbabwe and statistically significant at 10% as the p-value was 0.0636. This implies that a unit increase in GDP would result in a unit increase the trade balance by approximately 0.00000000116 (1.16E-09). Trade balance grows as the output of Zimbabwe grows. Yusop et al (2012) found similar results as those of this study.

4.8.3 Exchange Rate (EXC)

The exchange rate was found to have a positive effect on the trade balance (TB) and statistically significant at 1% as the p-value was 0.0041. This implies that a unit increase in exchange rate increases trade balance by 0.000259. Increasing the exchange rate in the economy increases the trade performance since it means the local currency has depreciated therefore making local products cheap in the external market. Zakaria (2014) found similar results in his study.

4.8.4 Trade Openness (TO)

Trade openness was found to have a positive effect on trade balance and significant at 1% as the p-value was 0.0000. This implies that a unit increase in trade openness would result in a unit increase in the trade balance by 25.66475. An increase in restrictions on trade would reduce imports thereby increasing trade performance. Similar results were found in the study done by Allaro (2012) on the effect of liberalization on Ethiopia's trade balance in the period 1974-2009.

4.8.5 Foreign Direct Investment (FDI)

The coefficient of foreign direct investment was found to have a negative effect on the trade balance and statistically significant at 10% with a p-value of 0.0844. This implies that a unit increase in FDI will result in a unit decrease in trade performance by 0.0000000104 (1.04E-08). This implies that a unit increase in FDI will reduce the trade performance in Zimbabwe. This is not in line with theory which predicts a positive relationship between FDI and trade performance. This might have been due to huge amounts of investments foreign-funded enterprises depending on imports too much and quite part products are sold in domestic market but not in foreign markets. Ding et al (2009) found similar results to that of the study.

5.0 CONCLUSION AND POLICY RECOMMENDATION

5.1 Conclusions

The study sought to determine the effect of tariff barriers on trade performance for the period 1980-2014. The study used secondary time series data collected from ZIMRA, ZIMSTATS and the World Bank. The Ordinary Least Squares procedure was used. The model was statistically significant at 1% since the F-probabilistic value was 0.000034. The R-squared was 62.9914% which is fairly high implying that the regression line fits well in the given model and that most variations are explained inside the model. The study therefore concluded that tariffs, GDP, exchange rate and trade openness had a positive effect on the trade performance whilst there was a negative relationship between trade balance and FDI. GDP and FDI were found to be insignificant in the model implying that there was no relationship between the two independent variables and the trade performance in the model. The expected relationship of FDI and trade performance did not match the relationship found in the study, this might have resulted from a couple of factors like unreliability of data due to missing data in the inflationary period and transformation of data from Zimbabwean dollars to \$US to the figures before 2009. It might also have been as a result of large numerous foreign- funded investments depending on imports too much and sell their products in local markets and not in foreign markets. The main objective of the study of examining the effects of tariff barriers on the Zimbabwe international trade performance was achieved and so did the specific objectives. The research questions were also answered and the relationships between tariffs, trade openness and trade performance were both found to be positive. The hypothesis was rejected since GDP and FDI were insignificant at 5% but the exchange rate, tariffs and trade openness were significant in explaining the trade performance.

5.2 Recommendations

Trade Openness had a positive impact on trade balance. We therefore propose policies that promote the relaxation of trade policies to increase the performance. The implementation process has to be addressed since it determines the effectiveness of the reforms, Akpokodje et al (2010). The relaxation of regulations mostly on the export side would increase exports and then increase the trade balance. From the results the increasing of the exchange rate in Zimbabwe would increase the trade performance but since the currency is borrowed and the rate is determined by external market forces it would not be easy to increase the exchange rate although overvaluation of a currency might result in deterioration in trade, Piana (2006). GDP was found to have a positive effect on trade. We therefore propose the implementation of policies aimed towards increasing GDP like the Zimbabwe Agenda for Socio Sustainable Economic Transformation (ZIMASSET) Economic blueprint to increase agricultural output. Policies aimed at increasing incentives for production like subsidizing industrial and agricultural production can also be implemented to increase the trade performance. Tariffs were found to have a positive relationship with trade performance of Zimbabwe. We therefore propose policies that increase tariffs so as to increase the trade performance of Zimbabwe. FDI was found to have a negative effect on the trade performance of Zimbabwe. We therefore recommend that the government reduce foreign direct investment in Zimbabwe and implement policies that promote local investment or use of local resources to finance the trade expenses and promote production and trade locally.

REFERENCES

- [1] Adeolu, O. Adewuyi and Akpokodje, Godwin. Impact of Trade Reforms on Nigeria's Trade Flows. (2010). The International Trade Journal. Vol 24. Issue 4. 411-439.
- [2] Barro, R. Economic Growth in a Cross Section of Countries. Quarterly Journal of Economics. (1991). Vol. 106, No. 2, pp. 407-443.
- [3] Bredenkamp, H and Schadler, S. Economic adjustment and reform in low income countries. (1999). International Monetary Fund. Washington DC.
- [4] Chitiga, M and Magudu, R. Lessons from Zimbabwe's recent Trade Liberalization. (2004)
- [5] Gujarati, D, (2004). Basic Econometrics, 4th, McGraw-Hill Companies, London.
- [6] Herath, H.M.S.P and Liang, Ciao and Yongbing, Chen. Trade Liberalization in Sri Lanka: Effects on Exports and Imports. (July 2014). Sri Lanka Journal of Banking and Finance (SLIBF). Vol. 01 No 01,2013.
- [7] Hume, D. The Foundation of Classical Monetary Economics. (1752). Political Discourses, Edinburg.
- [8] Ju, J. Yi, W and Zeng L. Impact of Trade Liberalization on the Trade Balance of Developing Countries (2010). IMF Staff Papers. Vol 57. No 2. Pp 427-49.
- [9] Krugman, P. Geography and Trade. (1991). Business and Economics.
- [10] Lipsy, R.G. An Introduction to Positive Economics. (1975). Oxford University Press, London.
- [11] Makki, S. Relationship of FDI and Trade. (2004). American Journal of Agricultural Economics. Vol 86. No 3. Pp 795-801.
- [12] Muñoz, S. Export Performance: The Impact of the Parallel Market and Governance.

- [13] Pachezo- Lopez, Penelope. The Effect of Trade Liberalization on Exports, Imports, Balance of Trade and Growth: The case of Mexico. (2005) Journal of Post Keynesian Economics. Vol 27. Issue 4.
- [14] Parikh, Ashok and Corneliu, Stirbu. Relationship between trade liberalization, Economic Growth and Trade Balance: An Econometric Investigation. (2004). HWWA Discussion paper No 282.
- [15] Piana, V. The pattern approach to world trade structures and their dynamics. (2006). Princeton Institute for International and Regional Studies. Vol 10. Issue 4.
- [16] Reif, T. External Competitiveness and Export Performance in Tanzania: Selected Issues and Statistical Appendix. (2004). IMF Country Report No. 04/284 (Washington: International Monetary Fund).
- [17] Sampson, Gary P. And Yeats, Alexander J. The incidents of transport costs on exports from the United Kingdom. (1978). Transport Economy and Policy. 12(1978): 196-202.
- [18] Santos-Paulino, A.U. Trade Liberalization and Export Performance in Selected Developing Countries. (2002). Journal of Development Studies. Vol 39. No 1. Pp140-64.

