How responsive are private savings to changes in real interest rate in Ghana?

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HOW RESPONSIVE ARE PRIVATE SAVINGS TO CHANGES IN REAL INTEREST RATE IN GHANA?

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Abstract: *This paper seeks to find out the effect of real interest rate on savings in using time series data from 1970-2013. In line with the objectives and using modern econometric techniques, the study estimates a generic savings model. The study also estimated a dynamic error-correction model following the Engle and Granger method to take care of the nonstationarity of the variables. The results of the study suggest that real interest rate exhibit both short-run and long-run significant positive effect on savings, making it a very important variable for savings mobilization in Ghana. The study recommends that financial policy makers in the country must work hard towards realistic interest rate specifically positive rate in real terms. The central bank authorities must also work hard to reduce inflation to probably single digit on consistent basis since real interest rate levels are affected by inflation.*

Key Words: Real Interest Rate, Financial Savings, Financial Repression, Income, Investment.

1.0 Introduction

The growth of output of any economy depends on capital accumulation and capital accumulation requires investment and an equivalent amount of savings to match it. Two of the most important issues in development economics and for developing countries are how to stimulate investment and how to bring about an increased level of savings to fund increased investment (Thirlwall, 2004).

In the context of recent European financial crisis which has reduce financial flow to many developing countries from traditional donors, the generation of domestic savings has assumed more importance. It therefore calls for the implementation of macroeconomic policies that are conducive to savings growth. It is on this basis that the government of Ghana has for sometime now placed more emphasis on policies that give credence to increased savings mobilization in the country. According to Ahiawodzi (2008), policies implemented by government have reflected in modest increase in the gross domestic savings.

Savings play a very crucial role towards the development of many nations. Its process of economic development has long been a fundamental axiom of development theory. Its basis can be traced to such classic analysis as Rostow's stages of growth and Lewis's growth theory and even the early growth models of Harrod-Domar and others. A look at those analyses reveals that, an increase in the rate of savings is a key factor underlying a nation's ability to achieve a sustained increase in its growth rate. Some recent theoretical and empirical works (Gavin et al 1997 and Loayza et al 2000) also reiterate the presumed correlation between savings and growth.

The preceding discursion makes it clear that the importance of savings to economic growth cannot be overemphasized. One important factor which has been identified as contributing to increased savings mobilization is interest rate. The relationship between interest rate and savings can be traced to the classical economists like Adam Smith, David Recardo, Thomas Multhus and others. These people argued that the main determinant of savings is interest rate. They therefore concluded that, the higher the interest rate the higher the savings. However, the notion of interest rate having positive influence on savings was made popular by Mckinnon (1973) and Shaw (1973). This follows their argument that in a financially repressed economy, interest rate remains below its market clearing value thereby generating less than the optimal amount of savings and thus detracting from the pool available for investment. They therefore believe that liberalizing interest rate helps to increase savings in an economy. Unfortunately, the nature of interest rate elasticity of savings in the Least Developed Countries (LDCs) is still inconclusive. For instance, in Ghana, Ahiawodzi, (2008) on one hand finds a significant positive relationship between real interest rate and savings. On another hand, Bandiera et al, (1998), and Hussain et al (2002) all could not establish any strong reliable interest rate effect on financial savings in Ghana. The two studies actually dismissed any role of interest rate in explaining financial savings in Ghana making the debate endless.

However, following the argument by Mckinnon (1973) and Shaw (1973), a number of developing countries including Ghana embarked on financial sector reforms since 1980s with the sole aim of mobilizing more savings and eventually investment. Unfortunately, low savings and investment have characterized the Ghanaian economy, apparently due to low incomes. The level of domestic savings has been generally low with gross domestic savings averaging 6.8 percent of GDP annually since 1982 compared with 16.2 percent of gross fixed capital formation in GDP. Although there has been some stable and upsurge of domestic savings since 1999 after years of volatility, the rate of growth of domestic savings has been quite slow to boost investment needed for accelerated growth (Aryeetey & Baah-Boateng, 2007). In spite of the significant increase in gross fixed capital formation since 1983, much higher levels are needed to drive up growth (Aryeetey, 2004). One may then ask whether the numerous macro financial policies including interest rate liberalization embarked on since the late 1980s have done much toward savings mobilization in the country. Moreover, not much study has been done on Ghana in this direction, and even the few existing ones used data that covered up to the 1990s or early 2000s. But since the implementation of the Financial Sector Strategic Plan (FINSSIP) in 2001, a lot of changes have occurred in the Ghanaian economy. For instance, the production of oil in commercial quantities and the rebasing of the economy in 2010 among others have changed the dynamics of the country. Indeed the financial and banking sector has gone through a lot of transformation with financial institutions coming out with different rate to attract more savings which deserve attention now.

This study has the main objective of examining the responsiveness of private savings to real interest rate, using time series data covering 1970-2013. The study is significant when one ponders on policies on interest rate be put in place to mobilize more savings by Ghanaian policy makers. It will also be beneficial to financial institutions like banks and other savings and loans institutions to develop products that will suit savers in their quest to mobilize more savings.

2.0 Literature Survey

Most studies of saving in relation to the rate of interest do not distinguish between financial saving and total saving, but where they do, financial saving is shown to be very responsive, while total saving is not. This probably may explain why there are many contradictions. A study conducted in Mexico by Warman and Thirlwall (1994) showed that financial saving is very sensitive to real rate of interest. It also indicated that there are difference in financial saving sensitivity to interest rate between Mexico and the United State. Contrary to the above, Wijbergen (1983) and Buffie (1984) indicate that financial savings need not be interest elastic, and if they are, they may not be translated into increased credit to the private sector. For example, they may be used to raise the cash and foreign-asset reserves held by these institutions, or to finance fiscal deficits.

The controversy between interest rate and total savings looks endless as various scholars report contradicting result across the globe. For instance, studies conducted by Fry (1978, 1980) found aggregate saving significantly interest elastic in seven Asian countries. The studies were done using 1960s pooled time series data. In contrast, studies done by Giovannini (1983, 1985) could not reproduce the results for these countries using the same model and 1970s pooled time series data. Giovannini explained Fry's results by the fact that his sample period included Korea's financial reform of the mid-1960s when interest rates were drastically increased. And because of institutional factors that were peculiar to Korea at the time, there is almost unanimous agreement (Thorne 1986) that this was followed by a substantial increase in financial and non-financial savings. Accordingly, removing Korea from the sample of Asian countries, and/or carrying out the analysis for a different sample period, the significant interest elasticity of saving cannot be found. Similarly, the argument that high real deposit rates increase financial savings which are then channeled to investors cannot be established a priori. The argument by Giovannini in this circumstance appears more meaningful. This is because, it is highly possible that Korean reform may have contributed to the result obtained by Fry.

The debate keeps waging on with many researchers been very careful in dealing with the relationship between interest rate and total savings. For instance, Gupta (1984) estimated savings functions for twelve Asian countries (Burma, India, Indonesia, Korea, Malaysia, Nepal, Pakistan, Philippines, Singapore, Sri Lanka, Taiwan, and Thailand), separating financial savings and savings in physical assets, the hypothesis being that increases in the interest rate will affect positively the former and negatively the latter. The explanatory variables included permanent income, transitory income, expected inflation, unanticipated inflation, the nominal interest rate, the financial intermediation ratio, and uncertainty with respect to inflation. Among the ten countries for which the interest rate variable could be defined, its coefficient was positive in nine of the financial savings equations. Of the nine equations, the coefficient of the interest rate variable was statistically significant at the 5 percent level in three cases, and it exceeded its standard error in four cases. In turn, as expected, the coefficient of the interest rate variable was generally negative

in the physical savings equation. The coefficient was statistically significant at the 5 percent level in four cases and exceeded its standard error in three cases.

In a follow up study by Gupta (1987) on 22 Asian and Latin American countries over the period 1967-76 suggested that there is little support for the hypothesis of financial repression, and that the most important determinant of saving is real income. From Gupta's two studies, some important observations are necessary. From his earlier study it is clear that interest rate have significant positive effect on financial savings than other type of savings. However, the latter study indicates that interest rate may not necessarily be an important variable when it comes to saving determination and as such keeping the debate on.

More interestingly, one advocate of financial liberalization, Fry, a leading authority on finance and development concedes that 'what is agreed... is that if an effect [on saving] exists at all, it is relatively small' and that 'positive interest effects are easier to find in Asia than in other parts of the world, but even in Asia the effects appear to have diminished over the past two decades' (Fry, 1995). This was the same person who earlier on, Fry (1978) find interest elasticity of savings elastic and significant in the same Asian countries. One can therefore deduce from Fry's argument that the passage of time can even change the relationship between saving and interest rate. There is therefore the need for regular empirical study to determine the relationship from time to time making the present study more relevant.

There are number of studies to suggest that the effect of interest rate on private savings is quite ambiguous. The assumption of whether private savings will response negatively or positively to interest rate depends on substitution and wealth effect. The impact of higher real deposit rates on saving is unclear, as the substitution and wealth effects work in opposite directions. While higher deposit rates increase the return to saving, they also make it possible for households to meet objectives with a lower volume of savings. Bandiera et al (1998) conducted a study to find out how financial reform affect savings in eight developing countries. The study in the end found no clear relation between private savings and real interest rates. In some specifications for some countries the results are negative and significant, but they are insignificantly negative or even positive in other cases.

Edwards (1996) studied the effect of interest on saving and found that changes in interest rate will have an ambiguous effect on private savings but whether they respond positively or negatively will depend on the relative strength of the substitution and wealth effects. Moreover, Loayza et al (2000), found a significant negative relationship between the real interest rate and private saving for their large sample of both developing and developed countries, although for national saving the coefficient was insignificant. Their study was actually an econometrics and statistical study about the factors that drives private savings across the world.

The situation in Africa is not different from what pertains in Asia and other developing countries. In an empirical work, Leite and Makonnen (1986) used pooled cross-section data consisting of 14 observations for six African countries, Benin, Burkina Faso, Cote d'Ivoire, Niger, Senegal, and Togo, to regress gross private saving on lagged gross private saving, the rate of interest, and the share of exports in gross domestic product. In all equations interest rates were found to be positively related to savings and highly significant. However, the effect is much reduced and not statistically significant if changes in disposable income are introduced in the equation. An

observation can be make about this study that interest rate on it own may not be a strong variable in influencing saving unless affected by other factors.

To add to the above, Bwire et al (2008), conducted a study on the effect of real interest rates on national savings in Uganda for the period 1975 – 2006. The study concluded that real interest rate happens to be a significant variable in national savings; however, its does not on it own facilitate savings mobilization. Moreover, Aryeetey et al. (2000), looked at economic reforms in Africa, specifically, on intervention and liberalization policies and performance in the financial sector. Their observation was that even though the financial sector reform policy is appropriate for Ghana, the savings level in the economy has not improved much. Their study however covered the period 1988 – 1996. It must be emphasized that the Ghanaian economy has gone through a lot of changes since then. It therefore makes the present study a useful exercise.

Contrary to the McKinnon-Shaw premise, the increased real interest rate may not necessarily lead to improved financial savings. In critically low-income countries, for instance, the level of income could be so abysmal that households spend virtually all their earnings on basic necessities of life. In such a case, even with high real deposit rates, very little or no proportion of income could be saved. This suggests that the McKinnon-Shaw proposition would, therefore, be more relevant to high-income countries (Adenutsi, 2011). This proposition was affirm by Ogaki et al. (1996) whose results reveals that, in the long run, a 100 per cent rise in real interest rate leads to a 66.7 per cent rise in financial savings in high-income countries but savings could only increase by 10 per cent rise in low-income countries.

Observing from the literature reveal that there are varying opinions with respect to the actual relationship between interest rate and savings and as such the present study will employ time series data to examine how interest rate influence saving in Ghana.

3.0 Methodology

3.1 Model Specification

The cardinal issue in this study is to examine the effect of interest rate on savings. However, in the literature, there is no single savings theory which captures all determinants of savings. This study thus specifies a savings model which is inspired by Bwire et al (2008) but which included variables important to the Ghanaian economy. The study therefore estimates an econometric model with real financial savings (RFS) as the dependent variable measured as the sum of savings and time deposits deflated by consumer price index (CPI).

The real financial savings is predicted by Real Income, RY (measured as nominal gross domestic product deflated by GDP deflator), Real Interest Rate, RIR (measured as the nominal interest rate adjusted for inflation using Fishers' equation), Inflation Rate, INF (measured by the consumer price index), Exchange Rate, EX (measured as the value of the cedi to the dollar), and Private Inward Remittance, PIR (measured as all private transfers by nationals abroad back home as captured by the bank of Ghana). That is;

RFS= f (RY, RIR, INF, EX, PIR)…………. (1)

Interest rate regime in Ghana covers different periods, that is the control period (1970-1987) and the reform period (1988-2013). As a result of the two different interest rate regimes, a dummy variable (MRIR) which assumed value of zero (0) for the control period and one (1) for the reform period was used for the structural policy changes. As a result, equation one is augmented 'as'

$$RFS_t = \beta_0 + \beta_1 RY_t + \beta_2 RIR_t + \beta_3 INF_t + \beta_4 EX_t + \beta_5 PIR_t + \beta_6 MRIR_t + \varepsilon_\tau \dots\dots\dots\dots(2)$$

Where the 'β' represent the set of parameters which reflect how changes in the independent variables impact on savings and 'ε' represent the error term. The expected signs for β_1, β_2, β_4 and β_5 are positive. The sign for β_3 is expected to be negative. It must be noted that, similar model has been used in a number of studies like Giovannini (1985), Fry (1988), and many others. Again, although most of the earlier studies used nominal savings as the dependent variable, this study made use of real savings to adjust for inflation since inflation is used as an explanatory variable.

3.2 Data Sources

The Bank of Ghana (BOG) was the main source of data for the study. Data for financial savings, interest rate, per capita income, private inward remittances, and exchange rates were obtained from the Annual reports and Quarterly Statistical Bulletins by the Bank of Ghana. This was however supplemented with data from International Finance Statistics published by the International Monetary Fund (IMF). This was than to ensure the authenticity of the figures. Data on inflation, consumer price index (CPI) and exchange rates were sourced from the Ghana Statistical Service (GSS).

3.3 Estimation and Testing

3.3.1 Unit-root test

To overcome the problem of non-stationarity, Augmented Dickey Fuller (ADF) unit root testing procedure suggested by Dickey and Fuller (1979) for each of the variables in equation (2) was undertaken. ADF test is an extended version of Dickey Fuller test, which proposes to include in regression, several lags of the difference of the series to account for serial correlation unlike what Dickey-Fuller assumed that error terms are uncorrelated. The ADF specification for the study is as follows:

$$\Delta y_t = \alpha_0 + \sigma_t + \theta y_{t-1} + \sum_{i=1}^{\rho} \gamma_i \Delta y_{t-1} + u_t \dots\dots\dots\dots\dots (3)$$

Where t = 1, 2 ... n
The hypotheses for the ADF test in the above equation are;
H_0: $\theta = 0$ (there is unit root)
H_1: $\theta < 0$ (there is no unit root)
The test is carried out with intercept term for all variables. One lag value has been inserted in the equation to determine the stationary nature of the series and t has been inserted to take care of time trend.

3.3.2 Cointegration Test

In order to determine the number of equilibrium-correction terms (ECTs) that should appear in the dynamic equilibrium-correction mechanism model, the study followed a residual-based approach using the Augmented Dickey Fuller (ADF) cointegration test as recommended by Engle and Granger (1987). This approach was used based on the fact that the number of observations was not many. The inadequate observations made it impossible to follow Johansson cointegration test procedure which is superior to the Engle and Granger test. Bandiera et. al. (1998) followed the ADF method in testing for cointegration due to inadequate number of observations. Engle and Granger (1987) gave the concept of co-integration regarding non-stationary series, to examine whether there is any long-run equilibrium relationship. They showed that if two variables are co-integrated, they would not drift apart over time. The null hypothesis is that no-cointegration exists between the variables.

3.3.3 Estimation of Error-Correction Model

The next stage of the process involves error correction mechanism (ECM). This is a means of reconciling the short-run behaviour of economic variables with its long-run behaviour. The Engle-Granger representation theorem states that if two series are co-integrated then the ECM can interpret the dynamic changes in the short run and can include variations in the partial adjustment mode. From the long-run equation (2), an Error Correction Model is formulated to take account of the presence of nonstationarity of the variables. Assuming there is the presence of unit root of I(1), following the Engle and Granger (1987) formulation, the error correction equation is stated as follows;

$$\Delta RFS_t = \alpha_0 + \alpha_1 \Delta RY_t + \alpha_2 \Delta RIR_t + \alpha_3 \Delta INF_t + \alpha_4 \Delta EX_t + \alpha_5 \Delta PIR_t + \alpha_6 [RFS_{t-1} - (\alpha_0 + \alpha_1 RY_t + \alpha_2 RIR_t + \alpha_3 INF_t + \alpha_4 EX_t + \alpha_5 PIR_t)_{t-1}] + \alpha_7 MRIR_t + \varepsilon_\tau \dots\dots\dots\dots\dots\dots\dots\dots(4)$$

Equation (4) leads to;

$$\Delta RFS_t = \lambda_0 + \lambda_1 \Delta RY_t + \lambda_2 \Delta RIR_t + \lambda_3 \Delta INF_t + \lambda_4 \Delta EX_t + \lambda_5 \Delta PIR_t + \lambda_6 (RFS_{t-1} - \alpha_0 - \alpha_1 RY_{t-1} - \alpha_2 RIR_{t-1} - \alpha_3 INF_{t-1} - \alpha_4 EX_{t-1} - \alpha_5 PIR_{t-1}) + \lambda_7 MRIR_t + \varepsilon_\tau \dots\dots\dots\dots\dots\dots\dots\dots(5)$$

4.0 Empirical Results and Analysis

4.1 Unit-root Test Results

The results of the test are presented in Tables 4.1.

Table 4.1   Unit Root Test at First Difference

Variable	Lag Length	Test Statistics	ADF 95% Critical Value	Comments	Order of Integration
DRFS	1	-5.6316	-3.5313	Reject H_o	I (1)
DRY	1	-5.0166	-3.5313	Reject H_o	I (1)
DRIR	1	-6.1538	-3.5313	Reject H_o	I (1)
DINF	1	-6.1451	-3.5313	Reject H_o	I (1)
DEX	1	-4.5418	-3.5313	Reject H_o	I (1)
DPIR	0	-4.3219	-3.5279	Reject H_o	I (1)

The result as presented in Table 4.1 showed that all the variables were confirmed stationary at first difference, meaning the presence of no unit root as the test statistics and ADF critical values show. The null hypothesis was only rejected at the first difference for all the variables. The result means that in estimating short-run error correction model, all the [I(1)] variables would have to be differenced once to achieve stationarity.

4.2 Cointegration Test Results

Following Engle and Granger method, the test statistic obtained a value of ADF (1) = -64572 (-3.527). The results mean that the long – run model was found to be cointegrated which indicates that the variables have long-run equilibrium relationship. This means that the null hypothesis of no-cointegration between the variables was rejected. The full results of the long-run regression and the cointegration are shown in Table 4.2.

Table 4.2 Long-run Cointegration Regression Results of Real Financial, Savings Function at the Levels, 1970 - 2013.

Regressor	Coefficient	Standard Error	T- ratio	Probability
CONS	72.9915	25.9581	2.3119	0.008**
T	-5.0452	1.0624	-4.7489	0.000**
RY	0.018850	0.27409	0.68773	0.496
RIR	1.8656	0.60461	3.0857	0.004**
INF	1.5608	0.60527	2.5788	0.015**
EX	49.9949	29.2743	1.7078	0.97
PIR	0.10651	0.012306	8.6552	0.000**
MRIR	28.1952	14.9489	1.8861	0.046*

*Note: The asterisk *, ** indicate significance at 5% and 1% levels respectively.*

R- Squared: 0.94657, R- Bar Squared: 0.93279, F- statistic: F (8, 31) 68.6538 (0.000)

DW - Statistic: 1.7361, Cointegration Statistic: ADF (1) = -6.4572 (-3.5279)

From the estimated long-run results in Table 4.2, it can be observed real interest rate (RIR) has significant effect on savings at 1% confidence level. However the variable RIR in Table 4.2 captures the effect of interest rate on financial saving for the period 1970 to 1987 which happens to be the pre-reform era. The result means that real interest rate is having positive long-run influence on savings even during the pre-reform period. The dummy, variable (MRIR) which captures the effect of real interest rate on savings during the reform period bears a positive sign and is significant at 5% confidence level. This clearly means that real interest rate during the reform period has stimulated long-run financial savings in Ghana at the levels. The findings therefore support the postulation by the Financial Repression Hypothesis by Mckinnon and Shaw (1973).

Other principal factors responsible for long-run financial savings in Ghana are inflation, exchange rate and private inward remittances. As expected all these variables have positive effect on long-run financial savings. What was surprising about the results is that Income is not statistically significant in explaining long-run financial savings in Ghana. In order to eliminate time element in the model, time variable was included in the model. The time variable, T, is significant which point to the fact that the financial saving variable is trended over the period and therefore depended on time.

4.3 Results of Error-Correction Model

From the estimated results presented in Table 3, the main positive macroeconomic factors that explain short-run variations in savings mobilization in Ghana, in order of statistical importance, are investment, private inward remittance, post reform real interest rate, and exchange rate. However, income, inflation rate do not influence short-run savings mobilization in Ghana. The insignificant nature of real income may be due to the fact that income levels in the country is very low and as result people end up spending most of their income on basic necessities of life leaving little or nothing for savings which is in line with an observation by Adenutsi, (2011). Over 74 per cent of the total short-run variations in savings mobilization are attributable to the explanatory variables aforementioned. From the short-run dynamics, any disequilibrium in savings mobilization is corrected in the next year at the rate of 5.6 per cent.

Table 4.3 The Short –Run Real Financial Savings Regression Parsimonious Results.

Regressor	Coefficient	Standard Error	T – Statistics	T- Probability
CONS	-4.1159	2.5381	-1.6217	0.116

DRY(-1)	0.025718	0.023432	1.0976	0.282
DRIR	1.0833	0.56562	1.9152	0.066
DINF	0.98352	0.56494	1.7409	0.093
DEX	69.8112	33.1353	2.1069	0.045*
DEX (-2)	-107.2531	40.2749	-2.6630	0.013*
DPIR	0.072249	0.032223	2.2422	0.033*
DPIR(-1)	-0.024146	0.025129	0.96088	0.345
DPIR(-2)	0.094213	0.33418	2.8192	0.009**
DMRIR	11.8733	12.9252	0.91861	0.036*
RES$_{(t-1)}$	-0.56194	0.17560	-5.4780	0.000**

R- Squared: 0.81720, R- Bar Squared: 0.74950, F- statistic: F (10, 27) =12.0704 (0.000) DW-Statistic: 2.0389

Note: The asterisk *, ** indicate significance at 5% and 1% levels respectively.

The empirical results suggest that, within the short run, a one percentage further increase in real interest rate during the reform period (DMRIR) at any point in time directly results in increasing saving mobilization in the country by about 110 per cent. However, real interest rate before the reform (DRIR) did not have any significant effect on short term savings mobilization in the country. The significant impact of the DMRIR in savings is consistent with the findings of Azam (1996), Ahiawodzi (2008) but contradict the findings of Bandiera et al, (1998), who could not also establish any strong reliable interest rate effect on savings in Ghana and seven other developing countries. The estimated results from this study reveal that at 5 percent and 10 percent confidence levels, the first difference and second lagged of private inward remittance (DPIR, DPIR-2) are positively significant respectively on short term savings. These findings thus support the findings of Glytsos (2002), in the Mediterranean that remittances promote investment through savings.

At 5 percent significant level from the empirical results, both the first difference and the second lag of exchange rate (DEX and DEX-2) all exhibit significant effect on financial savings in Ghana. However, whiles the first difference (DEX) is having a positive coefficient, the second lag of exchange rate (DEX-2) is having a negative coefficient. Empirically, such finding has been observed by Montiel and Serven (2009) in most Asian countries such as Korea, Malaysia and Thailand.

5.0 Conclusion and Policy Implications

The empirical result revealed that major determinants of financial savings in Ghana include interest rate, inflation rate, exchange rate and private inward remittance. The long-run cointegration result showed that interest rate has significant positive effect on financial savings in Ghana which is

consistent with Mckinnon (1973) and Shaw (1973) theoretical postulations. This was supported by the short run parsimonious results. The results revealed that both the controlled period (1970-1987) and the liberalized period (1988-2010) interest rates were having significant positive effect on long run savings in Ghana. However, pre reform interest rate does not exhibit short term influence on savings mobilization in Ghana. Moreover, the result also revealed that exchange rate and private remittance are very important determinant of savings in Ghana. These variables especially private inward remittance exert significant influence on savings in Ghana. Income however, has positive relationship with savings but surprisingly does not exert significant influence on it.

With respect to policy implications, financial policy makers in the country must work hard towards realistic interest rate specifically positive rate in real terms. This will help attract idle funds into the banking sector so that private investors can borrow more for investment. Real interest rate has remained mainly negative in the country and as such may be contributing to it unattractive nature to potential savers. There is therefore the need to charge realistic deposit rate to encourage more people to save in the country. Additionally, more effort must be put into maintaining macroeconomic stability in the country. This is based on the fact that real interest rate levels are affected by inflation, as a result reducing inflation to probably single digit on consistent basis will help increase real interest rate. It must be indicated that, the bank of Ghana is doing well to reduce inflation through its inflation targeting policy, but a lot more must be done to clear people minds as far as uncertainty in the country is concerned to encourage them to save. Certainty in the minds of the public will also encourage more permanent savings as against precautionary savings being exhibited at the moment.

Furthermore, adequate measures must be put in place to encourage citizens abroad to send money home to their relatives on regular basis. In order for such monies to pass through the financial institutions, the banks and other financial institutions must give some incentives to those who send and receive their remittance through their branches. Policies to consider in this regard should focus on reduction in the cost of international money transfers, and enhancing the efficiency and reliability of international money transfer mechanisms. This will encourage savings since remittance receivers are more likely to open bank account. Moreover, Universal banks should link up with rural and community banks to ensure people in rural areas of the country can easily receive money from their relatives living outside the country. The process of sending money from abroad and receiving in Ghana should be made simple and easy.

Finally, the Bank of Ghana (BOG) must try hard to stabilize the depreciation of the cedi. One way to do this is by discouraging excessive importation of foreign goods and services by placing appropriate import taxes. This may increase the price of imported goods and eventually discourage people from importing them into the country. Additionally, government must do well to encourage exportation of locally produce goods. This can be done by giving subsidies and other incentives to exporters to boost their moral.

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