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INTERNATIONAL TRADE OPENNESS AND ITS EFFECT ON UNEMPLOYMENT AND POVERTY IN KENYA

ULUSLARARASI TİCARET AÇIKLIK VE KENYA'DA İŞSİZLİK İLE
YOKSULLUK ÜZERİNE ETKİSİ

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Abstract

The purpose of this study was to find out how international trade openness affects the rate of unemployment and poverty in Kenya for the periods of 1990-2017. Most trade economists believe that an increase in trade openness leads to economic growth of a country. This in turn leads to an increase in employment opportunities and reduction of poverty levels. However this has not been the case in Kenya. Over the last few decades there has been an increase in foreign trade activities in Kenya yet the rate of unemployment and poverty has remained relatively high. The relevance of this study is due to the fact that in 2017 Kenya was ranked in position 142 in terms of the Human Development Index (HDI). The ranking is a clear indication that nothing much has been done by the Kenyan government to solve unemployment and poverty problem. This research therefore tried to examine the extent unto which international trade openness and foreign direct investment have contributed to Kenyans' poverty and unemployment rates. Vector Error Correlation Method (VECM) was used to analyse time series data of the variables under consideration from the year 1990 to 2017, and the results indicated that there is no long term relationship that exists among trade openness and FDI to unem-

ployment in Kenya. On the other hand, both trade openness and FDI have a long term impact on poverty. The study established that in the long term increase in trade openness increases poverty levels in Kenya whereas an increase in FDI decreases poverty levels. The study suggested ways through which the Kenyan government can influence trade openness and foreign direct investment in order to reap maximum benefits in terms of unemployment reduction and eradication of poverty in Kenya.

Key words: International Trade, Trade Openness, Foreign Direct Investment, Unemployment, Poverty and Vector Error Correlation Method

Öz

Bu çalışmanın amacı, uluslararası ticaret açıklığının Kenya'daki işsizlik ve yoksulluk oranını 1990-2017 dönemleri için nasıl etkilediğini tespit etmektir. Ticaret ekonomistlerinin çoğu, ticaret açıklığındaki artışın bir ülkenin ekonomik büyümesine yol açtığına inanıyor. Bu da istihdam olanaklarının artmasına ve yoksulluk seviyelerinin azalmasına yol açmaktadır. Ancak bu Kenya'da böyle olmamıştır. Son birkaç on yıl boyunca Kenya'da dış ticaret faaliyetlerinde bir artış olmuş, ancak işsizlik ve yoksulluk oranı nispeten yüksek kalmıştır. Bu çalışmanın alaka düzeyi, 2017'de Kenya'nın İnsani Gelişme Endeksi (İGE) açısından 142. sırada yer almasından kaynaklanmaktadır. Sıralama, Kenya hükümeti tarafından işsizlik ve yoksulluk sorununu çözmek için fazla bir şey yapılmadığının açık bir göstergesi. Bu nedenle, bu araştırma, uluslararası ticaret açıklığının ve doğrudan yabancı yatırımın Kenyalı'ların yoksulluk ve işsizlik oranlarına ne ölçüde katkıda bulunduğunu incelemeye çalıştı. 1990'dan 2017'ye kadar olan değişkenlerin zaman serisi verilerini analiz etmek için Vektör Hata Korelasyonu Yöntemi (VECM) kullanılmıştır ve sonuçlar Kenya'da işsizlik ile DYY arasında işsizlikle uzun vadeli bir ilişki olmadığını göstermiştir. Öte yandan, hem ticaret açıklığı hem de DYY yoksulluk üzerinde uzun vadeli bir etkiye sahiptir. Çalışma, dışa açıklıktaki uzun vadede artışın Kenya'daki yoksulluk seviyelerini artırırken, DYY'deki artışın yoksulluk seviyelerini azalttığını tespit etti. Çalışma, Kenya hükümetinin işsizliğin azaltılması ve Kenya'daki yoksulluğun ortadan kaldırılması açısından azami faydayı elde etmek için ticari açıklığı ve doğrudan yabancı yatırımları etkileyebileceği yolları önerdi.

Anahtar Kelimeler: Dış Ticaret, Ticaret Açıklığı, Doğrudan Yabancı Yatırı, İşsizlik, Yoksulluk ve Vektör Hata Korelasyonu Metodu

1. INTRODUCTION

The role of international trade openness on unemployment and poverty is one of the major controversial issues in the development literature. Increase in the rate of unemployment and poverty when Kenya's economy is relatively better in terms of trade liberalisation and economic growth has raised a lot of questions among scholars in Kenya on the benefits of international trade. To explain this disconnect, the thesis studies the major relationship between international trade openness, unemployment and poverty in Kenya.

Although many studies have been done on the subject still there is unsatisfactory results since there is disconnection between

theoretical results and empirical evidence. Theories of international trade suggest that an increase in direct foreign investment and foreign trade leads to increase in economic growth. This will in turn make income distribution more equal hence decrease in poverty. This is not the case as much empirical evidence shows that trade openness has adversely affected the poor and in fact, led to a deterioration in economic wellbeing in many developing countries (Dollar and Kray 2002; Hassan et al 2010, Aghion 2003; Aryeetey 2006). Same concerns about disconnection between international trade and unemployment have been raised (Aryeetey 2006; Hassan, et al 2010; Aghion, et al 2003; Nanthakumar, et al 2011).

Most trade economists too tend to assume a situation of full employment with fully flexible wages when they are explaining economic models. This assumption clearly shows that trade economists do not believe that trade can resolve the problem of unemployment. An economist like David Ricardo however suggests that free trade leads to division of labour and specialization which leads to increase in productivity. This means that there will be cheaper imports and a large variety of quality products which producers and consumers will choose from, implying that some imports will replace locally produced products. In other words free trade can lead to loss of jobs in some parts of the economy while it can lead to an increase in productivity and job creation in some other parts of the economy.

Other people who are non-economists too believe that foreign trade leads to loss of jobs in their home countries as foreign trade leads to free mobility of labour, meaning that foreign will move into their countries which might make their countrymen lose jobs to foreigners.

Apart from the fact that studies which have been done are theoretical and focused on cross country analysis, most studies hardly focus on the relation between international trade, unemployment and poverty.

Kenya being one of the countries in which the relationship between international trade openness on unemployment and poverty is not clear, there is a need for thorough empirical work to investigate the effects of trade openness on unemployment and poverty.

This research paper therefore tried to answer these two main questions: 1) what is the relationship between international trade openness and foreign direct investments in Kenya on poverty and unemployment? 2) To what measure can international trade policies and foreign direct investment be used as a

strategy to reduce unemployment and poverty in Kenya?

2. LITERATURE REVIEW

Most of the recent theoretical reviews elaborate more on the effect of free trade on unemployment and poverty. According to Kebede, Fekadu and Aredo (2011), international trade is seen as a means of achieving industrialization through trade openness, trade expansion, economies of scale and easy access to world markets. According to Ajayi (2003) FDI is an effective source of technology essential for creation of employment and highly competitive productive resources which leads to growth of a country and at the same time reducing poverty levels in developing countries. This research was supported by (Dupasquier and Osakwe, 2005) who argued that FDI promotes economic growth which leads to job creation thereby reducing unemployment and also eliminates poverty. However the relationship between trade openness and the two macro-economic variables has been a topic of controversy amongst policy makers and economists. Some economists like Oyinola (1995) and Adelegan (2000), have argued that trade openness (multinational imports and heavy capital investments in developing countries) leads to reduction of local labour leading to unemployment and poverty. Halit Y. (2013) also studied the effects of trade liberalization on the growth rate of sectorial employment in both developed and developing countries. The study showed that trade openness in terms of massive trade volumes has not generated many jobs in developing countries. According to Pianta and Vivarelli (2006) international free trade might increase job opportunities in developing countries since free international trade promotes employment growth hence enhancing income thereby leading to poverty reduction.

Aaron (1999) and Pigato (2000) in their research argued that trade openness and

FDI creates employment opportunities and reduces poverty in recipient country. Aaron (1999) stated that establishment of multinational companies in a country encourages establishment local firms that will supply inputs into them, thereby creating employment and reducing poverty at the same time. Pigato (2000) observed that in addition to locals having jobs in the multinational companies, more jobs will also be created by subcontractors, service industries and suppliers through backward and forward linkage activities. In contrast, Todaro and Smith (2003) asserted that multinational corporations are profit driven organizations and most of them invest in developing countries or already developed countries. They don't invest to alleviate poverty or unemployment, they invest solely for profits.

Pierper (1998) and Ghose (2003) asserted that the kind of trading strategy adopted by the country determines whether jobs will be created or not. They stated that excessive imports lead to loss of jobs because of deindustrialization and import competition. Baldwin (1995) observed that imports have negative impact on employment whereas exports positively affect employment. Rama (2003) noted that countries that adopt export trading strategy positively impact employment.

Rivera-Batiz and Romer (1991) and Grossman and Helpman (1991) pioneered the literature study of how trade openness affect poverty and growth. In addition organizations like IMF and world trade organization (WTO) have increased emphasis on the study of trade openness and how it affects poverty and growth. Quite a number of studies have been done on trade openness and how it affects poverty and unemployment. According to Greenwa, et al.(2002) and Subrahmanya (2005) trade openness could lead to reduction of poverty. However, as per Winters (1999) trade liberalization and globalization does not directly affect poverty but rather it will impact the determinants of poverty. Meier

(1995), De Janvry and Sadoulet (2000) similarly believed that trade openness will impact growth which will later have an effect on poverty. Nordstrom et al. (1999) stated that free international trade stimulates economic growth which leads to reduction in poverty. Weisbrot and Baker (2002) however undermined the impact of trade openness and globalization on economic growth. According to them some of the Asian countries like Taiwan, China and South Korea have immersed massive success from international trade since they have effective trade policies like the use of subsidies, capital flow regulations and trade regulations. They stated that these policies that stimulated economic growth in this countries are in complete opposite of policies of trade openness and globalization.

3. METHODOLOGY AND DATA COLLECTION

According to Creswell (2003) research design is a scheme, outline or a plan that is used to generate answers to research problems. As per Dooley (2007) research design is the structure of the design, it's like a glue that hold the research project elements together. The research adopted a correlational research design, which as per Kothari (2004), is used to seek if two or more variables are associated or related in some way, using statistical analysis, while observing the variable. It's presumed that the independent variables have a relationship with the dependent variable. In this study unemployment and private consumption per capita which is used as a measure of poverty are used as dependent variables while trade openness, FDI inflows, exchange rates, financial development and inflation rates are used as independent variables.

3.1 Empirical Setup

In this research, trade openness, FDI inflows, unemployment, and poverty was used as the economic variables. Two different models were used in this study (model for unemployment and poverty) which are investigated against FDI and trade openness.

For the purpose of this research private consumption per capita was used as a measure of poverty.

The summary of the model is as below

$$Y_t = \alpha_0 + \beta_1 OPNX_t + \beta_2 FDI_t + \varepsilon_t \dots \dots \dots \text{equation 1}$$

Where Y_t stand for poverty and unemployment, OPNX denotes international trade openness and FDI denotes foreign direct investment in Kenya and ε_t is an error term.

Including other explanatory variables which are exchange rate (EXT), financial development (FD) and inflation rate (INF) equation (1) becomes:

$$Y_t = \alpha_0 + \beta_1 OPNX_t + \beta_2 FDI_t + \beta_3 EXT_t + \beta_4 INF_t + \beta_5 FD_t + \varepsilon_t \dots \dots \dots \text{equation 2}$$

Expressing equation 2 as a VAR model therefore,

$$X_t = A_0 + \beta_1 X_{t-1} + \beta_2 X_{t-2} + \beta_3 X_{t-3} + \dots \dots \dots + \beta_q X_{t-k} + \varepsilon_t \dots \dots \dots \text{equation 3}$$

ation 3

Where

$$X_t = (Y_t \quad OPNX_t \quad FDI_t \quad EXT_t \quad INF_t \quad FD_t)$$

Equation 3 can be further be written as below

$$X_t = \alpha_0 + \beta_1 \sum_{j=1}^k X_{t-j} + \varepsilon_t \dots \dots \dots \text{equation 4}$$

Writing equation 4 in a form of VECM,

$$\Delta X_t = A_0 + \Phi X_{t-1} + \sum_{j=1}^k \Gamma_j \Delta X_{t-j} + \varepsilon_t \dots \dots \dots \text{equation 5}$$

From the equation 5 above Δ represents difference operator, X is a 6x1 – dimensional vector of non-stationary I(1) endogenous variables of the model, α is a 6x1 - dimensional vector of constant and is k-dimensional vector of the stochastic error term normally distributed with white noise properties $N(0, F_2)$. Φ is the long run matrix that determines the number of co-integrating vectors that consist of α and β representing the speed of adjustment towards long run equilibrium and long run parameter respectively. The short term relationship is represented by Γ .

3.2 Data and its Sources

Time-series secondary data was used in assessing the nexus between international trade openness on unemployment and poverty in Kenya for the period of 1990-2017. Unemployment is taken as the rate of unemployed people in Kenya, poverty is measured by private consumption per capita and FDI

inflows is the total of all direct investments by foreigners in Kenya. International trade openness is measured as the total of exports and imports divide by GDP.

Data was collected from World Bank Database while some extra data was obtained from the Kenya National Bureau of Statistics.

3.3 Method of Analysis

Vector Error Correlation Method (VECM) was used to determine the effect of trade openness on unemployment and poverty in Kenya. Using the VECM framework the direction of causation between variables was determined while providing estimates on both the long run and the short run. According to Rahmaddi and Ichihashi (2011), the information on the long run relationship among the variables is provided by the co-integration analysis while the short run relationship among the variable is provided by granger causality test. E-views 8 analysis software was used to analyse data herein ge-

nerating a regression model of the variables. After data analysis the result were represented in form of equations, graphs and tables.

4.1 Descriptive analysis of data

Figure 1 below shows the relationship between economic unemployment rate and poverty rate in Kenya over the period of 1990 to 2017.

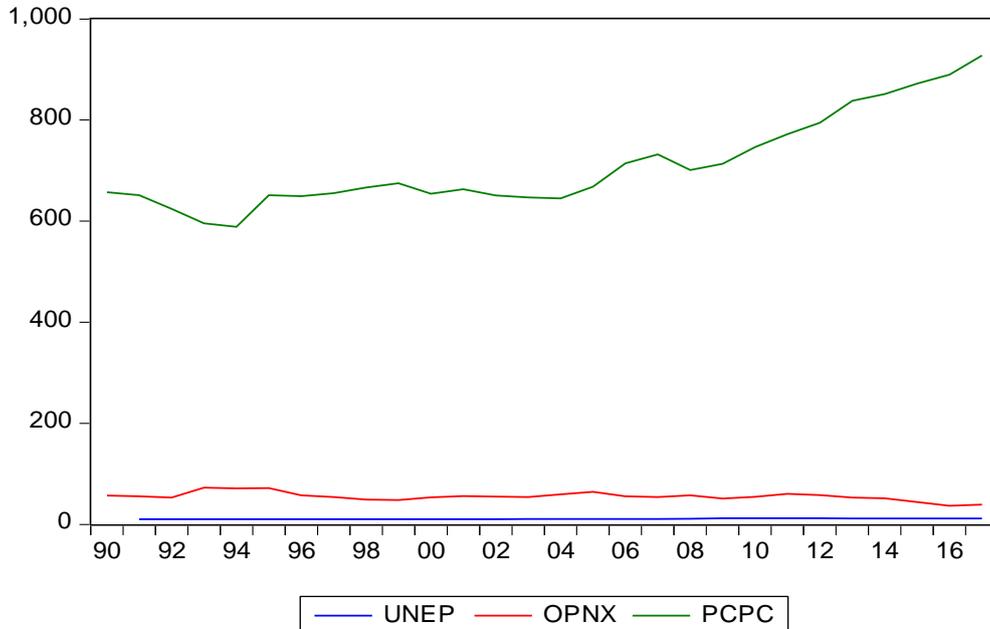


Figure 1: Graph showing relationship between trade openness, unemployment rate and poverty (1990-2017).

From the graph it can be observed that there is no systematic relationship which exists between unemployment and poverty. Based on the observation we can't tell the relationship between the variables, necessita-

ting the need for empirical analysis.

Figure 2 shows the relationships amongst foreign direct investment, unemployment and poverty in Kenya during the period of 1990 to 2017.

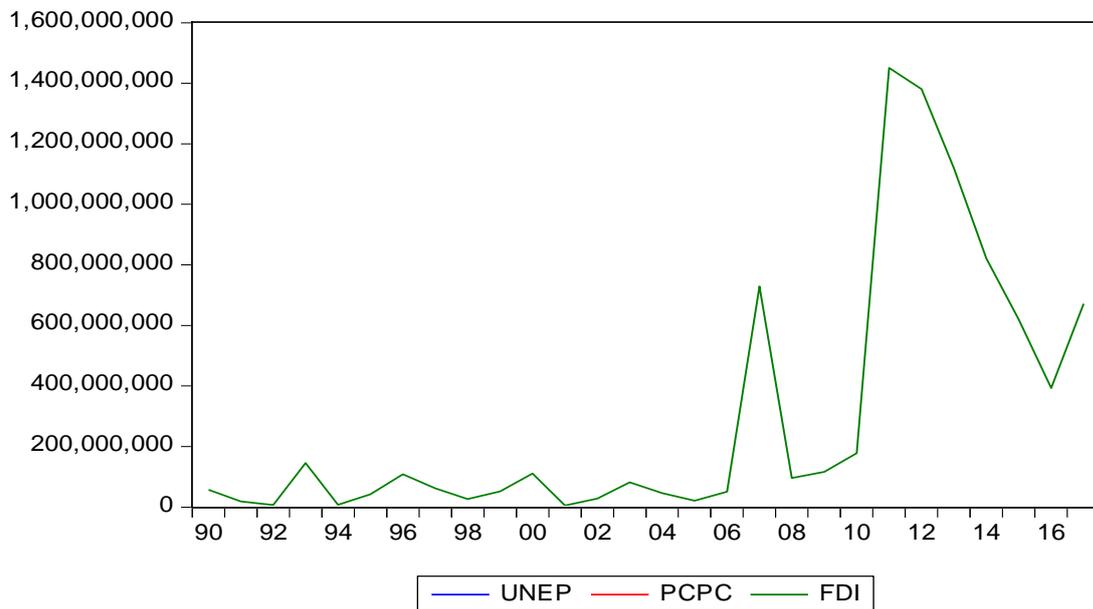


Figure 2: Graph showing relationship between FDI, unemployment and poverty. (1990-2017)

From graph 2 above no clear relationship exists between foreign direct investment, unemployment and poverty. Due to existence of this illogical trend pattern between the variables, empirical analysis will be done to find out the relationship between the variables.

4.2 Empirical Result

To determine whether variables are co-integrated one precondition must be satisfied that is all the variables must be non-stationary at level but when converted into first difference they are stationary. To deter-

mine whether the variables are stationary a unit root test is carried out.

4.2.1 Unit Root Test

Empirical analysis commences by testing whether the variables are stationary. Two tests are carried out, Augmented Dickey-Fuller (ADF) and the Philip-Perron tests. The results of the test are presented in the table one below. Both the Augmented Dickey-Fuller (ADF) and the Philip-Perron tests showed that all variables were non stationary at level but became stationary at first differencing as shown in table 1 below.

Table 1: Unit root tests

Variable	Augmented Dickey-Fuller test		Phillips-Perron test statistic	
	level	1 st difference	level	1 st difference
Unep	-0.763170	-4.487716*	-0.804268	-4.485553*
Fdi	-2.006775	-5.461061*	-2.006775	-5.731480*
Pcpc	1.635732	-3.707577*	1.980681	-3.562664*
Opnx	-1.643661	-4.958111*	-1.792235	-4.957880*
Infl	-2.813475	-5.847681*	-2.697577	-11.59028*
Exc	-1.887990	-4.863727*	-1.924852	-4.858215*
Fd	-1.680405	-6.554133*	-1.559417	-6.653655*

Note * =5% significance level.

Since all variables are non-stationary at level and become stationary at

first difference we can determine the co-integration relationship among the variables.

4.2.2 Co-integration mechanism

The variables were tested for co-integration (long term relationship) using the Johansen test of co-integration.

From the unemployment model, which is model of UNEP FDI INF OPNX EXC FD, both trace statistics and Max-Eigen statistics rejected the null hypothesis that at most

two co-integrating equations exist. According to the two tests at least three co-integrating equations at 5 per cent exists as shown in table 2 below. This results shows that there is a possibility of a long term relationship which exist among unemployment, foreign direct investment, international trade openness and the other variables.

Table2
Series: UNEP OPNX INF FDIF FD EXC

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.964571	221.9907	95.75366	0.0000
At most 1 *	0.956871	138.4847	69.81889	0.0000
At most 2 *	0.706409	59.89568	47.85613	0.0025
At most 3	0.530687	29.25651	29.79707	0.0576
At most 4	0.301030	10.34440	15.49471	0.2552
At most 5	0.054109	1.390706	3.841466	0.2383

Trace test indicates 3 cointegrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.964571	83.50594	40.07757	0.0000
At most 1 *	0.956871	78.58904	33.87687	0.0000
At most 2 *	0.706409	30.63917	27.58434	0.0196
At most 3	0.530687	18.91211	21.13162	0.0994
At most 4	0.301030	8.953693	14.26460	0.2900
At most 5	0.054109	1.390706	3.841466	0.2383

Max-eigenvalue test indicates 3 cointegrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

With respect to poverty model, that is the model of PCPC EXC INF OPNX FDI and

FD the trace statistics rejected the null hypothesis that at most 2 co-integrating equations at

0.05 level exists. The Maximum Eigen statistic also rejected the null hypothesis that at most one co-integrating equation exist. Results from trace statistics indicates that at least 3 co-integrating equations at 0.05 level exists whereas the Maximum Eigen statistics indicates

that at least 2 co-integrating equations exists at 5 per cent as shown by table 3 below. This result shows that there is possibility of long term relationship amongst poverty, international trade openness, foreign direct investment and the other variables.

Table3

Series: PCPC OPNX INF FDIF FD EXC

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.901664	147.0922	95.75366	0.0000
At most 1 *	0.736061	86.78868	69.81889	0.0012
At most 2 *	0.631957	52.15568	47.85613	0.0187
At most 3	0.511165	26.16726	29.79707	0.1238
At most 4	0.206496	7.558297	15.49471	0.5138
At most 5	0.057676	1.544569	3.841466	0.2139

Trace test indicates 3 cointegrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.901664	60.30349	40.07757	0.0001
At most 1 *	0.736061	34.63301	33.87687	0.0406
At most 2	0.631957	25.98842	27.58434	0.0789
At most 3	0.511165	18.60896	21.13162	0.1087
At most 4	0.206496	6.013728	14.26460	0.6114
At most 5	0.057676	1.544569	3.841466	0.2139

Max-eigenvalue test indicates 2 cointegrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

4.2.3 Long run relationship among international trade openness, foreign direct investment, unemployment and poverty rate in Kenya.

From above models of unemployment

and poverty a long run relationship among the variables is established. Using the Vector Error Correction Estimates we can determine the co-integrating equations among the variables.

Model I: Long and Short Run co-integration of unemployment equation:

$$UNP_t = 2.91 - 0.053OPNX_{t-1} + 2.60E-10FDI_{t-1} + 0.06 INF_{t-1} - 0.18 EXC_{t-1} + 0.88FD_{t-1} +$$

ϵ_t

(0.01252)	(2.4E-10)	(0.01168)	(0.00971)	(0.05102)
[4.27347]	[-1.07655]	[-5.13694]	[18.3741]	[-17.2579]

The above co-integrating equation shows how international trade and foreign direct investment affect unemployment in case there is a long term relationship. The equation shows that in case there is a one per cent increase in international trade openness unemployment in Kenya will reduce by 0.053 per cent. On the other hand a one per cent increase in foreign direct investment will lead to an increase in unemployment by 2.6E-10

per cent. Using the co-integration equation we can draw a conclusion that, in case a long term relationship exists between unemployment, trade openness and foreign direct investment, an increase in international trade openness will reduce unemployment whereas an increase in foreign direct investment will lead to an increase in unemployment in Kenya.

Model 2: Long and Short Run Co-integration Poverty Rate Equation:

$$PCP_t = 462.17 - 4.55OPNX_{t-1} + 5.24E-08 FDI_{t-1} + 7.077INF_{t-1} + 2.41 EXC_{t-1} - 8.59FD_{t-1} +$$

ϵ_t

(0.60787)	(1.2E-08)	(0.57295)	(0.39533)	(2.44804)
[7.49276]	[-4.54189]	[-12.3521]	[-6.08575]	[-3.50999]

In the equation above private consumption per capita is used as a proxy of poverty. If a long term relationship exists between the variables, both international trade openness and foreign direct investment will be significant in determining PCP in Kenya. As per the equation a one cent increase in trade openness will reduce PCP by 4.55 per cent in the long run. This implies that in case trade openness increases poverty will increase since there is a decrease in consumption. On the other hand an increase in foreign direct investment by one per cent will lead to an increase in PCP by 5.24E-08 per cent. An increase in PCP means a decrease in poverty.

From the results therefore we can conclude and say that an increase in trade openness increases poverty whereas an increase in foreign direct investment leads to a decrease in poverty.

4.2.4 Vector Error Correlation Method (VECM)

VECM is used for estimating whether there is short term or long term relation which exists between different variable over a period of time. It also estimates directly the speed at which a dependent variable returns to equilibrium after a change in other variables. When unemployment is used as dependent variable the following results are obtained.

$$\begin{aligned}
 D(\text{UNEP}) = & C(1) * (\text{UNEP}(-1) + 0.0534945611124 * \text{OPNX}(-1) \\
 & - 0.0599751092088 * \text{INF}(-1) - 2.59562044717\text{E-}10 * \text{FDIF}(-1) \\
 & - 0.880547672947 * \text{FD}(-1) + 0.178343167314 * \text{EXC}(-1) - \\
 & 2.90660850915) + C(2) * D(\text{UNEP}(-1)) + C(3) * D(\text{OPNX}(-1)) + \\
 & C(4) * D(\text{INF}(-1)) + C(5) * D(\text{FDIF}(-1)) + C(6) * D(\text{FD}(-1)) + C(7) * D(\text{EXC}(-1)) + \\
 & C(8)
 \end{aligned}$$

	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	0.047600	0.032907	1.446512	0.1662
C(2)	0.273701	0.189176	1.446808	0.1661
C(3)	0.002923	0.008406	0.347720	0.7323
C(4)	0.022588	0.005373	4.204185	0.0006
C(5)	-3.87E-10	1.23E-10	-3.149199	0.0059
C(6)	0.061794	0.027749	2.226895	0.0398
C(7)	-0.015320	0.007860	-1.949157	0.0680
C(8)	0.071101	0.049492	1.436614	0.1690

Taking into consideration our explanatory variables of interest which are trade openness and foreign direct investment it is observed that the error correction term for co-integrating equations is not significant. This implies that there is no evidence of causation from trade openness and foreign direct investment to unemployment in the long term. In addition there is no causality from trade openness to unemployment in the short term. However there is evidence of causality from FDI to unemployment in the short term. The-

refore, the result clearly shows that there is no relationship that exist whatsoever between trade openness and unemployment in Kenya both in the long term and short term. This means that to whichever rate trade openness increases in Kenya unemployment rate is not affected. On the other hand FDI has a short term effect on unemployment. Meaning that, in short term, an increase in FDI in Kenya will lead to an increase in unemployment which will however not persist in the long run.

In respect to poverty the following results are obtained;

$$\begin{aligned}
 D(\text{PCPC}) = & C(1) * (\text{PCPC}(-1) + 4.55465049233 * \text{OPNX}(-1) - \\
 & 7.07716323023 * \text{INF}(-1) - 5.24271981855\text{E-}08 * \text{FDIF}(-1) -
 \end{aligned}$$

$$\begin{aligned}
& 8.59260331799*FD(-1) - \\
& \quad 2.40585326632*EXC(-1) - 462.169951273) + \\
& C(2)*D(PCPC(-1)) + C(3) \\
& \quad *D(OPNX(-1)) + C(4)*D(INF(-1)) + C(5)*D(FDIF(-1)) + \\
& C(6)*D(FD(-1)) + \\
& \quad C(7)*D(EXC(-1)) + C(8)
\end{aligned}$$

	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	-0.387383	0.121651	-3.184370	0.0051
C(2)	0.674482	0.266296	2.532828	0.0208
C(3)	-0.449583	0.831069	-0.540969	0.5952
C(4)	-1.001891	0.580852	-1.724865	0.1017
C(5)	-1.87E-08	1.32E-08	-1.418321	0.1732
C(6)	-1.704979	2.001478	-0.851860	0.4055
C(7)	-0.938175	0.798749	-1.174556	0.2555
C(8)	7.806877	5.558288	1.404547	0.1772

Paying attention to trade openness and foreign direct investment, the results above show that the error correction term (ECT) for co-integrating equations is significant at 5%. This implies that there is long term causation from trade openness and FDI to poverty in Kenya. The result also shows that there is no short term causation from both trade openness and FDI to poverty. The ECT coefficient has a value of -0.387 which implies that the system will correct its disequilibrium at an adjustment speed of 38.7% per year in case there is exogenous shock in the system.

5. CONCLUSION AND POLICY RECOMMENDATIONS

The findings of this research clearly show that there is no long term relationship that exists among trade openness and FDI to unemployment in Kenya. On the other hand, both trade openness and FDI have a long term impact on poverty. This means that in the long term an increase in trade openness increases poverty level in Kenya whereas an increase in FDI will eradicate poverty.

This therefore implies that the Kenyan government should not rely on trade open-

ness and FDI policies as a way of reducing unemployment in Kenya but they should use the policies to reduce poverty levels. For Kenya to reduce unemployment they need to deal with the problem of corruption first. Kenya has been ranked as one of the most corrupt countries in the world. Actually the government of Kenya has declared corruption a national disaster which needs to be fought by every citizen irrespective of the age. Despite this effort of fighting corruption nationally, it goes without shame to say that it's the political leaders who are looting everything from the government for their own benefits. The moment leaders steal billions of money from the government, the income the government could have used to invest so as to create employment opportunities is lost. This money goes to the pocket of one person meaning a large number of people will suffer because of few corrupt individuals in the country. Corruption can also discourage international companies from investing in Kenya. It might be noted here that, from the study there was no long term relationship between FDI and trade openness on unemployment maybe because some of this companies which invest

in Kenya don't pay their taxes because of corruption. In addition some countries which have done FDI in Kenya like China come with their workmen meaning that not so many locals will have jobs in these companies. Other people work with these companies temporarily where they are likely to be laid off any time making them unemployed again. The government should agree with these international companies to have best policies for employing Kenyans. The government should also encourage FDI in agricultural sector especially in rural areas. Companies which are willing to invest in agricultural sector especially in rural areas should be given the first priority. This will create job opportunities for local people at the same time reducing poverty.

REFERENCES

- Boulhol, H. (2008), "Unemployment and Interactions between Trade and labour Market Institutions," CES Working Papers, Centre d'Économie de la Sorbonne.
- Davis, D. R. (1998), "Does European Unemployment Prop up American Wages? National labour Markets and Global Trade," *American Economic Review*, 88 (3), 478-494.
- [Dutt, P., D. Mitra, and P. Ranjan (2009), international Trade and Unemployment: Theory and Cross-National Evidence, *Journal of International Economics*, 78 (1), 32-44.
- Felbermayr, G., J. Prat, and H. Schmerer (2011), "Globalisation and Labour Market Outcomes: Wage Bargaining, Search Frictions, and Firm Heterogeneity," *Journal of Economic Theory*, 146 (1), 39-73.
- Helpman E. and O. Itskhoki (2010), "Labour Market Rigidities, Trade and Unemployment," *Review of Economic Studies*, 77 (3), 1100-1137.
- Janiak, A. (2006), "Does Trade liberalisation Lead to Unemployment? Theory and Some Evidence", ECARES, Université Libre de Bruxelles.
- Krugman P. (1995), "Growing World Trade: Causes and Consequences," *Brookings Papers on Economic Activity* (1), 25th Anniversary Issue, 327-377.
- Matusz, S. J. (1996), "International Trade, the Division of Labour, and Unemployment," *International Economic Review*, 37 (1), 71-83.
- Moore, M. P. and P. Ranjan (2005), "Globalisation vs Skill-Biased Technological Change: Implications for Unemployment and Wage Inequality," *Economic Journal*, 115 (503), 391-422.
- Papageorgiou, D., M. Michaely, and A. Choksi (1991), *Liberalizing foreign trade*, Basil Blackwell Publishers for the World Bank; Cambridge, MA. 7 volumes.
- Sener, F. (2001), "Schumpeterian Unemployment, Trade and Wages," *Journal of International Economics*, 54 (1), 119-148.
- Visser, J. (2006), "Union Membership Statistics in 24 Countries," *Monthly Labour Review*, 129, 38-49.
- Wacziarg R. and J. S. Wallack (2004), "Trade Liberalisation and Intersectoral Labour Movements," *Journal of International Economics*, 64 (2), 411-439.

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