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Public Expenditures and Agricultural Growth in Burkina Faso

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Abstract

This study analyzes public funding in the agricultural sector in Burkina Faso and assesses its impact on agricultural growth. Based on data collected from several sources (finance acts over the period 1983-2008, Automated Prediction Instrument (IPA), World Bank and National agricultural statistics over 26 years (from 1983 to 2008), the agricultural production has been modelled by using an error correction model and Cobb-Douglas function. The econometric analysis results show that public funding has a positive impact on agricultural production in the short term. A 9% growth rate of public funding over the period 2009-2015, causes an average agricultural production of 6.75% over the period. So, it is necessary for the State to increase funding in the agricultural sector to achieve a better growth of the domestic production and to meet the Millennium Development Goals regarding hunger reduction over the period 2009-2015.

Keywords: Public funding, Maputo, agricultural growth, Burkina Faso

Introduction

The agricultural sector (including, livestock, fisheries and forestry) has long been neglected by African countries and has not been allocated the funding required for its development. According to Food and Agriculture Organization (FAO, 2012) the proportion of public expenditures allocated to agriculture in 2007 was estimated at 3% in average for Sub-Saharan Africa against 7% for East Asia and the Pacific.

Agriculture is so important in controlling hunger and poverty that the African Union Heads of States and Governments ratified in July 2003 in Maputo the Declaration on Agriculture and Food Security. This declaration commits the States to allocate at least 10% of their budgets to the agricultural sector so as to achieve a 6% agricultural growth required to reduce poverty by 50% by 2015.

From 1983 to 1990, Burkina Faso significantly invested in the rural sector. Through programs such as the *"mass Development Program"* (1983-1985) and the "Five Year Development Plan" (1986-1990), the country allocated 44% and 41% of its investments to agriculture and water (Somé, 2004). But the following structural adjustment program (1991-2002) was characterized by the withdrawal of state funding from the agricultural sector. Most of the public subsidies were cancelled and State support to the sector became occasional and limited. Furthermore, the international funding for this sector was also reduced (FAO, 1996) over this period.

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Since the 2008 food crisis and the subsequent violent riots, the State is increasingly focused on the agricultural production improvement. That is translated into considerable subsidies granted to help purchase fertilizers and improved seeds in order to boost production.

According to the World Bank (2012), over the period 2004-2011, the spending in the agricultural sector, as defined by the New Partnership for African Development (NEPAD), accounted for 10.2% of the national budget. The rate is slightly above the Maputo commitment requirement. The volume of agriculture expenditures, estimated as per NEPAD Classification of the Function of Government (COFOG) method, doubled from 65 billion FCFA in 2004 to 129 billion FCFA in 2011.

Meanwhile, the agricultural growth reached 3% in average from 2004 to 2011. The International Food Policies Research Institute (IFPRI 2006) shows that, this rate must be raised to 6.8% if the first Millennium Development Goals (MDG 1) "reducing extreme poverty rates by half by the 2015 deadline" is to be achieved.

This study intends to analyze public funding to the agricultural sector in Burkina Faso and its impact on agricultural growth. It also addresses the public investment required to achieve the MDG 1 on reducing poverty.

This paper encompasses four sections: the first section enlightens on the agricultural background in Burkina Faso. The second one describes the study methodology; Section 3 presents and discusses the main outcomes of the study and the last section highlights the main conclusions drawn.

Background of agriculture in Burkina Faso

Characteristics of agriculture in Burkina Faso

Agriculture is one of the key sectors of Burkina Faso economy. It accounts for 85% of Burkina Faso's active labor force. Most agricultural activities are organized and implemented by family farms, which stands as the main form of production in Burkina Faso. Farming sometimes faces harsh conditions (poor rainfall, poor soils, funding problems) limiting severely the production growth and resulting in a fall in the agricultural export revenues and food insecurity. Yet, the agricultural sector is still the leading sector of the country economy since; for years to come, the economic growth will be based on dynamic of agricultural exports (cotton, fruits and vegetables) and agri-industry (fruits and vegetable processing, skin tannery and cotton spinning). Good export prospects in the agro-pastoral sector will however be dependent on the capacities of the sector to meet high demands from coastal countries in terms of meat and cattle, and cereals for the ECOWAS and WAEMU countries, and fruits and vegetables for the European market.

Agriculture in Burkina Faso is subsistence farming, producing mainly cereals that accounts for 77% of the surface areas cultivated and 71% of the total production over the 2001-2010 periods. The production growth rate over the period from 1984 to 2010 is estimated at 6% which is far beyond the population growth rate (about 3.1%). The cash crops consisting mainly of cotton are also important as they constitute the main export agricultural products in Burkina Faso. Most cotton growers (80% in 2000) are illiterate. The fruit and oleaginous plant production sectors are suffering from poor trading organization and lack of grading and cleaning infrastructure.

Agriculture in Burkina Faso is highly dependent on climate and will need irrigation to develop (FAO, 2005). Considering the increasing food needs and the high pressure on land, irrigated agriculture has to play an increasingly important role in Burkina Faso economy. The country has a huge potential of irrigable land area which is estimated at 255 000 ha with only 25% of it exploited and 500 000 ha of lowland appropriate for development.

The livestock sector also contributes to food security and animal traction, transportation and farm fertilization. Livestock population is large and varied. Nevertheless, the per capita productivity needs to be significantly improved if the country livestock production is to fully cover the country demand for milk and milk products. This effort has to be supported by the establishment of large and/or small scale processing plants and an efficient distribution chain (Ministry of Animal Resources, 2008).

Along these potentials, a number of natural, technical, financial, economic and organizational constraints affect the development of the sector. The rainfall is scarce, irregular and inadequately distributed and the soils are poor and not suitable for cultivation. Most of the farmers are illiterate, inefficient and lack the adequate means to modernize the production systems. This results in a limited modernization of agriculture and a poor use of fertilizers in the production. Poor rural roads and inadequate promotion of agricultural products affect the marketing in this sector.

Funding of agricultural sector in Burkina Faso

The agriculture sector in Burkina Faso is in need of funding; only 10% of the need is hardly covered. Financial institutions, for various reasons, are reluctant to granting farmers the necessary credit that will allow them to properly invest in production activities. For the 2009-2010 campaign, only 19.6% of agricultural households had access to agricultural credit to purchase inputs and 2.1% of them for the equipments. According to studies conducted in the sector, agricultural training, extension and monitoring also lack adequate funding. Most of the farmers have a low educational level (71.7% of the population was illiterate 2007 (INSD, 2007)). It is proven that literacy increases the efficiency of Burkina farmers by 31.4%; agricultural production could be increased in the same rate if all the farmers were literate (Zonon, 2003).

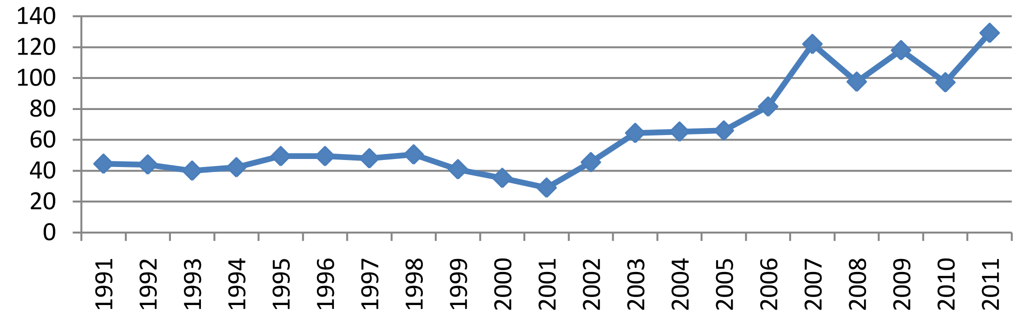
The agricultural sector, like any other sector, needs funding to better contribute to the economic growth. The access to inputs and equipments which is required to foster for the adoption of an intensive production system is highly dependent on the financial resources available. Yet currently, the FAO (1996) pointed out a reduction in agricultural funding these years in developing countries. Therefore, the African Heads of States undertook in 2003 through the Maputo declaration to allocate 10% of public expenditures to agriculture, with the view to help achieve the 6.8% agricultural growth rate assumed necessary to reduce extreme poverty and hunger by half by the 2015 (MDG 1).

The reason for State intervention in the agricultural sector is that private funding is inadequate. Therefore, the State and the public sector have to play an important role in agriculture development to address this issue. The Maputo declaration clearly shows the leading role of agriculture in the economic development of African countries and the return of public interventions as a result of funding the agricultural sector.

National expenditure in agriculture in Burkina Faso has been weak until the 2003s (fig1). From 1997 to 2001 the trend went downward. The 1990s were marked by the structural adjustment programs with the liberalization of the agricultural sector through the withdrawal of all state subsidies granted to the farmers.

Since 2003, the Governments committed to abide by the Maputo declaration. The national spending in agriculture has increased from 65 billion in 2004 to more than 129 billion in 2011 representing a 98.46% increase over the period. This additional funding was used to fund agricultural service development programs, agricultural sector support programs and hydro-agricultural developments.

Fig. 1: Public agricultural spendings



Theoretical framework and methodology of the study

The theoretical framework of the analysis of the agricultural sector funding

Economists have always value the contribution of agriculture to economic growth. For Lewis (1954), Agriculture contributes to capital development, frees poorly productive workforce for others sectors such as industry. For Gillis (1990) agriculture, considering its potential, attracts foreign direct investment, creates jobs and provides new investment opportunities for local entrepreneurs to increase local production. Agriculture contributes to the development as an economic activity, livelihood and environmental service.

Historically, the national expenditure has been one of the main instruments of agricultural policy. In all countries, budgets are allocated to the agricultural sector for various purposes: irrigation, product storage and transportation, and marketing infrastructure, loans to farmers, research, extension, and improved seeds production. Another heading allocated by national budgets to the agricultural sector include funding post-harvest programs (for purchasing cereal from farmers at high price and selling them to consumers at lower price).

However, empirical evidence of the nature of relationship between national spending and economic growth has always been debated. Devarajan *et al.* (1996) could not show the significant relationship between growth and the level of expenditures. The outcome of empirical literature on the effects of expenditures composition was also debated. Barro (1997) found that public consumption expenditures as a percentage of the GDP were negatively correlated to growth. On the other hand, Devarajan *et al.* (1996), revealed a positive relationship between national consumption spending and economic growth. Caselli *et al.* (1996) have also pointed out the positive effect of national spending on growth. Easterly *et al.* (1997) found no significant effect of national consumption spending in the GDP on growth in Latin America.

Morley and Perdikis (2000) in Egypt (following the 1974 and 1991fiscal reforms) found that there was a long-term positive effect of the total national spending on growth; however there was no significant effect in the short-term. Nubukpo (2003) about the WAEMU countries found that except from Senegal and Togo, for the long-term, the total national spending has no positive effect on UEMOA economic growth. Coulbaly (2013) in Côte d'Ivoire came to the conclusion that spending in education has a significant contribution to economic growth, with a competition between the education sector and the other economic sectors for the effective allocation of public financial resources. According to Ben and Hassad (2006) national spending in education and health can lead to economic growth provided this spending is made efficiently. Kane (2004) in Senegal came to the conclusion that national capital spending has a positive and significant impact on economic growth.

Model selection

The nature of the variables requires the use of the error correction model (ECM) that helps in modeling both the ongoing dynamic (represented by the variables in first difference) and the long-term dynamic (represented by level variables).

Indeed to see the stochastic features of a chronological series, it has to be stationary meaning that its mathematical expectation and variance are finite constants and that its co-variance is a finite function independent from the time dimension.

Theoretical model

This paper analyzes the impact of public expenditures on agricultural growth. The functional form, to establish the link between agricultural production and factors underpinning its growth is a Cobb-Douglas type function. Barro and Sala-i-Martin (1996) and Guillaumont (2003) resorted to this type of function in identifying the determinants of production in the Sahel. And so did Mundlak *et al*. (2002) in analyzing the agricultural growth determinants in Indonesia, Philippines and Thailand. We will adapt this function to our study.

Let Y be the agricultural production, K capital, L labour, F, funding we have :

$$Y = AK^{\alpha}L^{\beta} \quad With \;\; A = exp(a + \gamma F)$$

Agriculture is characterized by a production function with constant returns to scale. Therefore we assume that $\alpha + \beta = 1$

The application of the logarithm gives:

$$\log(Y) = a + \gamma F + \alpha log(K) + \beta log(L)$$

After differentiation:

$$\frac{\Delta Y}{Y} = \gamma \Delta F + \alpha \frac{\Delta K}{K} + \beta \frac{\Delta L}{L}$$

We will determine the value of the coefficient γ in the short and long-terms using error correction model.

Speciation of the variables

As suggested by the theoretical model: we will use the following variables: public expenditures allocated to the agricultural sector, agricultural production, capital and agricultural labor.

Public funding allocated to agricultural sector (FIN)

Variable FIN represents the share of the national budget allocated to agricultural sector. Or the cumulative public expenditures in this sector: spending in salary, equipment, transfers, agricultural research. Data collected for this variable are from the finance act of the study period (1983-2008).

Agricultural production (PROD)

PROD is the total agricultural production in value (livestock and crop production) over the study period. The data used are from the data base of the automated forecasting tool.

Agricultural labor force (TRV)

TRV is the agricultural workforce. For raison of simplification, rural working population is considered as agricultural workforce. Data for this variable are from the World Bank indicators (2007).

Capital (CAP)

The capital is determined based on agricultural investments. The following traditional relationship between capital and investment:

$$K_t = I_t + (1 - \delta)K_{t-1}$$

The literature suggests several methods to determine the initial capital. Yet the most commonly used method is the one proposed by Harberger (1978), subject to the hypothesis of a balanced growth, through the relationship:

$$K_{t-1} = \frac{I_t}{g + \delta} \;\; and \;\; K_0 = \frac{I_1}{g + \delta}$$

With g representing the long term economic growth rate that is estimated roughly with the actual growth rate (4.2% in Burkina Faso). The parameter δ describes the capital depreciation rate. The depreciation can be assessed through survey within industrial plants but for the aggregated capital stock a depreciation rate ranging from 4 to 6% is acceptable (Aamer and Suleiman, 2007).

Limits of the study
Because of the lack of data, we could not cover private funding (micro-finance institutions, commercial banks credits) in the econometric analysis. Thus, the issue of the impact of private funding on agricultural production growth in Burkina Faso still remains to be addressed.

Results and discussion

Estimation and validation of the model
As suggested in the theoretical model, LPROD, LTRV and LCAP respectively represent the logarithms of PROD, TRV and CAP. Tests such as stationarity, co-integration, and residual tests were conducted to validate the model.

Stationarity tests
The stationarity tests considered herein are unit root tests of Augmented Dickey-Fuller (ADF), Phillips-Perron (PP) and Kwiatkowski-Phillips-Schmidt-Shin (KPSS). The null hypothesis in ADF and PP tests is the presence of unit root (no stationarity).

The KPSS test is generally less used and the PP test is known to have a weak power (Villemot, 2004). Both tests were then used mainly to confirm the results of the ADF test. According to the results, the variables FIN, LPROD, LTRV are stationary in first difference and LCAP is stationary in second difference (see. annex I).

Optimal number of lags and co-integration test
The selection of the optimal number of lags is essential since an inadequate number may encourage auto-correlation of the residuals of model and a high number of lag can lead to an over estimate of the number of co-integration (Keho, 2006). The number of optimal lags shows that the common criteria by Akaike (AIC) and Hannan-Quinn are minimal when considering two lags (see annex II). The result of the co-integration test by Johansen, taking into account the nature of the data, shows the co-integration relationship through the trace statistics (see annex II).

Estimation of the model using the ordinary least squares method
The ordinary least squares method in one step as suggested by Banerjee *et al.* (1993) was use to estimate the model, because of the small size of our sample. In fact, one of the weaknesses of the two step method by Engle and Ganger is that long-term estimate does not take into account potential information from the short-term dynamics (Keho, 2006). Banerjee *et al.* (1993) shown that this case leads to a considerable bias for small samples.

Banerjee *et al.* estimate method consists in making an estimate through ordinary least squares of the following equation:

$$D(LPROD_t) = \beta_0 + \beta_1 D(FIN_t) + \beta_2 D(D(LCAP_t)) + \beta_3 D(LTRV_t) + \beta_4 LPROD_{t-1} + \beta_5 LFIN_{t-1} + \beta_6 D(LCAP_{t-1}) + \beta_7 LTRV_{t-1} + \beta_8 tend + \varepsilon_t$$

The coefficients β_i are real parameters and ε_t represents the errors terms in the linear regression. The variable $tend$ represents the trend that we add because of some variables trends significance in the model.

The table 2 below shows the results of model estimate.

Table 2: Results of the model estimate (OLS)

Variables	Coefficient	Std. Error	t-Statistic	Prob.
C	-7.250760	7.059068	-1.027155	0.3196
D(D(LCAP))	0.068706	0.176376	0.3 89545	0.7020
D(FIN)	0.008048	0.004138	1.944748*	0.0696
D(LTRV)	15.90428	7.210288	2.205776**	0.0424
LPROD(-1)	-1.455197	0.255645	-5.692251**	0.0000
D(LCAP(-1))	0.115000	0.162966	0.705667	0.4905
FIN(-1)	0.005866	0.004942	1.187072	0.2525
LTRV(-1)	1.688146	0.508818	3.317783**	0.0044
R-squared = 0.,7058				
Adjusted R-squared = 0.5489				
Prob (F_statistic) = 0.0059				
Number of observations = 24				

Source: Authors' own results

LPROD (-1) coefficient, which is the adjustment coefficient, is negative. It is also significant at 5% level (with a probability of Student p of 0.0000). There is obviously a correction mechanism; meaning that on the long-term, the gaps between our variables are filled. The correction method is therefore valid. The model is significant at 5% level (Fisher statistics probability is $0{,}0027 < 0{,}05$) and its explanatory power is quite high (R^2 adjusted=0.54). The coefficient of the variable public funding is statistically significant at 10% level in the short term. An increase of 1% of the national budget allocated to agriculture results in an increase of the production value of 0.008%, suggesting that public funding is still not enough to have a significant impact on production.

On the other hand, the coefficients of the variable agricultural labor are significant in short and long term. An increase of 1% of the agricultural labor force leads to an increase in the value of production by 15.9% in the short term and 1.69% in the long term. Coefficients of the variable capital are positives but not significant.

Public Funding has therefore a positive influence on agricultural growth in the short-term whereas agricultural labor has a long term and short-term positive impact on agricultural growth.

Residuals tests and constant returns to scale assumption

The results of these tests are presented in annex III. Jarque-Bera test shows that errors follow a normal distribution (JB=1.64<5.99). Since this test is not appropriate for series with limited number of observations, we used the Shapiro-Wilk test which has confirmed the results of the normality of our residuals (W= 0, 95170; W_{critic}= 0,916 (W >W_{critic})). Based on the White's test, the heteroskedasticity hypothesis of errors can be rejected: Hence, they are homoskedastic. The hypothesis of error autocorrelation can be rejected based on the Breuch-Godfrey test. Furthermore, the CUSUM test shows that the model is structurally stable (the CUSUM curve remains within the confidence interval).

To test the hypothesis of increasing returns to scale of the production function, the Wald's test was used. The null hypothesis of the test conducted is $\beta_2 + \beta_3 = 1$**.** With a p-value higher than 5% (p≈0.4), we accept the null hypothesis. The yields are then constant.

Simulation results

According to the International Food Policy Research Institute (IFPRI), the production growth required to achieve the MDG 1 is set at 6.8%, with regard to that aspect, we made simulations to assess the increase rate in public funding required to achieve this level.

The results of the simulations are presented in table 3.

Table 3: Simulation results

Increase in agricultural production (in %)	Increase in funding (%)						
	Years	**1%**	**5%**	**8%**	**9%**	**9.5%**	**10%**
	2009	8.36	9.96	11.16	11.57	11.77	11.97
	2010	1.38	2.33	3.11	3.39	3.53	3.67
	2011	4.84	6.07	7.13	7.51	7.71	7.91
	2012	3.19	4.38	5.49	5.90	6.11	6.34
	2013	3.97	5.29	6.57	7.06	7.32	7.58
	2014	3.61	4.97	6.38	6.94	7.24	7.55
	2015	3.78	5.24	6.83	7.47	7.82	8.18
	Mean	3.71	5.06	6.29	6.75	6.98	7.23

Source: Estimate by the authors

These results reveal that a 9% increase in public funding over the period 2009-2015, brings about a 6.75% average increase in agricultural growth over the same period. With a 0.19% estimation error in this study, the production growth rate will range between 6.56% and 6.93%. Considering that the IFPRI rate (6.8%) is included in this confidence range, we can conclude that with a 9% increase in public funding for agriculture, the country can achieve the MDG 1.

Conclusion

Agriculture is a key sector for Burkina Faso economy. In this regard, there is a need to deeply consider the conditions for a better growth of the country agricultural production. In addressing the issues of agriculture funding in Burkina Faso, this study is in line with this effort. The study was actually intended mainly to highlight the issue of agricultural sector funding, while assessing its impact on agricultural production.

The economical analysis shows that the public funding has a significant impact on agricultural production growth. The simulations also evidence that a 9% increase of public funding over the period 2009-2015 would help Burkina Faso achieve the MDG 1 (of halving poverty and hunger).

It is then obvious that public funding has a positive impact on agricultural production in the short and long terms. The State should therefore increase funding for the agricultural sector if it wants to strengthen its economy. In other words, the objective will be to increase the share of the budget allocated to agriculture. This increase is expected to reach at least 9% yearly over the period from 2009 to 2015 in order to achieve MGD No. 1. This increase could be achieved through the promotion of granting subsidies to producers to purchase agricultural inputs (fertilizers, pesticides, farm machinery). It can also materialize through marketing infrastructure development or rehabilitation (rural roads, cold storage facilities, slaughterhouses) and promoting processing plants to increase the production added value. Furthermore, agricultural training could be enhanced to improve farmer's performance. The State could strive to invest more in the irrigation sector in order to increase food security and increase exports revenues.

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Annexs

Annex I: Results of stationnarity tests

Agriculture production

Augmented Dickey-Fuller Unit Root Test on D(LPROD)

Null Hypothesis: D(LPROD) has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic based on SIC, MAXLAG=8)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-8.625214	0.0000
Test critical values:	1% level	-3.737853	
	5% level	-2.991878	
	10% level	-2.635542	

Public expenditure

Augmented Dickey-Fuller Unit Root Test on D(FIN)

Null Hypothesis: D(FIN) has a unit root
Exogenous: Constant
Lag Length: 8 (Automatic based on SIC, MAXLAG=8)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-3.667161	0.0162
Test critical values:	1% level	-3.920350	
	5% level	-3.065585	
	10% level	-2.673459	

Agricultural labour

Augmented Dickey-Fuller Unit Root Test on D(LTRV)

Null Hypothesis: D(LTRV) has a unit root
Exogenous: Constant, Linear Trend
Lag Length: 8 (Automatic based on SIC, MAXLAG=8)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-4.586017	0.0115
Test critical values:	1% level	-4.667883	
	5% level	-3.733200	
	10% level	-3.310349	

Capital

Augmented Dickey-Fuller Unit Root Test on D(LCAP,2)

Null Hypothesis: D(LCAP,2) has a unit root
Exogenous: Constant, Linear Trend
Lag Length: 0 (Automatic based on SIC, MAXLAG=8)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-6.397383	0.0001
Test critical values:	1% level	-4.416345	
	5% level	-3.622033	
	10% level	-3.248592	

Annex ii: Results of co integration test

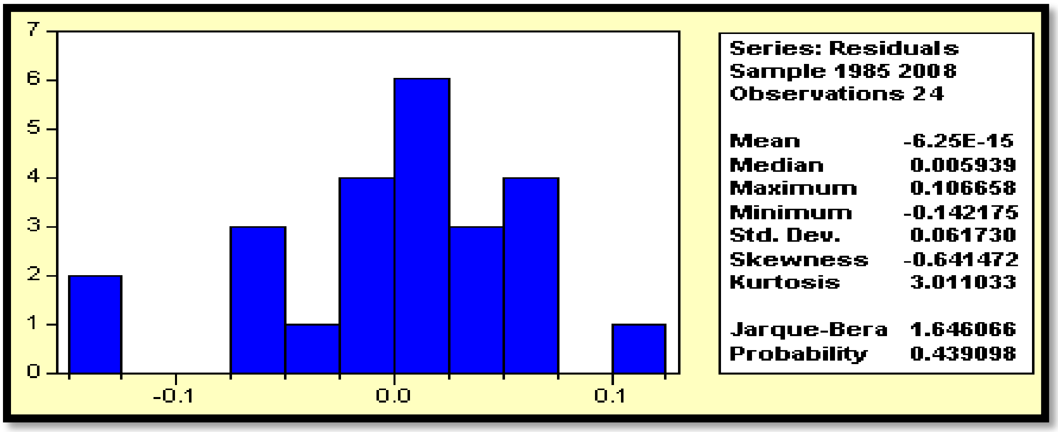
Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.732995	67.91005	63.87610	0.0220
At most 1	0.602331	37.53881	42.91525	0.1555
At most 2	0.427975	16.32968	25.87211	0.4664
At most 3	0.140509	3.482531	12.51798	0.8149

Trace test indicates 1 cointegrating eqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

Annex iii: Residual and constant yield

Outcome of normality test



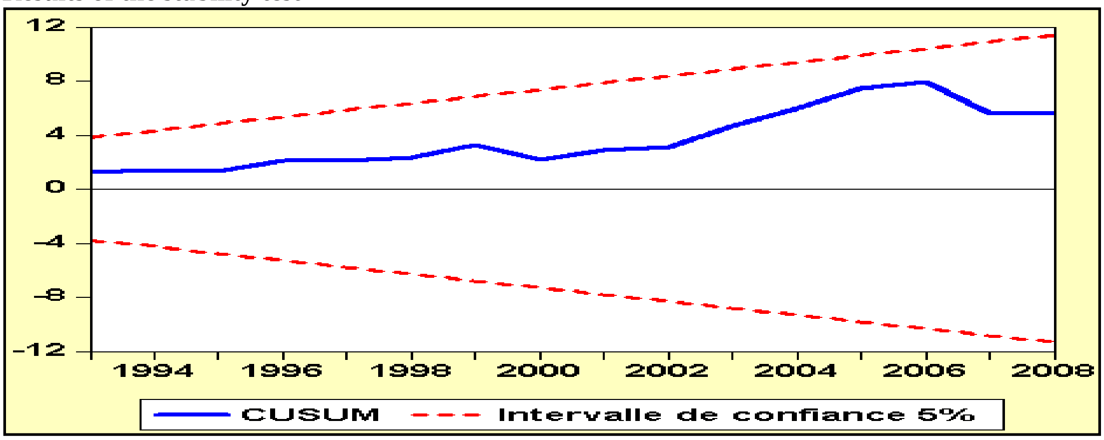
Results of the homoskedasticity test

White Heteroskedasticity Test:			
F-statistic	0.512024	Probability	0.871400
Obs*R-squared	9.591049	Probability	0.726985

Results of the error correlation test

Breusch-Godfrey Serial Correlation LM Test:			
F-statistic	0.240521	Probability	0.789401
Obs*R-squared	0.797250	Probability	0.671243

Results of the stability test



Results of the constant yields test

Wald Test:
Equation: YT_K

Test Statistic	Value	df	Probability
F-statistic	0.811560	(1, 15)	0.3819
Chi-square	0.811560	1	0.3677

Null Hypothesis Summary:

Normalized Restriction (= 0)	Value	Std. Err.
-1 + C(1) + C(3)	-19.44633	21.58626

Restrictions are linear in coefficients.

Table 1: Spending in agriculture estimated as per the NEPAD's COFOG method, 2004-2011 (in billion of FCFA)

	MAH - MRA - MEDD	Other ministries and Dept. Interm. Comm	Non state budget projects	Other[1]	Total spending COFOG	Execution State budget [2]	% Maputo
2004	40.2	12.2	8.8	4.0	65.3	640.3	10.2%
2005	42.7	11.1	9.8	2.3	66.0	716.7	9.2%
2006	56.2	11.3	11.8	2.2	81.5	835.1	9.8%
2007	53.5	32.3	34.7	1.6	122.0	944.2	12.9%
2008	59.2	11.1	25.7	1.5	97.6	886.1	11.0%
2009	56.5	38.3	21.0	2.3	118.0	1.083,1	10.9%
2010	71.2	8.0	15.1	2.9	97.2	1.121,1	8.7%
2011	89.1	14.2	22.1	3.8	129.2	1.357,1	9.5%
Total	468.7	138.5	148.9	20.8	776.9	7.583,7	10.2%

Source: World Bank, SP/CPSA 2012, IAP 2013