Food Prices and Inflation Rates: Relationships in the East African Community (EAC)

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ABSTRACT: Fuel and food prices are two of the important factors explaining inflation situation in the East African Community (EAC). Recently with the decline in fuel prices more concern in the EAC member states has been on food prices. This is because rising food prices have serious effects on food access and poverty levels in the region. But, food access situation has not been the same in the EAC member states as there are food surplus and food deficit countries among them. Moreover, there are studies that indicate inflation is detrimental to growth and household welfare if it reaches particular thresholds while household economic situation is exacerbated when staple food prices are rising. This paper tries to find out whether inflation rates and food prices move together in the EAC countries. For this purpose, bivariate correlations are used to analyze the relationship; between inflation rates (CPI), between food prices and between inflation rates and food prices in the EAC countries and test the significance of the values of Pearson correlation coefficients. Data used are inflation rates (CPI) for the period 1997-2016 from the African Development Bank (AFDB) and food price index from EAC Secretariat. Results show that inflation rates and food prices are positively highly correlated and markets in key staple food items are more integrated in the EAC countries. This has important policy implications to controlling inflation and stabilization of food prices through trade and increased regional supply of food. This contributes to improve affordability and food access situation and the paper recommends strengthening regional integration initiatives and implementation of agreed negotiations in order to move to a higher form of economic union where macroeconomic policies in general and policies that target inflation and food security in particular are coordinated.

KEYWORDS: Inflation, food prices, correlation, Consumer Price Index (CPI), integration

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I. INTRODUCTION

Poor macroeconomic performance and poverty have been characteristic features of many Sub Saharan African countries (SSA) for long time in the past. But, more recently those countries that embraced economic reforms and benefitted from political stability have generally shown better economic performance in terms of economic growth although not in terms of improved economic welfare and poverty reduction. This is because distribution of wealth or income has not narrowed in many of the SSA countries including those in the East African region. The East African Community (EAC) is made up of five countries namely Kenya, Uganda, Tanzania, Rwanda and Burundi and has a total population of 133 million and nominal GDP of \$79 billion. In the EAC three countries are landlocked (Burundi, Rwanda and Uganda) and within EAC, Kenya has the largest economy and high per capita GDP (average nominal GDP per capita of US \$ 590 in 2010) while Burundi has low per capita GDP (average nominal per capita GDP of US\$ 180 in 2010).

The EAC Member States have embraced the process of liberalization and introduced pro-market reforms with Uganda leading in the process of liberalization followed by Tanzania, Kenya, and Rwanda while Burundi has embraced reforms at a slower pace. Moreover, it is important to note that the progress made in implementation and the conclusion of various negotiations towards economic integration has been more pronounced in the EAC than in the Common Market for Eastern and Southern Africa (COMESA). The EAC Position Paper stresses, that countries by opening their markets to each other would enhance the development of regional value chains, increase intra-African trade, stimulate economic growth and lift their people out of poverty (EAC Position Paper, 2014).

In March 2016, EAC adopted a road map for member States to optimize the utilization of its resources to accelerate productivity and the social wellbeing of its people, called the Vision 2050. The Vision depicts a future East Africa with cohesive societies, competitive economies, and strong inter-regional cooperation that will transform the EAC region into an upper middle-income region based on the principles of inclusiveness and accountability. All members of EAC with the exception of Tanzania are members of COMESA and Tanzania on its part is a member of Southern African Development Community (SADC). Despite the overlapping

membership and income differences among member states of EAC the integration agenda continues and efforts are made to integrate the regional food market and stabilize food prices. The importance of regional integration and economic growth and development as tools to eradicate poverty in the EAC region emanates from the experiences and historical backgrounds of the member countries as all of them went through particular economic and political structural changes from the 1960s onwards and in particular since their independence.

The agricultural sector is the dominant sector and the main stay of the economies of EAC countries. In the past liberalization of food crop marketing has been a common component of the structural adjustment and market reform programs being implemented in these countries. The leading international development agencies view such liberalization as a means of promoting both static allocative efficiency and long-term agricultural growth (World Bank 1981; Elz 1987). In reality agricultural development was slow in the EAC region and international trade did not play as an engine of growth as predicted by the classical trade theory. Nevertheless, at present there is more understanding that without effective market integration, prices of agricultural products will not move together and market distortions will not benefit producers and consumers of agricultural products in the EAC countries. Thus, 'getting prices right' has been the crucial policy prescription for agricultural development whereby, the presence of market integration is a vital precondition for it to be effective (Timmer, 1986).

In the EAC, there are indications that rising food prices and higher inflation rates have not only been affecting macroeconomic growth in the region, but also welfare in general. Moreover, inadequate economic institutions combined with political instability make situations worse leading to declining economic activities and even higher inflation rates and poverty. There are many studies that suggest high inflation is detrimental to economic growth (Gregorio, JosØ De. 1993; Bullard and Keating, 1995; Bittencourt, 2012). There is also wide literature suggesting that households are thought to perform poorly when inflation is high", (Fischer, S, 1993, Barro, R, 2008). The negative relationship between inflation and growth is confirmed once inflation reaches particular thresholds as inflation creates economic distortions, increases volatility and uncertainty and reduces productive investment. In African countries which suffer from chronic poverty, high inflation and increasing food prices have certainly negative effects on overall economic welfare. This has been observed in the case of hyperinflationary situation in Zimbabwe where the impact of inflation on growth and its detrimental consequences on economic activity was widespread in all sectors.

Inflation remains to be a macroeconomic problem that has been of serious concern to policy makers in the EAC member states. During 1997-2016, inflation tended to increase in the EAC region although at different rates and fluctuated substantially in recent years. Despite the efforts taken by governments towards promoting food security and investment priority given to the agricultural sector, food prices have been increasing in the EAC region. Higher inflation rates and rising food prices have larger negative effects on the poor and low income groups that spend large share of their income on food. They also reduce the overall purchasing power of money incomes and have negative real income effects on all consumer groups. Thus, the question of whether food markets are becoming more integrated in the EAC region has been frequently raised not only because of its high importance to the regional integration agenda but also because of its importance to stabilization of food prices and implications on inflation in the region.

Macroeconomic situation in the EAC region is highly influenced by availability of food and prices of food in the market which are still influenced by exogenous forces. But as trade integration deepens and inflation control policies are coordinated, food prices in the member countries are expected to move together more closely in the region. Thus, the study on inflation rates and food prices is pertinent in the EAC region as countries move further towards higher levels of economic integration that require harmonization of macroeconomic policies. In this respect food market integration will contribute to growth in intra-regional trade with far reaching policy implications on agricultural development, stability of food markets and curbing inflationary situations. With this background the objective of this paper is to find out whether there are relationships between inflation rates and food prices in the EAC member states. The aim is to put the analysis of inflation rates and food prices in the context of the progress made in regional economic integration and in particular in food market integration in the EAC region. The specific objectives of the study are to:

- examine the relationships between inflation rates (CPI) and find out whether they move in the same direction in the EAC countries
- find out whether food prices in the EAC move together during the period under study indicating progress in food market integration
- find out if there is relationship between inflation rates and domestic food prices in the EAC countries and also between inflation rates and food prices of the partner member states

A priori, it is expected that there is co-movement of food prices in EAC countries and thus food markets in EAC region are integrated. At the same time rising inflation rates are expected to be related to rising food prices.

II. METHODOLOGY

Bivariate Correlations are used to analyze the relationship between inflation rates and food prices in the EAC countries and test the significance of the values of Pearson correlation coefficients. Bivariate correlations are calculated to assess the relationships between:

- i) inflation rates in the EAC countries
- ii) prices of food in the EAC countries
- iii) inflation rates and food prices in the EAC countries

The Research questions or hypotheses that the paper attempts to answer are stated as follows:

- Are inflation rates in the EAC countries correlated and do they move or vary in the same direction?
- Are changes in food prices moving in the same direction in the EAC countries during the period under study?
- Are changes in food prices and inflation rates in the EAC countries correlated?

The data consists of two variables, Inflation Rates and Food Prices for five countries namely Kenya, Uganda, Tanzania, Rwanda and Burundi.

The variable names are as follows:

INFLKE = Inflation rates in Kenya **INFLUG** = Inflation rates in Uganda = Inflation rates in Tanzania INFLTZ = Inflation rates in Rwanda **INFLRW** INFLBR = Inflation rates in Burundi **FDPRKE** = Food prices in Kenya **FDPRUG** = Food prices in Uganda = Food prices in Tanzania **FDPRTZ** = Food prices in Rwanda **FDPRRW FDPRBR** = Food Prices in Burundi

The data on inflation rates are CPI and data on food prices are average annual prices and the base year for calculating food price index is the year (2000=100).

Food items are different in terms of their degree of tradability within the EAC region and with rest of the world but the major staple foods like maize, rice, beans, beef etc. are largely consumed by households and traded widely in the region. Prices of most of these food items are included in the calculation of the CPI which is a weighted average price index of a basket of goods and services consumed in a particular year. The calculation of food price index uses only prices of key food items and does not include other goods and services which may be included in the calculation of CPI.

3. Results and Findings

The summary statistics of the data on inflation rates and food prices are shown in table 1. The descriptive statistics shows that the maximum inflation rate reached during the period 2000-2016 is in Burundi and maximum food prices is in Kenya, followed by Burundi and Uganda. Average food prices for the period 2000-2016 is highest in Kenya and food price variability as measured by the standard deviation is high in Uganda.

Table 1: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
INFLKE	17	1.99	16.00	8.2653	3.41032
INFLUG	17	30	18.70	7.3612	4.76150
INFLTZ	17	3.85	16.00	7.4565	3.38317
INFLRW	17	1.97	15.44	6.4971	3.85011
INFLBR	17	-1.30	25.67	10.4988	6.87588
FDPRKE	13	1.41	35.25	14.9685	9.20305
FDPRUG	13	-6.84	32.32	7.0415	11.59091
FDPRTZ	10	4.70	20.59	10.7770	5.52183
FDPRRW	10	1.70	21.46	12.9350	6.79460
FDPRBR	13	80	32.70	9.8208	8.84264
Valid N (listwise)	10				

3.1. Correlations between inflation rates

Bivariate correlation results between inflation rates in the EAC countries are shown in Table 2. A strong positive correlation was found indicating a significant relationship between inflation rates in Kenya and Uganda [r(17) = 0.876, p<0.01], Kenya and Tanzania [r(17) = 0.846, p<0.01] and Uganda and Tanzania [r(17) = 0.826, p<0.01]. This shows that inflation rates moved in the same direction in the three EAC countries. However, correlations between inflation rates in the each of the three countries with inflation rates in Rwanda and Burindi was found to be insignificant. For instance weak correlations were found between inflation rates in

Kenya and Rwanda [r(17) = 0.304, p>0.05] and Kenya and Burundi [r(17) = 0.475, p>0.05]. It is important to note that Rwanda and Burundi joined the EAC Customs Union lately in 2008 while liberalization measures were relatively slow in the case of Burundi compared to the other EAC member states.

Table2: Correlations between inflation rates in the EAC Countries

		INFLKE	INFLUG	INFLTZ	INFLRW	INFLBR
INFLKE	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	17				
INFLUG	Pearson Correlation	.876**	1			
	Sig. (2-tailed)	.000				
	N	17	17			
INFLTZ	Pearson Correlation	.846**	.826**	1		
	Sig. (2-tailed)	.000	.000			
	N	17	17	17		
INFLRW	Pearson Correlation	.304	.428	.233	1	
	Sig. (2-tailed)	.235	.087	.367		
	N	17	17	17	17	
INFLBR	Pearson Correlation	.475	.416	.234	.522*	1
	Sig. (2-tailed)	.054	.097	.367	.031	
	N	17	17	17	17	17

^{**.} Correlation is significant at the 0.01 level (2-tailed); *. Correlation is significant at the 0.05 level (2-tailed).

3.2. Correlations between food prices

Bivariate correlations between food prices in the EAC countries are shown in Table 3. A positive significant relationship was found between food prices in Kenya and Uganda [r(13) = 0.630, p<0.05)], Tanzania and Uganda [r(10) = 0.679, p<0.05] and Kenya and Burundi [r(13) = 0.634, p<0.05). Thus food prices largely tend to move together in the EAC countries indicating that food markets are relatively integrated in the region.

Table 3: Correlations between food prices in the EAC Countries

_		FDPRKE	FDPRUG	FDPRTZ	FDPRRW	FDPRBR
FDPRKE	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	13				
FDPRUG	Pearson Correlation	.630*	1			
	Sig. (2-tailed)	.021				
	N	13	13			
FDPRTZ	Pearson Correlation	.277	.679*	1		
	Sig. (2-tailed)	.438	.031			
	N	10	10	10		
FDPRRW	Pearson Correlation	.332	315	070	1	
	Sig. (2-tailed)	.348	.375	.848		
	N	10	10	10	10	
FDPRBR	Pearson Correlation	.634*	.275	.346	.186	1
	Sig. (2-tailed)	.020	.364	.327	.608	
	N	13	13	10	10	13

^{*.} Correlation is significant at the 0.05 level (2-tailed).

3.3. Correlations between inflation rates and food prices in EAC Countries

Pearson correlation coefficients calculated to examine the relationship between inflation rates and food prices in the EAC countries are reported in table 4. Results show significant positive relationship between inflation in Kenya and food prices in Tanzania [r(10) = 0.920, p < 0.01]. But, the relationship between inflation rates in Kenya and food prices in the other EAC member states was found to be insignificant.

Table 4: Correlations between inflation rates in Kenya and food prices in the EAC countries

-		INFLKE	FDPRKE	FDPRUG	FDPRTZ	FDPRRW	FDPRBR
INFLKE	Pearson Correlation	1	.451	.523	.920**	050	.420
	Sig. (2-tailed)		.122	.066	.000	.890	.153
	N	17	13	13	10	10	13

^{**.} Correlation is significant at the 0.01 level (2-tailed).

In Table 4, correlations between inflation rate in Uganda and food prices are presented. Strong positive relationships are [r(10) = 0.845, p < 0.01] for inflation rates in Uganda and food prices in Tanzania and [r(13) = 0.649, p < 0.05] between inflation rates in Uganda and food prices in Kenya. But the relationships of inflation rates in Uganda with food prices in Rwanda and Burundi were found to be insignificant.

Table 5: Correlations between inflation rates in Uganda and food prices in the EAC countries

		INFLUG	FDPRKE	FDPRUG	FDPRTZ	FDPRRW	FDPRBR
INFLUG	Pearson Correlation	1	.649*	.764**	.845**	163	.493
	Sig. (2-tailed)		.016	.002	.002	.654	.087
	N	17	13	13	10	10	13

^{*.} Correlation is significant at the 0.05 level (2-tailed).

The relationship of inflation rates in Tanzania to food prices in the EAC member states was found to be insignificant except with Uganda where a significant positive relationship [r(13) = 0.747, p<0.01] is reported as shown in Table 6.

Table 6: Correlations between inflation rates in Tanzania and food prices in the EAC countries

		INFLTZ	FDPRKE	FDPRUG	FDPRTZ	FDPRRW	FDPRBR
INFLTZ	Pearson Correlation	1	.423	.747**	.915**	160	.349
	Sig. (2-tailed)		.150	.003	.000	.659	.242
	N	17	13	13	10	10	13

^{**.} Correlation is significant at the 0.01 level (2-tailed).

In the case of Rwanda it has been found that there is significant positive relationship [r(13) = 0.826, p<0.01] between inflation rates in Rwanda and food prices in Kenya and inflation rates in Rwanda with food prices in Burundi [r(13) = 0.733, p<0.010]. However, correlations were insignificant between inflation rates in Rwanda and food prices in Uganda and Tanzania.

Table 7: Correlations between inflation rates in Rwanda and food prices in the EAC countries

		INFLRW	FDPRKE	FDPRUG	FDPRTZ	FDPRRW	FDPRBR
INFLRW	Pearson Correlation	1	.826**	.220	.003	.634*	.733**
	Sig. (2-tailed)		.000	.470	.993	.049	.004
	N	17	13	13	10	10	13

^{**.} Correlation is significant at the 0.01 level (2-tailed).

Correlations between inflation rates in Burundi and food prices in other EAC countries is shown in table 8 where there is insignificant relationship between inflation rate in Burundi and prices in the other EAC member states. This suggests that there is relatively less food market integration of Burundi with the rest of the EAC countries.

Table 8: Correlations between inflation rates in Burundi and food prices in the EAC countries

Tuble 0.	Tuble of Collections between influence in Bullium und 1000 prices in the 1210 countries								
		INFLBR	FDPR KE	FDPRUG	FDPRTZ	FDPRRW	FDPRBR		
INFLBR	Pearson Correlation	1	.533	.163	.122	.139	.466		
	Sig. (2-tailed)		.061	.595	.737	.701	.108		
	N	17	13	13	10	10	13		

III. DISCUSSION

Inflation rates in EAC countries followed similar patterns reaching highest levels in 2008 and in 2012. Inflation rates were highest in Burundi compared to that of other EAC countries (figure.1). UNECA Report also shows that inflation in East Africa increased from 5.3 per cent in 2014 to 5.9 per cent in 2015. In Kenya, it went down from 6.9 to 6.3 per cent and remained unchanged in Tanzania at 6.1 per cent. But it climbed steeply in Burundi (from 4.4 to 7.4 per cent), and Uganda (from 4.3 to 5.7 per cent), respectively, reflecting, political instability, weather-related shocks and consequent increases in domestic food prices, and a depreciation of the domestic currency and rise in domestic food prices (UNECA, 2016).

^{**.} Correlation is significant at the 0.01 level (2-tailed).

^{*.} Correlation is significant at the 0.05 level (2-tailed).

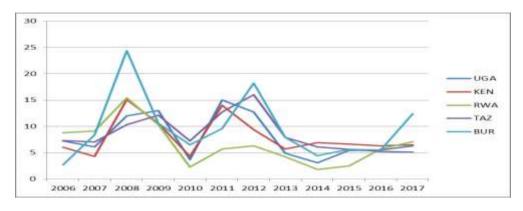
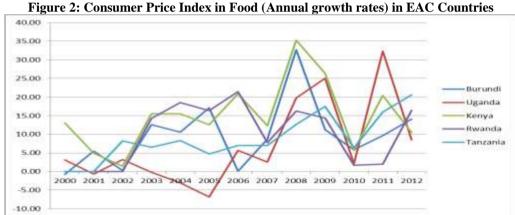
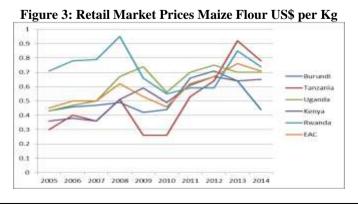


Figure 1: Inflation rates in the EAC Countries (2006-2017)

In addition changes in food prices in the EAC countries as measured by annual growth rates in the CPI for food show that food prices increased fast and reached its highest in 2008 and 2011 as shown in figure 2. This shows similar patterns to that observed in figure 1 for inflation rates in EAC countries.



There are indications that increase in food prices have contributed to higher inflation rates in the EAC countries with rising food prices specifically notable in maize. In the EAC countries, maize is the main staple food in Kenya and Tanzania while it is second to bananas in Uganda. Wanjiku J. etal. found that during the last quarter of year 2008, domestic maize prices increased in all domestic markets in East Africa (Kenya, Zambia, Ethiopia, Tanzania and Rwanda, maize prices increased by 3,10,7,6 and 4% respectively) (Wanjikul J. etal., 2012, p.8). However, inflation rates were declining in EAC since 2012 which was mainly due to falling oil and food prices. UNECA report also indicates that regional inflation reached 7.5 per cent in 2015 up from 7.2 per cent in 2014, but is forecast to decline to 6.7 per cent in 2016 and 6.3 per cent in 2017. Inflationary pressure was reduced by lower global oil prices and the continuing fall in food prices since 2011 (UNECA, 2016). Figure 3 presents trends of retail prices of maize flour in the EAC countries during the period 2005-2014 where high prices were reported in 2008, declined reaching lowest levels in 2010 and increased in 2011 and then declined in 2014.



On the other hand, the low trade volume between EAC countries in key food items partly explains the insignificant relationship of inflation rates in a country and food prices in partner countries. For instance, this is true for food staples in the case of imports of beans from Uganda and rice from Tanzania. Beans are exported largely from Uganda to Democratic Republic of Congo (DRC) and South Sudan than to the EAC member States. Baffes etal argue that region's price rather than trade among the EAC countries determines the price of beans. Thus, demand shocks from neighboring countries like South Sudan and DRC should also be important drivers of prices in the EAC region. Other factors identified as affecting price relationships are weather shocks and trade policy, namely export bans and ad hoc import policies (Baffes et al. 2015).

In the case of rice Tanzania exports mainly to Kenya. But Asian suppliers are still dominant in the EAC market because of low prices and large supply capacity. Kilimo Trust reports that rice has become the second major staple food after maize in EAC. Tanzania is the largest producer and consumer of rice in the region and on the average 30% of the rice produced in Tanzania is being consumed by the producers. Kenya is the second largest net consumer and the leading importer from outside the EAC. Rice imported into Kenya comes from Pakistan (74%), Vietnam (10%) and Thailand (5%). Thus trade is mainly at national level with minimal rice crossing borders (Kilimo Trust, 2014). This is because rice prices in EAC are often much higher than the prices in the Asian countries that export rice to the EAC. Rice produced by the smallholders in the EAC is not price competitive compared to other Asian rice producing countries. Overall rice prices were highest in Tanzania and Uganda which were believed to be well above the world prices given its 75% Common External Tariff (CET) and Kenyan prices are the lowest and its rice imports are high in the region with its low CET of 35%.

IV. CONCLUSIONS AND IMPLICATIONS OF THE STUDY

In conclusion, the main findings are as follows. First, on relationships of inflation rates in the EAC countries it has been found that inflation rates move in the same direction as shown by the CPI during the period 1997-2016. The changes in inflation rates (annual growth rates) in the five countries also follow similar patterns reaching highest in 2008 and 2011 while inflation rates increased faster in Uganda and Kenya compared to the other EAC countries. Bivariate correlation results show strong positive correlation between inflation rates in Kenya and Uganda [Pearson correlation coefficient: [r(17) = 0.876, p<0.01)], between inflation rates in Kenya and Tanzania [Pearson correlation coefficient: [r(17) = 0.846, p<0.01]] and between inflation rates in Uganda and Tanzania [Pearson correlation coefficient: [r(17) = 0.826, p<0.01)]]. Inflation rates moved in the same direction in the three EAC countries. Weak correlations were found that were not significant between inflation rates in Kenya and Rwanda as well as Kenya and Burundi. It is important to note that Rwanda and Burundi joined the EAC Customs Union lately in 2008 while liberalization measures were relatively slow in the case of Burundi compared to the other EAC member states.

The trend of food prices shows similar patterns in the EAC countries and overall food prices increased fast and reached highest in 2008 and 2011. Correlation results on the relationships between food prices in the EAC region show a positive significant relationship between food prices in Kenya and Uganda [Pearson correlation coefficient: r(13) = 0.630, p<0.05]. Food prices in Tanzania and Uganda are also found to be significantly positively related as shown by the Pearson correlation coefficient [r(10) = 0.679, p<0.05]. Thus, overall food prices tend to move together in the EAC countries showing some progress in integration of food markets. However, this may be more pronounced in markets of major staple foods like maize, rice, beans and beef and this has been found by similar other studies such as those by Wanjiku J. etal. 2002 and by Konandreas P., Sharma R, and Costantino A. 2015.

Lastly, bivariate correlation results on the relationships between inflation rates and food prices in the respective EAC member countries, found significant positive correlation in Tanzania [r(10) = 0.915, p<0.01] and in Uganda [r(13) = 0.764, p<0.01]. Food prices and inflation rates move together in the same direction and recent studies show inflation to be triggered by rising maize prices as the maize market is more unstable characterized by high instability. Also important are prices of rice and beans although intra-EAC trade in maize is high compared to rice and beans and the region is relatively self-sufficient showing higher level of market integration in the maize market.

Results on the relationship between inflation rates in each EAC member state and food prices in partner member states show mixed results. A significant positive correlation [r(10) = 0.920, p < 0.01] was found between inflation in Kenya and food prices in Tanzania . However, values of Pearson correlation coefficients between inflation rates in Kenya and food prices in the other EAC member states were found to be insignificant at 0.01 level (two tailed). Similar results were also found for the relationship of inflation rates in Tanzania, Rwanda and Burundi to food prices in the other EAC member states which was found to be insignificant.

Food prices in the EAC region suffer from price increases and declines. Among the factors triggering price rises are domestic and regional supply disturbances arising from drought and bad harvests, wars and conflicts, trade policies and restrictions. Food prices are also affected by the global economy such as those

experienced during world market crisis in 2008 and 2011. More importantly food markets suffer from large seasonal gaps and as the result EAC countries are heavily dependent on food aid and it is common to find government restrictions of food from crossing borders. As movements of food prices mostly come from the supply side there are significant challenges related to volatility of food prices and the negative effects on inflationary expectations. This will also have negative effects on public confidence and credibility of inflation targeting by monetary authorities. Thus macroeconomic policy convergence and monetary integration of EAC countries would have important role in reduced food price volatility and inflation in the region.

Price rises in particular for food have serious implications on overall living standards and nutritional levels which suggest the need for policy interventions to smooth out price changes and stabilize food markets. The traditional approach of government price controls and government marketing channels as well as rationing of food had mixed albeit disappointing results in many of the East African countries. The policy implications are for governments to allow free flow of surplus food and ensure commitment towards expanded trade in food among EAC countries to strengthen food market integration in the region. Among the recommendations that follow from this study are: introduce measures of inflation control and food price stability by encouraging food producers to increase supply in the region; expand regional trade in key food items whose prices are of significant importance such as maize, rice, beef and beans; implement macro-policy coordination to stabilize food prices and reduce effects on inflation in EAC and; enhance EAC regional integration process through policy harmonization towards a higher form of economic integration and union.

REFERENCES

- [1]. African Development Bank Group. Download URL:http://comstat.comesa.int/mjezhae/afdb-socio-economic-database-1960-2016
- [2]. Baffes J., V. Kshirsagarz and D. Mitchell (2015). Domestic and External Drivers of Maize Prices in Tanzania; Available at SSRN:http://papers.csm.com/sol3/papers.cfm?abstract_id=2565953
- [3]. Barro, Robert J. (1998). Determinants of Economic Growth: A Cross-country Empirical Study. The MIT Press.
- [4]. Besley, Timothy J. and Torsten Persson. (2008). The Incidence of Civil War: Theory and Evidence. NBER Working Paper No. w14585.2,
- [5]. Bittencourt, Manoel. (2012). Inflation and economic growth in Latin America: some panel time-series evidence. Economic Modelling 29:333-340.
- [6]. Bullard, James, and John W. Keating. (1995). The long-run relationship between inflation and output in postwar economies. Journal of Monetary Economics 36:477-496.
- [7]. East African Community. (2014). East African Community Secretariat. Position Paper
- [8]. Elz, D., (ed.,), (1987). Agricultural Marketing Strategy and Pricing Policy: a World Bank Symposium, Washington, DC: World Bank
- [9]. Fischer, Stanley. (1993). The role of macroeconomic factors in growth. Journal of Monetary Economics 32:485-512.
- [10]. Gregorio, JosØ De. (1993). Inflation, taxation, and long-run growth. Journal of Monetary Economics 31:271-298
- [11]. KilimoTrust, (2014). Expanding Rice Markets in the EAC. Great opportunity for actors in locally produced rice. Dar-es-Salaam Tanzania
- [12]. Konandreas P., Sharma R, and Costantino A. (2015). Food Security in the EAC: Impact of Regional Integration under Customs Union and Common Market Policies. Final Report, IBF Consulting, EU.
- [13]. Timmer, C.P., (1986). Getting Prices Right: the Scope and Limits of Agricultural Price Policy, Ithaca: Cornell University Press.
- [14]. UNECA (2016), Economic Report Africa, 2016, Addis Ababa, Ethiopia
- [15]. Wanjiku J. etal, (2012). Exploiting opportunities in intra-regional trade in food staples in COMESA region. Selected Paper prepared for presentation at the International Association of Agricultural Economists (IAAE). Triennial Conference, Foz do Iguacu, Brazil, 18-24 August, 2012.
- [16]. World Bank. (1981). Towards Accelerated Growth in Sub-Saharan Africa. Washington DC: World Bank.

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