

# International Trade as a Tool of Economic Growth of Rwanda (2000 To 2016)

Murekeyimana Theogene<sup>1</sup>, Dr Manoj Suryavanshi<sup>2</sup>, Dr. Nkurayija Jean de la Croix<sup>3</sup>

<sup>1</sup>Research Scholar, Department of Economics, Nims University Jaipur (Rajasthan)

<sup>2</sup>Lecturer, Department of Economics, Nims University Jaipur (Rajasthan), India

<sup>3</sup>Senior Lecturer, School of Economics, Law & Governance, University of Rwanda

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## ABSTRACT

More economists believe that trade is the engine of development in modern societies. They argue that international trade creates feasible of benefiting from the impending economic empowerment, according to accessible relative advantages and reveals understandable signs for investment in the lucrative economic projects in the global ground. Also, international trade will be affected growth rate of the economy through access to foreign markets, technology and resources. A term of trade is an important determinant of the growth of its cross border trading and it serves as a measure of its international competitiveness. As Rwanda participates in international trade and as it wants to base on the potentials of international trade and become a middle-income country, a study on drivers of Rwandan competitiveness in international trade was necessary. This study based on selected variables of Rwanda, and we performed a regression by using tools of econometrics (Eviews 9). Research findings revealed that the determinants of term of trade of Rwanda are the nominal and real exchange rate, technological progress, level of investment, the level of domestic price, fiscal policy and the degree of closeness. The results also showed that increase in investment makes Rwandan products more competitive on foreign markets in short run as well as in the long run. Improvement of technology makes Rwandan products more expensive on foreign markets in short run due to the learning curve but in the long run Rwandan products become more competitive as results of that technological progress. The depreciation of Rwandan currency depreciates the term of trade of Rwanda. The research also revealed that increase in domestic price makes Rwandan products less competitive on foreign markets. Increase in the degree of closeness of Rwanda affects negatively its competitiveness in international trade and vice versa.

**Key words:** economic growth, international trade, Rwanda, term of trade.

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## I. INTRODUCTION

Rwanda is a small, land-locked country located in Central Africa. It is known as “the land of a thousand hills”. The major economic sectors of Rwanda are tourism, mining and agriculture. The country has made significant improvements in its business environment, with its entry as the most competitive East African country in the WEF ratings, and its 2011 World Bank Doing Business rankings of 58<sup>th</sup> from 143<sup>rd</sup> in 2009. Rwanda continues a shift from exports of raw materials and commodity products to more sophisticated niche products. This is due the development of sector strategies, human capital improvements, and public-private discourse. The key to Rwanda’s long-term export growth will be facilitating this transition through strategy implementation, and technology infusion across industries [1]. Rwanda’s Vision 2020 plan, the country set ambitious goals for growth that required an almost seven-fold increase in the economy. Because of the progress made in the last decade, the economy now needs to expand by just 250% between 2017 and 2020 in order to increase its per capita GDP from US\$ 700 to at least US\$900. But this growth in the decade ahead will be more challenging, and thus far, Rwanda’s scorecard in terms of meeting its export growth of 15% per annum is mixed [2]. The priority sectors for the 5-year National Export Strategy (NES), in the short and medium term, are the traditional sectors of tea, coffee, tourism and mining, as well as nascent, non-traditional export sectors of horticulture and business process outsourcing [3].

Expanding exports has long been a government priority for Rwanda to ensure strong economic growth, attract foreign exchange and create new off-farm jobs. The government has been highly proactive in its promotion of exports, leading to years of considerable export growth. However, imports have grown even faster, and with recent shifts in global commodity prices, Rwanda is now experiencing a large and growing trade imbalance. To tackle this challenge, a new programme, ‘Made in Rwanda’, has sought to improve the perceptions of Rwandan products within Rwanda, promote

nascent industries, and boost the productivity of exporting sectors. This is a promising new step for export promotion, but is also still taking shape [4].

There is a large part of economic theory analyzing the causal relationship between international trade and economic growth. Certainly, since exports and investments consist of the main determinants of economic growth, an increase of exports and investments contribute to an increase of economic growth. Increased export earnings help shrink the foreign exchange gap and thus facilitate the importation of capital goods and technical knowledge, and these would lead to economic growth. According to Bhagwate (1978) and Krueger (1978), the expansion of the exports leads to specialization, economy of scale and efficient allocation of resources. This, in turn results in an increase the real income, economic growth and productivity of a country, a sequence of events which they call the export-led growth hypotheses (ELGH). Despite the expected positive effect of export on GDP, however, developing countries, depending on their economic requirements and their structure, have not only relied on such export promotion policies but also pursued import substitution strategies or, indeed, a combination of these two [5].

Ricardo in his study in 1817, notes that trade facilitates products output with a comparative advantage in a country resulting to a higher level of national wealth. Current experimental studies are less persuasive relating to the fundamental relationship between exports and economic growth, because the major interest focuses on which methods are used for economic growth during trade extension. International trade brings about vibrant impacts critical to a country's economic development, with the ability to acquire foreign capital and new technologies. Free trade with other countries can increase the efficiency of a country's resource use, and hence increase the exports of goods in which it has a comparative advantage [6]. Nevertheless, when countries importing, countries enforce barriers to trade, the repayment from trade can be missing. Other important benefits associated with trade include positive export strategies, such as increases in output, employment and consumption, all of which increase the demand for a nation's output [7] (Sentsho, 2002). Trade can also help Less Developed Countries by providing to them the foreign exchange necessary for economic development. Countries that trade are further able to respond to peripheral shocks than those that do not trade. In general, external trade generates foreign exchange that contributes to financing industrialization.

The international trade theory used in this work (Neoclassical Trade Theory) is based on the principle of comparative advantage of David Ricardo, which states that a country has a comparative benefit in producing a good if the opportunity cost of producing that good, in terms of another good, is lesser in that country than it is in other countries. Neoclassical trade theory assumes two factors of production (labour and capital), equal technology in all countries, perfect competition, and constant returns to scale, and factor mobility between sectors but not between countries (Appleyard et al., 2001). In the neoclassical trade theory, trade can take place due to comparative advantage which is explained through differences in relative factor endowments-factor abundance (Heckscher-Ohlin theorem (HO)). The Heckscher-Ohlin theorem states that a country will produce and export the good whose production makes exhaustive use of the relatively affluent factors of production beside trade. The country should control the production and augment the imports of the good whose production makes exhaustive use of the costly factor of production before trade (Appleyard et al., 2001). In the neoclassical trade theory, a country will expand from trade at any time its terms of trade (TOT) are different from its own relative prices in autarky. A country among altered terms of trade has the advantage of intensifying the production of the factor plentiful good, exporting the good more acceptable in other countries, and importing the good that is relatively more expensive to produce at home. The neoclassical trade theory will be evaluated in a neoclassical production function framework incorporating an additional factor of production (exports) into the production function. Exports are integrated into the production function to confine their relationship with aggregate output [8].

Growth theory analyses the disparity in the rates of economic growth between countries, in order to identify the factors that affect the growth of output. These factors differ in terms of their impact on growth depending on economic circumstances. Determinants of growth are not identical in all countries, differing from one country to another, and from one time period to another. Smith focused on increasing productivity through the division of labour and specialization, which resulted in greater productive efficiency. He considered that the profits gained in agriculture and industries contribute the increase in savings, which leads to increase investment, and thereby increases growth. Also, the division of labour, increasing productivity, applies to industry more than agriculture [9].

Babatunde (2002) argues that trade structure of Sub-Saharan Africa's (SSA) economies shows great dependence on export of unprocessed primary commodities, which slows their economic growth trajectory [10]. Evidence from both advanced and emerging economies has converged to show that on average exporting firms tend to be more productive relative to their counterparts which remain focused on the domestic market [11]. Naude & Gries (2004) contend that the main reason for Africa's lack of industrialisation and its gloomy economic growth performance is because of its lack of adequate manufacturing exports [12]. Africa's study indicated that: The last three decades have witnessed stagnation in Africa. The composition of Africa's exports has almost remained unaffected and this has contributed to the collapse in Africa's share of world trade. Africa will not be able to achieve the Millennium Development Goals, nor set itself on a sustainable path to growth and poverty reduction, without increased trade [13].

## II. OBJECTIVES

The objective of this study is to check the fundamental link between international trade and economic growth of Rwanda.

## III. METHODOLOGY

In the empirical analysis of this paper we use annual data for the period 2000 to 2016 for all variables. The rest of the study proceeds as follows: describes the data and the specification of the multivariate VAR model that is used; Employs with Dickey-Fuller tests and examines the data stationarity; Presents the cointegration analysis and Johansen cointegration test; analyses the estimations of error correction models; while summarizes the Granger causality tests [14].

### Data Collection Tool

Documentary data provides an insight to this paper, based on the literature and studies conducted before this one. Books, journal articles and reports on the aspects of international trade and monetary policy were consulted and so the research was able to determine the truth about the phenomenon. In this study, the secondary data used draw from Rwanda National Bank (RNB), National Institute of Statistics of Rwanda (NISR) and World Bank (WB).

In order to investigation the fundamental relationships discussed above (introduction) we stipulate the following multivariate VAR model:

$$Itot = f(Irer, ltechpro, lclose, lexch, linv, lcpi)$$

or  $Itot_t = \beta_0 + \beta_1 Irer + \beta_2 ltechpro + \beta_3 lclose + \beta_4 lexch + \beta_5 linv + \beta_6 lcpi + u_t$

Where the following notations have been used:

**Itot**: logarithm of the terms of trade; **Irer**: logarithm of the real exchange rate of rwanda; **itechpro**: logarithm of technological progress, a proxy of the real gdp; **lclose**: logarithm of the degree of closeness, a proxy of the ratio of gdp to the sum of exports and imports; **lexch**: logarithm of the nominal exchange rate; **linv**: logarithm of the ratio of investment to gdp; **lcpi**: logarithm of cpi;  $u_t$ =error term.

### i) UNIT ROOT TEST

The Augmented Dickey Fuller (ADF) test and the use of correlograms will be employed as a prior diagnostic test before the estimation of the model to examine the stochastic time series process properties of exchange rate volatility. This enables us to avoid the problems of spurious result that are associated with non-stationary time series models.

### ii) CO-INTEGRATION TEST

This is employed to determine the number of co-integrating vectors using Johansen's methodology with two different test statistics namely the trace test statistic and the maximum Eigen-value test statistic.

### iii) VECTOR ERROR CORRECTION MODEL (VECM)

Error Correction Model (ECM) comes to play when it has been established that, there exist a long run relationship between the variables under consideration. This enables us to evaluate the cointegrated series. In a situation where there is no cointegration, VECM is no longer required and we can precede to Granger causality tests directly to establish casual relationship between the variables.

## IV. RESULTS FINDINGS

Econometrics may be defined as the social science in which, tools of economic theory; mathematics and statistics inference are applied to the analysis of economic phenomena [15]. Tools of econometrics are then used here to analyze the obtained data in order to know the impact and influence of international trade on economic growth of Rwanda and the implication of changes in those impacts. With that, policy makers in Rwanda can make good decisions to achieve the desired goals.

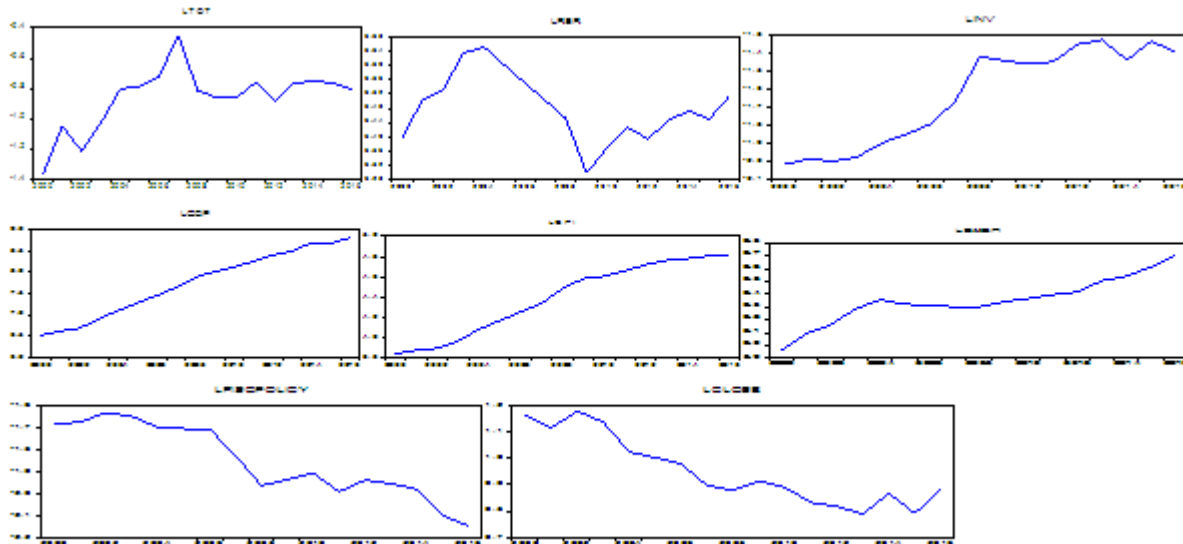
Endogenous growth models make of the same idea to analyse the board externality effects of exports on the economy, but they address the role of imports as well. These models emphasize the fact that trade works as a conduit of knowledge spillover. In turn, this information spillover enables the economy to realize increasing returns, and human capital also has a role in increasing economic growth through the same knowledge spillover effect of trade [16]. In fact according to the endogenous growth theory, factors such as physical capital (R&D effects), human capital (representing

knowledge spillover effects), export expansion (proxying the positive externality effects), capital and intermediate imports (capturing learning by doing effects) are the major determinants of economic growth.

### Analysis of Stationarity

For arriving at the best conclusions and suggest important policies, data to be used must be stationary or made stationary. Non-stationary variables can lead to misleading inferences.

### Graphical analysis



By observing the above graphical representations (from figure 1 to figure 7), it is easy to say that the present data are not stationary as some of them are increasing or decreasing and as it can be seen, the variability is not constant. So, we can say that they are not stationary at level but other tests have to be used in order to confirm that.

### Unit Root Test By Using ADF Tests

**Table 1 Results of the Unit Root Tests: using ADF tests**

Variables	Level	ADF test			Conclusion
		Intercept & Trend	Intercept	None	
Ltot	Level	-2.730610	-3.134793**	-1.41245	I(1)
	Δ level	-5.581302*	-5.533138*	-5.629288*	
	Lrer	Level	-2.184991	-3.159508**	
Δ level	-2.987240	-3.245304**	-3.371602*		
Lcpi	Level	0.319850	1.514458	0.959244	I(1)
	Δ level	-2.151803**	-1.579857**	-0.991422***	
Lexch	Level	-1.522941	-1.015298	3.808362	I(1)
	Δ level	-2.178924	-2.454572***	-1.868128***	
Lfisepolicy	Level	-2.446681	0.112612	1.961234	I(1)
	Δ level	-3.449842***	-3.447956**	-2.852141*	
linv	Level	-1.196369	-1.141956	-2.067989**	I(1)
	Δ level	-3.571344***	-3.552523**	-3.061231*	
Lclose	Level	-0.713724	-1.367196	-1.425668	I(1)
	Δ level	-4.778782*	-4.609930	-4.231604*	
Lrgdp	Level	-0.332161	-1.626746	7.994334	I(1)
	Δ level	-4.116762**	-3.615381**	-0.520728	

\* Indicates statistical significant at the 1 percent level, \*\* Indicates statistical significant at the 5 percent level and \*\*\* Indicates statistical significant at the 10 percent level

Source: Author's calculation

The unit root test shows that all variables are not stationary at level. However, they become stationary after their first difference. The assessment of the short run dynamics of the term of trade makes the test of co-integration necessary which forms the next stage of analysis.

**Co-Integration Test**

If two or more time series are not stationary, it is important to test whether there is a linear combination of them which is stationary. This incident is referred to as the test for co-integration. The facts of co-integration implies that there is a long run relationship along with the variables. Hence, the short-run dynamics can be represented by an error correction mechanism. There are two most popular approaches of running a cointegration test: the Engle Granger method and the Johansen procedure. In this study, we apply the Engle Granger method in order to test for cointegration. To do so, we first of all show the long run relationship between the considered variables and from that equation, we compute the residuals where we check their stationarity. If the obtained residuals become stationary at level, that becomes an incontestable sign of the presence of cointegration among the considered variables. The following presents the results of the long run equation of term of trade in Rwanda by using Ordinary Least Square.

**The Long Run Equation Test of Term of Trade in Rwanda**

Dependent Variable: LTOT  
 Method: Least Squares  
 Date: 08/07/17 Time: 21:11  
 Sample: 2000 2016  
 Included observations: 17

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LRER	0.256375	1.462817	0.175261	0.8648
LGDP	0.113789	1.215573	0.093610	0.9275
LCLOSE	-3.157865	1.360314	-2.321424	0.0454
LFISCPOLICY	-0.187008	0.921980	-0.202833	0.8438
LEXCH	0.259662	1.062151	0.244468	0.8124
LINV	0.779305	1.093567	0.712627	0.4941
LCPI	-0.428035	3.426826	-0.124907	0.9033
C	-1.100516	13.70839	-0.080280	0.9378
R-squared	0.790849	Mean dependent var		-0.863820
Adjusted R-squared	0.628175	S.D. dependent var		0.206947
S.E. of regression	0.126191	Akaike info criterion		-0.996857
Sum squared resid	0.143317	Schwarz criterion		-0.604757
Log likelihood	16.47329	Hannan-Quinn criter.		-0.957882
F-statistic	4.861578	Durbin-Watson stat		1.320325
Prob(F-statistic)	0.015903			

From the above, 79% variation in terms of trade has been explained by the variation in independent variables as shown by R<sup>2</sup>. The F statistic and its corresponding probability show that all independent variables have jointly explained by the Rwandan term of trade because they are jointly statistically different from zero.

The results show that in the long run, the term of trade of Rwanda depreciates with improvement in technological progress, increase in investment and increase in nominal and real exchange rate.

When the technological progress increases by 1%, the term of trade of Rwanda depreciates by 0.11%. It means that in the long run, the technological progress is used to produce more goods and services which allow products made in Rwanda to be sold on foreign market at low price compared to the previous price that Rwanda was charging or the technological use improves the quality of Rwandan products and this makes those products more competitive. When the Rwandan investment increases by 1%, the term of trade depreciates by 0.077%. It means that when there is an increase in investment in Rwanda by 1% that makes Rwandan products more competitive on foreign markets. But that can also be possible because if not done cautiously, the government expenditure can bring inflationary pressure in the country. Then before confirming those results, it is better to study the property of the residuals resulting from that

equation. The resulting residuals have to be tested for stationarity and if they become stationary at level, that will be an indication that the current variables are co-integrated. So, the following is the unit root test for the obtained residuals

**Unit Root Test of Residuals By Using ADF Test**

Null Hypothesis: RESID01 has a unit root  
 Exogenous: Constant  
 Lag Length: 0 (Automatic - based on SIC, maxlag=3)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-4.392200	0.0299
Test critical values:		
1% level	-4.004425	
5% level	-3.098896	
10% level	-2.690439	

\*MacKinnon (1996) one-sided p-values.  
 Augmented Dickey-Fuller Test Equation  
 Dependent Variable: D(RESID01)  
 Method: Least Squares  
 Date: 08/16/17 Time: 17:58  
 Sample (adjusted): 2003 2016  
 Included observations: 14 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RESID01(-1)	-0.826627	0.243685	-4.392200	0.0053
C	0.016386	0.030506	0.537139	0.6010
R-squared	0.489514	Mean dependent var		0.011512
Adjusted R-squared	0.446974	S.D. dependent var		0.153318
S.E. of regression	0.114016	Akaike info criterion		-1.373387
Sum squared resid	0.155997	Schwarz criterion		-1.282093
Log likelihood	11.61371	Hannan-Quinn criter.		-1.381838
F-statistic	11.50702	Durbin-Watson stat		2.080799
Prob(F-statistic)	0.005346			

As it can be seen, the ADF statistic is -4.392200 and its absolute value is greater than the absolute value of critical values at 1%, 5% and 10%, that is why we reject the null hypothesis saying that the obtained residuals have a unit root (to have a unit root means that a considered variable is not stationary). In addition, the obtained probability of accepting that null hypothesis is equal to 0.0299, which is less than 5%. With this small probability, we reject also the null hypothesis saying that our residuals have a unit root. So, we conclude that the obtained residuals are stationary at level and this leads us to confirm that our variables used in estimating the long run equation are co-integrated.

**Short Run Dynamics of The Terms of Trade**

The term of trade and all the regressors of the model are not stationary but as the Co-integration is established, the appropriate mechanism for modeling the short run term of trade for Rwanda is an error correction mechanism (ECM). We therefore estimate an error correction model of the term of trade. In performing the error correction mechanism, the obtained results are the following:

**Summary of Error Correction Model of Terms of Trade**

Dependent Variable: DLTOT  
 Method: Least Squares  
 Date: 08/16/17 Time: 17:41  
 Sample (adjusted): 2002 2016  
 Included observations: 15 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DLRER	-1.451589	0.866441	-1.675347	0.1449

DLGDP	1.816069	1.017831	1.784254	0.0246
DLCLOSE	-3.584037	0.799091	-4.485143	0.0042
DLFISCPOLICY	-0.171685	0.526624	-0.326011	0.0555
DLEXCH	0.957577	0.921080	1.039624	0.3386
DLINV	0.421532	0.605892	-2.346181	0.0574
DLCPI	-3.607071	2.290679	-1.574673	0.0664
RESID01	-0.663282	1.335924	-0.496497	0.6372
C	-0.068847	0.110357	-0.623852	0.0557
<hr/>				
R-squared	0.858620	Mean dependent var	0.016208	
Adjusted R-squared	0.670114	S.D. dependent var	0.162411	
S.E. of regression	0.093282	Akaike info criterion	-1.622673	
Sum squared resid	0.052209	Schwarz criterion	-1.197843	
Log likelihood	21.17005	Hannan-Quinn criter.	-1.627198	
F-statistic	4.554868	Durbin-Watson stat	2.017584	
Prob(F-statistic)	0.040493			

The F statistics and its corresponding p value show that all estimated coefficients jointly influence the term of trade of Rwanda.  $R^2$  shows that the estimated model is a good one because it is showing that 85.8% variations in terms of trade have been explained by the variation in the independent variables. Six out of nine estimated parameters are statistically significant at 10% level of significance. This model is excellent. The results of the error correction model show that in the short run, the terms of trade appreciates with increase in technological progress increase in domestic prices and by increase in the degree of closeness.

In the short run, increase in technological use proxied by the real GDP has a negative effect on the term of trade. It means that when there is adoption of a technological use in a certain year, Rwandan products become more expensive in that year. When there is an improvement of technology by 1% that makes Rwandan products 1.81% more expensive and consequently less competitive on foreign markets in the short run. In the short run, when prices increase by 1% in Rwanda, the products made in Rwanda become 3.60% less competitive on foreign markets.

When inflation occurs in Rwanda, it makes production costs to be high in Rwanda which increases prices of Rwandan products on foreign markets. It is clear that inflation has been a serious handicap of Rwandan competitiveness in international trade. In short run, when Rwanda increases its degree of closeness by 1%, its term of trade gets depreciated by 3.58% or when it becomes open 1% more, the term of trade appreciates by 3.58%. It means that commercial policies which encourage the trade liberalization are able to make Rwandan products more competitive than before on international market.

### The Test of Heteroscedasticity

Test consists in detecting if in the model, errors vary with time.

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	1.940705	Prob. F(7,9)	0.1746
Obs*R-squared	10.22557	Prob. Chi-Square(7)	0.1761
Scaled explained SS	2.880739	Prob. Chi-Square(7)	0.8958

Heteroskedasticity Test: ARCH

F-statistic	0.616863	Prob. F(1,14)	0.4453
Obs*R-squared	0.675234	Prob. Chi-Square(1)	0.4112

The tests of ARCH shows that the probability of Obs\*R-squared is 41% greater than the threshold of 5%. Even the Breusch Pagan Godfrey test shows us that there is no heteroscedasticity, because the probability of Obs\*R-squared is 17% greater than the threshold of significance of 5% and it means that the variance of error is constant; it does not vary according to time. From those two test, we conclude that there is no presence of heteroscedasticity in our model (Variance is constant).

### Stability Tests

In order to judge the effectiveness of our models, it is necessary to carry out a test of stability. To do so, we chose the CUSUM test and a Ramsey reset stability test.

**Ramsey Reset Stability Test**

The Ramsey reset test is a general test to see whether there is no specification error in our model. Then we check whether we didn't omit the important variables from our model and if the functional form that we have chosen is the correct one. The obtained results for our model are the following:

Ramsey RESET Test  
 Equation: UNTITLED  
 Specification: ltot lrer lgdp lclose lfiscpolicy lexch linv lcpic  
 Omitted Variables: Squares of fitted values

	Value	Df	Probability
t-statistic	1.559013	8	0.1576
F-statistic	2.430522	(1, 8)	0.1576
Likelihood ratio	4.510010	1	0.3357

As the probability of the likelihood ratio is equal to 33.57% greater than 5% level of significance, it means that our model does not contain any specification error. So, the estimated model is a good one since it is a model which is normally distributed, it doesn't have a problem of autocorrelation, no presence of heteroscedasticity, no specification error and the parameters of our model have been found to be stable. So, we can trust the findings of the model.

**CONCLUSION**

A country's term of trade is an important determinant of the growth of its cross border trading and it serves as a measure of its international competitiveness. It plays a crucial role in guiding the broad allocation of production and spending in the domestic economy between foreign and domestic goods. For the case of Rwanda, Rwanda is a country of limited resources but it participates in international trade. It wants to base on the potentials of international trade and become developed.

The results also showed that increase in technological use depreciates the term of trade in the long run, and in the short run. However, in the long and short run, the Rwandan products are found to become more competitive, which means that technology is used to produce more goods and services. Increase in investment depreciates the term of trade in the short run as well as in the long run. This means that investment is placed more in tradable sectors and increase of investment helps Rwanda to produce more goods and services, which makes the production unit cost to become low. Consequently, the Rwandan products become more competitive on foreign markets in the short run, but also in the long run. Increase in nominal exchange rate depreciates the term of trade of Rwanda in the short run but also in the long run. In other words, the depreciation of Rwandan currency depreciates the term of trade of Rwanda. This is due to the fact that normally, a depreciation of a country's currency makes its exports cheaper, while it makes its imports more expensive. The term of trade of Rwanda appreciates with increase in domestic prices and this happens in the short run, as well as in the long run. In other words, increase in domestic prices makes Rwandan products less competitive on foreign markets. This is due to the fact that, when there is inflation, the production costs become high in that country, which makes the exported product to be expensive, and less competitive on foreign markets.

Increase of the degree of closeness of Rwanda appreciates its term of trade. It means that increase of the degree of closeness of Rwanda affects negatively its competitiveness in international trade and vice versa. It means that, as trade barriers become many for Rwanda, Rwandan products reach the foreign markets being very expensive and consequently less competitive. As Rwanda decreases its closeness and consequently increases its openness, Rwandan products arrive at foreign markets being more competitive than before on foreign markets, and this happens in the short run as well as in the long run. There are mechanisms of correcting errors which may happen in competitiveness of Rwanda in international trade. This is possible because Rwanda sees the great importance in international trade, as it is one of the ways of getting foreign currency it needs, in order to operate and get what it needs.

Balance of trade represents the difference in the value of imports to and exports from a country. There are some major reasons for which a country may decide to import a certain good or service. The first one is that a good or service may not exist in that country, e.g. there are no gas or oil deposits, an agricultural product cannot be produced because the climate is too cold and, in particular, an innovation that has only been introduced in other countries. Secondly, the domestic product might not be of the desired level of quality. Therefore, a country imports better goods than domestic output: note that advertising and/or packaging should be understood as a part of a product.

Another reason for importing a good may be that it is just cheaper abroad. The reason for this might be that foreign producers are more efficient. In addition, they might incur lower costs, better exploit economies of scale and/or accept



lower profits. Another reason is that at the current domestic price, domestic producers do not supply the amount of a good or service demanded, or because of ex ante coordination problems.

### RECOMMENDATIONS

The real depreciation to be beneficial for Rwanda, the following should be done:

Policy makers in Rwanda should strengthen efforts to control the rate of inflation in order to become competitive in a durable way. This can be achieved if internal as well as external sources of inflation are addressed.

Rwanda should continue to encourage capital inflow and investment from local investors as well as foreign investors. Investments and revenue from capital inflow should be oriented in tradable sectors especially sectors which can allow Rwanda to increase exports and improve its competitiveness in international markets. For sure, the increase and a good management of those investments can help Rwandan firms to enjoy economies of scale and their advantages.

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