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Predictors of Financial Development in Ghana

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Abstract

The paper explores the predictors of financial development in Ghana using data that span from 1971 to 2010. Evidence from the data supports the conclusion that interest rates and economic openness are long run significant predictors of financial development in Ghana whilst size of government is a short run significant predictor of financial development in Ghana. Economic growth, structural adjustment programme and democratic political system are not significant determinants of financial development. The results of the Granger causality tests in the error correction mode indicate a unidirectional causality running from economic openness and interest rate to financial development, meaning economic openness and interest rate drive financial development towards long run equilibrium. To the extent that rising interest rate as well as rising economic openness demonstrates a robust positive relationship with financial development, the paper contends that government intervention in the form of financial repression as well as trade restrictions should be avoided if the financial sector in Ghana is to develop. However, regarding economic openness, the paper cautions that the government must proceed with tact and circumspection so as to avoid the destabilizing effects of economic liberalization such as stock market volatility.

JEL classification numbers: G20, D90, E02, E44, C13, C22
Keywords: Financial Development, Predictors, Economic Openness, Interest Rate

1 Introduction

Financial sector development is defined in the work of Calderon and Liu (2002) as the improvement in quantity, quality and efficiency of financial intermediary services. Its relationship with economic growth has attracted both theoretical and empirical attention. Theoretically, the writings of Schumpeter (1911), Mckinnon (1973) and Shaw (1973) have posited that financial development promotes economic growth. The argument of the

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proponents of finance-leads-to-growth theorists is that a well-developed and functional financial system improves the efficiency of financial intermediation by reducing transactions and information costs and also minimizes risks. Empirically, studies that have been done on the finance-growth nexus have produced conflicting results (Adusei, 2012; Bittencourt, 2012; Odhiambo, 2010; Saci *et al.*, 2009; Apergis *et al*.,2007; Zang and Kim, 2007; Beck and Levine, 2004; Levine, *et al.* 2000; King and Levine, 1993a and 1993b).

Due to financial development's instrumental role in economic growth and development, exploring its significant determinants has become an increasingly significant research topic in recent years. Some of the notable studies on this topic are La Porta et al. (1997, 1998), Beck *et al.* (2003), Rajan and Zingales (2003) and Stulz and Williamson (2003). However, most of these studies are skewed towards the western world, making evidence from Africa scarce and scanty.

In Africa, whereas the finance-growth nexus has received some attention (Adusei, 2012; Odhiambo, 2010, Esso, 2010; Quartey and Prah; 2008; Agbetsiafa, 2004; Akinboade, 1998), a little attention has been paid to unraveling the determinants of financial development to inform policy formulation. The motivation of the current study, therefore, stems from the little attention that has been paid to the predictors of financial development in Africa. The paper makes contribution to the literature in the following ways. One, it provides evidence on the predictors of financial development from Ghana which is an emerging market; thus, expanding the frontiers of the evidence from emerging markets. Two, it draws attention of policy makers to economic openness, interest rate and size of government as important factors that could accelerate the development of the Ghanaian financial sector.

The rest of the paper is partitioned as follows. The next section reviews the extant literature followed by materials and methods section. Results section is next in line followed by conclusion and policy implications section.

2 Literature Review

In their survey of the determinants of financial development based on the theoretical and empirical studies, Voghouei *et al.* (2011) find that institutions, openness of trade and financial markets, legal tradition, and political economy are factors that promote the financial system. However, of these factors, they find that political economy factors, which could have both direct and indirect effects through other determinants, may be considered the most predictors of financial development.

A legal and regulatory system involving protection of property rights, contract enforcement and good accounting practices has been found to be essential for financial development. Notably, La Porta *et al.* (1997, 1998) have contended that the origins of the legal code substantially influence the treatment of creditors and shareholders, and the efficiency of contract enforcement. They posit that countries with a legal code like Common Law are predisposed to protect private property owners, while countries with a legal code like French Civil Law are inclined to care more about the rights of state and less about the rights of the masses. La Porta *et al.* (1997, 1998) report that countries with French Civil Law tend to have comparatively inefficient contract enforcement and higher corruption, and less well-developed financial systems, while countries with British legal origin attain higher levels of financial development.

The policy view of financial development emphasizes the significance of some macroeconomic policies, openness of goods markets and financial liberalization in promoting financial development. National macroeconomic policies such as keeping inflation at lower levels and maintaining higher investment are considered to be essential for financial development. From theoretical and empirical perspectives respectively, Huybens and Smith (1999) and Boyd *et al.* (2001) examine the effects of inflation on financial development and submit that economies with higher inflation are likely to have smaller, less active, and less efficient banks and equity markets. Ghazouani (2004) uses dynamic panel technique to establish that inflation has a negative impact on financial development for 11 Middle East and North African countries over the period of 1979-1999. The study also reveals a nonlinear relationship between inflation and banking sector development, implying that a rise in inflation rates after a certain level has no effect on banking sector development. Evidence produced by Seetanah *et al.* (2010) from Mauritius who investigate the determinants of financial development over the period 1970- 2008 lends credence to the negative relationship between inflation and financial development. The negative impact of inflation on financial development has been confirmed by Bittencourt (2008) who reports from Brazil that inflation impedes financial development. National macroeconomic policies that encourage openness to external trade have been found to promote financial development (Do and Levchenko, 2004; Huang and Temple, 2005).

The geographic view of financial development argues that geography is a significant determinant of financial development in that geography affects economic growth and development. Three strands of literature deserve attention. The first strand of literature focuses on the relationship between latitude and economic development and seeks to segregate countries that are closer to the equator from those not closer to the equator. The position is that countries closer to the equator have tropical conditions which may affect their economic development. Studies by Diamond (1997), Gallup *et al.* (1999) and Sachs (2003a, b) advocate that tropical location may directly result in abysmal crop yields and production due to unfavorable ecological conditions such as weak tropical soils, unsteady water supply and prevalence of crop pests. The second group of studies concentrates on the location of a country and its proximity to large markets or having only limited access to coasts and ocean-navigable rivers (Easterly and Levine, 2003; Malik and Temple, 2005). The third strand of literature focuses on the relationship between resource endowment and economic development. The postulation is that resource-rich countries are likely to develop faster than resource-poor countries (Diamond,1997; Isham *et al.* 2002; Easterly and Levine, 2003).

Economic growth, income level, population level, religion, language and ethnic characteristics have also been identified as significant determinants of financial development. Levine (2003, 2005) has addressed the significance of income levels in financial development. Jaffee and Levonian (2001) study the development of the banking sector in transition economies and provide evidence that the level of GDP per capita and the saving rate have positive effects on the banking system structure as measured by bank assets, number, branches and employees. Stulz and Williamson (2003) emphasize the impact of differences in culture, measured by differences in religion and language, on the process of financial development. Their study shows that culture explains cross-country variation in protection and enforcement of investor rights, especially for creditor rights.

3 Materials and Methods

The methodology of the study is presented under this section.

3.1 The Model

The dependent variable in our model is financial development. In line with the prior studies such as King and Levine (1993a); Levine and Zervos (1996); Beck et al. (2000); and Levine *et al*. (2000), natural logarithm of the ratio of domestic credit to the private sector to GDP (*Ln*DCPS) is used to measure the level of financial development. The explanatory variables are natural logarithm of economic openness (*Ln*OPEN), size of government (*Ln*SG), interest rate (*Ln*INT), and economic growth (*Ln*GDPPC). Economic openness is defined as exports plus imports divided by GDP; size of government is defined as government consumption of goods and services as a share of GDP; Interest rate is defined as 1 plus prime lending rate; and economic growth is defined as GDP per capita. Two dummies are introduced to account for the effects of structural adjustment progarmme (SAP) and democratic dispensation (DEMOC) on the development of the financial system in Ghana.

In both long run and short run, we expect economic openness to have a positive relationship with financial development because according to the geographic and policy views of financial development, countries that are able to trade with other countries are likely to see development in their financial systems (Malik and Temple, 2005; and Huang and Temple, 2005 Easterly and Levine, 2003). Similarly, we also expect size of government to contribute to development of the financial system. The intuition is that productive spending of the government on goods and services should lead to economic growth and development which, according to demand-following hypothesis of finance-growth hypothesis, will trigger demand for more financial services (Zang and Kim, 2007). Furthermore, we hypothesize that interest rate should have a positive relationship with financial development in the sense that as interest rate rises, financial institutions are motivated to offer more financial services. Besides, rising interest rate could be a screening tool to ward off unproductive borrowers from the financial system. In line with demand-following hypothesis (Zang and Kim, 2007; Liang and Teng, 2006), we expect economic growth to have a positive relationship with financial development. Structural adjustment programme and democratic dispensation are also expected to promote financial development.

The study employs Fully-Modified Ordinary Least Squares (FMOLS) regression. FMOLS is credited to Phillips and Hansen (1990). To utilize it, one must first establish that there exists a cointegration relation between a set of I (1) variables. Before we establish whether or not our chosen variables are cointegrated, we must perform unit root tests on our data. To perform these tests, the study employs Augmented Dickey Fuller (ADF) and Phillips-Perron (PP) tests. According to Engle and Granger (1987), when all the variables in our model are non-stationary at level, but stationary at 1st difference, this enables the use of Johansen cointegration technique.

Two log-linear equations are estimated: (1) Without dummy variables and (2) with dummy variables. The equations are:

$$LnDCPS = \delta_1 + \delta_2\, LnDCPS\,(-1) + \delta_3\, LnGDPPC + \delta_4 LnOPEN + \delta_5 LnSG + \delta_6 LnINT + \eta_t \quad (1)$$

$$LnDCPS=\delta_1+\delta_2 LnDCPS(-1)+\delta_3 LnGDPPC+\delta_4 LnOPEN+\delta_5 LnSG+\delta_6 LnINT+\delta_7 SAP+\delta_8 DEMOC+\eta_t \quad (2)$$

Where
LnDCPS = Natural log of domestic credit to the private sector to GDP
LnDCPS (-1) = Lag of natural log of domestic credit to the private sector to GDP
LnGDPPC= Natural log of GDP Per capita
LnOPEN = Natural log of exports plus imports as a share of GDP
LnSG= Natural log of Government Final Consumption Expenditure as a Share of GDP
LnINT= Natural log of 1+prime lending rate
SAP= Dummy for Structural Adjustment Programme. D=1 from 1984-1990; otherwise D=0
DEMOC= Dummy for democratic dispensation. D=1 from 1993 onwards; otherwise D=0
δ *= is the parameter to be estimated*
η_t = *stochastic error term*

3.2 Granger Causality Analysis

Engle and Granger (1987) and Granger (1988) argue that where there is cointegration between the variables under consideration, causality tests which do not consider the error correction term (ECT) obtained from the cointegration relationship are mis-specified. They posit that in the presence of cointegration, the Granger Causality model should be re-parameterized in the equivalent error correction mode. Thus, we will examine the direction of causality between the significant explanatory variables and financial development if cointegration relationship is established between financial development and the explanatory variables using the following models:

$$\Delta Y_t = C_1+\rho_1 e_{t-1} + \sum_{i=1}^{p} \alpha_i \Delta Y_{t-i} + \sum_{i=1}^{p} \beta_i \Delta X_{t-I} \quad (3)$$

$$\Delta X_t = C_2+ \rho_{2\ et-1} \sum_{i=1}^{p} \alpha_i \Delta Y_{t-i} + \sum_{i=1}^{p} \beta_i \Delta X_{t-I} \quad (4)$$

Where et_{-1} is the error correction term representing the long-run relationship between financial development and each of the significant explanatory variables. A negative and significant coefficient of the error correction term means that there is a long-run causal relationship between the two variables. If the coefficient of et_{-1} is negative and significant in both equations it means there is a bi-directional causality. If, for example, only ρ_1 is significant, it indicates a unidirectional causality from X to Y, implying X drives Y toward long-run equilibrium but not the other way around (Ahmad & Husain, 2007).
The study uses annual time-series data covering the period 1971-2010 collected from the World Development Indicators (WDI) of the World Bank (http://www.worldbank.org).

4 Results

The results of the ADF unit root and PP unit root tests are reported in Table 1. The results indicate that all the variables are stationary at their 1st difference form; thus, satisfying the condition for performing cointegration analysis. Johansen Cointegration test is, therefore, performed. Lag length of VAR model is selected at 2. The results are presented in Table 2. Table 2 provides evidence that both Trace Test and Maximum Eigenvalue Test identify one cointegrating relationship among financial development, economic growth, economic openness, size of government and interest rate. The presence of only one cointegrating relationship among the five variables in our model underscores the appropriateness of our model (Johansen, 1995).

Table 1: ADF and PP Tests Results

	ADF TEST			**PP TEST**		
Variables	Test Statistic	Lags	Order of integration	Test Statistic	Bandwidth	Order of integration
LnDCPS	-3.05	0		-3.05	0	
ΔLnDCPS	-5.62***	0	I(1)	-5.62***	0	I(1)
LnGDPPC	-0.75	0		-0.98	1	
ΔLnGDPPC	-5.13***	0	I(1)	-5.12***	3	I(1)
LnOPEN	-2.4	1		-1.99	1	
ΔLnOPEN	-4.61***	1	I(1)	-3.92**	6	I(1)
LnSG	-3.11	1		-2.70	3	
ΔLnSG	-5.1***	0	I(1)	-5.14***	7	I(1)
LnINT	-0.47	0		-0.47	0	
ΔLnINT	-4.52***	0	I(1)	-4.45***	3	I(1)

The results indicate that all the variables are stationary at 1st difference. Note: ***, ** and * represent 1%, 5% and 10% levels of significance

Table 2: Johansen and Maximum Eigenvalue Test for Cointegration

Hypotheses	Trace Test	5% critical value	p-value **	Hypotheses	Max. Eigenvalue stat.	5% critical value	p-Value
R=0	79.855	69.8189	0.0064	R=0	35.0918	33.8769	0.0357*
R=1	44.763	47.856	0.0948	R=1	23.3862	27.5843	0.1576
R=2	21.377	29.797	0.3345	R=2	12.9071	21.1316	0.4608
R=3	8.4699	15.495	0.4166	R=3	8.1815	14.2646	0.3605
R=4	0.2884	3.8415	0.5912	R=4	0.2884	3.8415	0.5912

Note: * indicates one cointegrating relationship.

The results of equation (1) presented in Table 3 reveal that in the long run economic openness and interest rate are significant determinants of financial development in Ghana.

This validates our a priori assumptions that economic openness and interest rate should positively explain financial development in the long run. However, as Table 4 indicates, in the short run economic openness and interest rate do not have any significant relationship with financial development.

The significant impact of economic openness on financial development is suggestive of the fact that Ghana is benefiting from international trade. This is in tandem with the postulation of geographic and policy views of financial of financial development that countries that are able to trade with other countries are likely to see development in their financial systems (Malik and Temple, 2005; and Huang and Temple, 2005 Easterly and Levine, 2003). However, the finding also suggests to us that Ghana's financial system is exposed to external shocks presupposing that any adverse occurrence in the economies of her foreign partners is likely to have a negative impact on her financial system.

The positive long-run impact of interest rate on financial development is refreshing because, among other things, interest rate can be used as a tool for filtering out good borrowers from bad ones. On the other hand, high interest rate could be inimical to economic growth since it wards off entrepreneurs with productive ideas from the financial markets. There is, therefore, the need for policy intervention such as liberalization of the financial system that encourages healthy competition which could compel financial institutions to charge moderate and competitive interest rates in their bid to attract customers.

Contrary to demand-following hypothesis, economic growth has a negative insignificant relationship with financial development in both short run and long run, implying that the growth of the Ghanaian economy does not lead to an increase in demand for financial services. The structure and the distribution of the income could account for this. An increase in income that is in the hands of the few may not trigger demand for more financial services. Size of government proxied by total government consumption of goods and services as a share of GDP has also shown a negative, statistically insignificant relationship with financial development in the long run. However, in the short run as Table 4 shows, size of government has a strong significant positive impact on financial development.

Table 3: FMOLS Regression Results: Equation 1

Dependent Variable: *LDCPS*				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**p-value**
C	-0.6682	0.7409	-0.9019	0.3736
LnDCPS(-1)	0.5547	0.0981	5.6517	0.0000***
LnGDPPC	-0.0019	0.1125	-0.0169	0.9867
LnOPEN	0.2676	0.0746	3.5873	0.0011***
LnSG	0.1820	0.2216	0.8213	0.4174
LnINT	0.4587	0.2742	1.6730	0.1038*
R^2 =0.94, Adjusted R^2 =0.93		F-statistic=99.72 Prob.(F-statistic)=0.0000		
N=40				
Breusch-Godfrey Serial Correlation LM Test=2.17(0.34)[1]				
ARCH Test= 0.41(0.52)				

[1=] Figures in parentheses are probability values. Note: ***, ** and * represent 1%, 5% and 10% levels of significance

Table 4: Error Correction Analysis based on Equation 1

Dependent Variable: *LDCPS*				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**p-value**
C	0.0091	0.0371	0.2460	0.8073
Δ*LnDCPS(-1)*	0.6008	0.1756	3.4210	0.0018
Δ*LnGDPPC*	-0.2636	0.2092	-1.2602	0.2170
Δ*LnOPEN*	0.1313	0.1428	0.9201	0.3646
Δ*LnSG*	0.5870	0.2415	2.4303	0.0211
Δ*LnINT*	0.4348	0.7971	0.5454	0.5894
ECT(-1)	-1.0096	0.2473	-4.0827	0.0003
R^2 =0.56, Adjusted R^2 =0.47		F-statistic=6.50		
Prob.(F-statistic)=0.000163		N=38		
ARCH Test= 0.30(0.29)[1]				

[1=] Figures in parentheses are probability values. Note: ***, ** and * represent 1%, 5% and 10% levels of significance

The results of Equation (2) are presented in Table 5. Surprisingly, the speed of adjustment to long-run equilibrium gauged by *ECT (-1)* is 100%. Though this is rare, it may suggest a unique financial architecture in Ghana and its relationship with macroeconomic variables. The results indicate that only economic openness and lag of the dependent variable have a positive, significant relationship with financial development. Economic openness recording a significant relationship with financial development whist controlling for democratic dispensation hints that democratic dispensation may not be a significant factor in the trade between Ghana and the rest of the world.

Table 5: FMOLS Regression Results: Equation 2

Dependent Variable: *LnDCPS*				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**p-value**
C	-0.6323	0.7629	-0.8288	0.4136
LnDCPS(-1)	0.5788	0.1174	4.9292	0.0000
LnGDPPC	-0.0204	0.1182	-0.1725	0.8641
LnOPEN	0.2409	0.1008	2.3896	0.0231
LnSG	0.2262	0.2357	0.9598	0.3446
LnINT	0.5010	0.3144	1.5935	0.1212
SAP	0.0703	0.1202	0.5844	0.5632
DEMOC	-9.04E-05	0.1188	-0.0008	0.9994
R^2 =0.94, Adjusted R^2 =0.93		F-statistic=68.02		
Prob.(F-statistic)=0.000000		N=40		
Breusch-Godfrey Serial Correlation LM Test=1.9(0.38)				
ARCH Test=0.000005 (0.99)				

Note: ***, ** and * represent 1%, 5% and 10% levels of significance

To explore the impact of each of the two dummies in the equation, democracy dummy variable (DEMOC) is first dropped. The results show that economic openness and interest rate significantly explain financial development. As can be observed from Table 6, when

structural adjustment dummy is dropped economic openness and interest rate still demonstrate a positive, significant relationship with financial development.

Table 6: FMOLS Regression Results: Equation 2 with DEMOC Dropped

Dependent Variable: *LnDCPS*				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**p-value**
C	-0.6322	0.7484	-0.8447	0.4045
LnDCPS(-1)	0.5788	0.1046	5.5311	0.0000***
LnGDPPC	-0.0204	0.1164	-0.1753	0.8620
LnOPEN	0.2409	0.0842	2.8616	0.0074***
LnSG	0.2262	0.2320	0.9752	0.3368
LnINT	0.5009	0.2827	1.7717	0.0860*
SAP	0.0703	0.0997	0.7051	0.4858
R^2 =0.94, Adjusted R^2 =0.93 F-statistic=81.91 Prob.(F-statistic)=0.000000 N=40 Breusch-Godfrey Serial Correlation LM Test=1.84(0.39) ARCH Test= 0.000000367(0.99)				

Note: ***, ** and * represent 1%, 5% and 10% levels of significance

Table 7: FMOLS Regression Results: Equation 2 with SAP Dropped

Dependent Variable: *LnDCPS*				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**p-value**
C	-0.6772	0.7511	-0.9016	0.3740
LnDCPS(-1)	0.5460	0.1021	5.3484	0.0000***
LnGDPPC	-0.0072	0.1149	-0.0630	0.9502
LnOPEN	0.2767	0.0793	3.4888	0.0014***
LnSG	0.1952	0.2272	0.8589	0.3968
LnINT	0.51130	0.3107	1.6459	0.1096*
DEMOC	-0.0375	0.0991	-0.3782	0.7078
R^2 =0.94, Adjusted R^2 =0.93 F-statistic=80.96 Prob.(F-statistic)=0.0000 N=40 Breusch-Godfrey Serial Correlation LM Test= 2.58(0.28) ARCH Test= 0.27(0.61)				

Note: ***, ** and * represent 1%, 5% and 10% levels of significance

To check the robustness of our findings, the study adopts Two-Stage Least Squares method of estimation which introduces instrumental variables. Lagged explanatory variables as well as first-deferenced explanatory variables are used as instruments. The sensitivity analysis is based on equation 1. The results presented in Table 8 confirm the results of the OLS that economic openness and interest rate are significant determinants of financial development in Ghana.

Table 8: Two-Stage Least Squares Regression Results Based on Equation 1

Dependent Variable: *LnDCPS*				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**p-value**
C	-0.4613	0.8579	-0.5377	0.5944
LnDCPS(-1)	0.2386	0.2154	1.1077	0.2760
LnGDPPC	-0.1194	0.1460	-0.8183	0.4191
LnOPEN	0.3107	0.0891	3.4864	0.0014***
LnSG	0.5112	0.3181	1.6071	0.1176
LnINT	1.0499	0.4657	2.25430	0.0309**
R^2 =0.92, Adjusted R^2 =0.91 F-statistic=71.26 Prob.(F-statistic)=0.0000				
N=40				
Breusch-Godfrey Serial Correlation LM Test= 5.47(0.14)				
ARCH Test= 0.21(0.65)				

Instrument List: LnGDPPC (-1) Ln(OPEN(-1) LnINT(-1) L(GS(-1) DLn(GDPPC) DLn(OPEN) DLnINT DLn(GS) * Figures in parentheses are probability values. Note: ***, ** and * represent 1%, 5% and 10% levels of significance

4.1 Granger Causality Analysis

Since all variables in our model are I(1) variables, the Granger causality is estimated in the error correction mode. The results, displayed in Table 9, indicate that economic openness and interest rate drive financial development towards long run equilibrium. In other words, there is a unidirectional causality running from economic openness and interest rate to financial development.

Table 9: Results of Granger Causality Tests in the Error Correction Mode

Hypothesis	**Yes/No**
*Ln*OPEN Granger causes *Ln*DCPS	Yes
*Ln*DCPS Granger causes *Ln*OPEN	NO
*Ln*INT Granger causes *Ln*DCPS	Yes
*Ln*DCPS Granger causes *Ln*INT	NO

5 Conclusion and Policy Implications

The study focuses on identifying variables that significantly explain the development of the financial sector in Ghana. The results show that in the long run, interest rate and economic openness significantly explain the variations in the development of the financial system in Ghana. However, in the short run this is not the case. The Granger causality tests show that there is a unidirectional causality running from economic openness and interest rate to financial development. Contrary to our expectation, economic growth, size of government, structural adjustment programme and democratic dispensation are insignificant predictors

of financial development. However, in the short run an increase in the size of government shows a strong significant positive impact on financial development.

One policy implication is that financial repression in which ceilings are placed on lending rates will not promote financial development in Ghana and should therefore be discouraged. Liberalizing the financial system in which forces of demand and supply are allowed to determine lending rates will, all things being equal, catalyze the growth of the financial sector.

Another policy implication is that to the extent that economic openness promotes financial development it is advisable for policy makers to implement measures that make Ghana more open to the rest of the world. However, it will be in the best interest of Ghana if more attention is paid to the export side of international trade. A quick look at Ghana's balance of payments account indicates that she has consistently been recording a widening trade deficit, giving her away as an import-dependent country. For instance, records from the World Bank between 2005 and 2011 indicate that annual growth rate of Ghana's current account deficit stood at 17.91%.

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