

## The Influences of Cost-Effectiveness of the Economic Tiers in Ghana all over the Present Ages of Global Financial Crisis

**David Ackah – Ph.D. Economics Development in Africa**

*Lecturer & Internal Auditor of Administration*

*Golden Sunbeam International College of Science Technology*

### **Abstract**

The on-going financial crisis has become the major subject under discussion in most national and international economic forums and summit in recent times because of the casualties it has inflicted to the financial institutions and the economies of the world. The on-going financial crisis has caused many banks within the Euro zone and America to resort to bailout funds in other to ensure continuity of their operations. Countries like Portugal, Ireland, Spain, Italy and Greece had to implement some austerity economic policies in order to attract bailout fund from the European central bank. The global economy has experience stagnation or slowdown over the past four years, while international trade volumes have been decreasing. Lives of ordinary people have been adversely affected as unemployment rate keeps on soaring resulting in uncertainty about the future. By examining the performance of the commercial banks, it is true that the banks in Ghana have been experiencing profitability over the last ten years which includes the current years of global financial crisis.

**Keyword:** *Global Situation, Economics Crunch, Financial Crises in Ghana, Influence of Cost-effectiveness*

### **I. INTRODUCTION**

The financial crises have dominated economic debates since its emergence in 2007. The on-going financial crisis has become the major subject under discussion in most national and international economic forums and summit in recent times. The current global financial crises is said to be triggered by numerous default on sub-prime loans, short term funding, high leverage, weakness in regulation, greed, Ineffective risk management practices and other factors in regards to the banking industry in the USA. It is believed that the financial institutions in USA failed in their responsibility to effectively allocate capital and manage risk. Rather they created complex products (securitization) because of their belief in big numbers and this rather amplified the risk involved their operations (Jafee et al 2009). Some of those managing these institutions because of their greediness took billions of dollars as their compensation at the time the banks were in crises (Griffith - Jones et al 2010).

The financial crisis has struck a heavy blow to the global economy. It has been tagged as the worst crises after the great depression in 1930s as result of its negative on-going effect on the financial institutions around the world and the global economy. Due to this, many banks within the Euro zone and America have received bailout funds in other to ensure continuity of their operations and the countries like Portugal, Ireland, Spain, Italy and Greece had to implement some austerity economic policies in order to attract bailout fund from the European central bank. The global economy has experience stagnation or slowdown over the past three years, while international trade volumes have been decreasing. Lives of ordinary people have been adversely affected as unemployment rate keeps on soaring resulting in uncertainty about the future. The global financial crisis has caused the downfall and casualties to some well-known and trusted financial institutions such as Lehman's Brothers and UBS in the western world. As these financial institutions represent the backbone of western economies it has posed a major challenge to political leadership of the western world; (Barry et al 2012).

The operations and the survival of banks have become the main issue of the on-going financial crises. Countries and some economic blocks are trying to find a lasting solution to ensure smooth operation of the banks because of its importance to national and global economies. The Basel Committee on banking supervision came up with a reform program on banking operations and submitted to the G20 in October 2010. This program was intended to ensure the recovery of the banks from financial crises and to strengthen the global banking system (Basel Committee's response to the Financial Crises 2010). The economies and the banks in sub-Sahara African countries have also been adversely affected by the financial crises. According to IMF report in 2009 the economic outlook of Sub-Sahara African countries showed tremendous growth over a decade before the advent of the financial crises in 2008. The average growth was about 6 percent in five years; inflations excluding Zimbabwe fell to single level of about 7 percent in 2007

while international reserves increased from 0.5 percent in the year 2000 to 1.4 percent in 2007. Apparently, these positive economic developments demonstrated by Sub-Saharan African countries before the financial crises was relying on factors which includes sound economic policies, rising commodity prices, debt relief, aid and grant from the international community. These economic gains were negatively impacted by the global financial crises in 2008. As the African economies rely heavily on commodity export, the global economic downturn caused export to fall while the prices of commodities experienced declined. The flow of remittances decreased while increase in credit and investors risk aversion resulted in decline of FDI. The economic downturn of Sub-Saharan African countries in 2008 causes an increase in credit risk and nonperforming assets and disrupted the balance sheets of some financial institution in some sub-Saharan African countries.

Ghana being a Sub-Saharan African country has had its fair share of the Africa's economic downturn in 2008 and 2009 in relation to global financial crises. According to the IMF Country Report in 2011 Ghana's real GDP growth rate decreased by 4% in 2009 and the growth rate of Ghanaian banks in terms of profitability with regards to return on assets in this same year decreased by 0.4%, while the return on equity also decreased by 7.5%. This gives an indication of the extent to which the Ghanaian economy and the operation of the financial institutions in Ghana was negatively impacted by the financial crisis in 2008 and 2009. Despite the fact that this happened, the IMF country report still gives an indication of profitability experienced by the banks in Ghana. Even though the profit recorded in 2009 was lesser than the previous year, yet still they experienced profitability and since then the banks have been experiencing consistent increase in profitability. The banks recorded return on assets of 2.1% in 2009 and 2.7% in 2010 while the return on equity increased by 26.6% and 28.6% respectively. According to the report published by Business Monitor International on Ghana commercial banking in January 2012 the profit level and assets of the banks in Ghana is expected increase continuously. The report projected that the total assets of the banks in Ghana will increase from 14.91(US\$ bn) in 2011 to 51.48 (US\$ bn) in 2016; BMI Q1 (2012).

## **II. PROBLEM STATEMENT**

The financial crisis has struck a heavy blow to the global economy. It has been tagged as the worst crises after the great depression in 1930s as result of its negative on-going effect on the financial institutions around the world and the global economy. Due to this, many banks within the Euro zone and America have received bailout funds in order to ensure continuity of their operations and the countries like Portugal, Ireland, Spain, Italy and Greece had to implement some austerity economic policies in order to attract bailout fund from the European central bank.<sup>1</sup> The global economy has experience stagnation or slowdown over the past three years, while international trade volumes have been decreasing. Lives of ordinary people have been adversely affected as unemployment rate keeps on soaring resulting in uncertainty about the future. The global financial crisis has caused the downfall and casualties to some well-known and trusted financial institutions such as Lehman's Brothers and UBS in the western world. As these financial institutions represent the backbone of western economies it has posed a major challenge to political leadership of the western world; (Barry et al 2012).

### *A. Supervisory research questions*

To provide a basis to concluding on problematic declaration stated overhead, the boom pursues to response the subsequent research enquiries:

1. What are the management controllable factors determining the cost-effectiveness of commercial banks in Ghana during these years of global financial crisis?
2. What are main industry specific factors impacting on commercial banks profitability in Ghana during these years of global financial crisis?
3. How do macroeconomic variables (GDP growth rate, inflation and interest rate) affect Commercial banks' profitability during these years of global financial crisis?

This might deliver some western banks that are stressed in this period of financial crises an alternative strategy which will enable them to survive and make profit. Many banks in the western countries are struggling to survive and to make profit. Some have received huge bailout funds from the government but still dragging their feet to survive and

some too are submission nominee's tall attention rate to appeal more money. The information provided by this thesis could also offer investors some background information on investment in the Ghanaian Banking sector.

#### *B. Structure of the Research*

This thesis has been divided into five major parts. The first part includes introduction, problem statement, guiding questions, objectives and limitations. The introduction part presents the basic information on the historical background of the financial crises and its impact on the global economy and the operations of the financial institution around the world. The introduction also provides brief information on the growth of profitability of the Ghanaian banking sector in this period of financial crises. The problem statement presents the main research question and background information on this research question. The guiding questions have been provided to serve as the basis for the information needed and to conclude on the main research question. The objectives stated demonstrate the importance of this thesis to banking institutions and investors. Finally, the limitations that have been encounter for writing this thesis are also presented.

The second part deals with the theoretical background of the study. This part contains the author's analysis on some banking theories which relates to the subject area of the study. It consists of four main categories of factors impacting on banks profitability which includes; bank specific characteristics, industry specific and macro-economic factors. In this part of the thesis the author choose to present and analyse the theoretical frameworks of measuring banks profitability as well as a number of profits determinants in banking.

The third part of the thesis presents Ghana's current economic situation, a brief background and developments in the Ghanaian banking industry and the profiles of the banks to be investigated.

The fourth part of the thesis also focuses on the description of the methodology used in the research. This part of the thesis presents the methodology of the study. The section presents the sources of data employed in the study, the chosen samples with regards to the four banks under study and the reason why they were chosen. The section as well concentrates on the justification of chosen profit determinants factors. Finally, it presents the empirical models adopted in the study in order to be able to analyse and discuss the solution to the research question and arrive at conclusions.

The final part of the thesis contains the result of the research on the four banks followed by discussion and summary of the research findings. The content of the thesis ends with conclusion which deals with summary of the whole report. Lastly, the thesis also presents the list of literatures used in the writing of the report followed by the appendixes which contains the tabulation of accounting ratios and some macroeconomic statistics.

### **III. LITERATURE REVIEW**

With regards to the discussions and analysis of the various theories and issues involve in this part of the study. To be able layout or explore the factors characterising the profitability of Ghanaian banks in this financial crisis. As it has been already mentioned, this part of the thesis focuses on theories which include profit measurement theories and various profit determinants theories of commercial banks.

#### *A. Profit Measures and Determinants of Commercial Banks Profitability*

With regards to the main focus of this study, the elaboration of the various profit measures and determinants theories which has been considered in other related studies is very significant to the realisation of the factors to be investigated in this study.

#### *B. Internal Determinants of Commercial Banks Profitability*

According to Husni (2011) the internal determinants of banks profitability are normally consisting of factors that are within the control of commercial banks.

##### *i. Income*

Rasiah (2010) presented that banks generate income mostly on their assets and the assets could be termed as income and non-income generating. According to Vong et al (2009), the major source of banks revenue is interest income. It contributes about 80% of commercial banks earnings

**ii. Loan quality**

As it has been mentioned above, one of the major roles of banks is to offer loans to borrowers and loans serve as one of the ultimate source of earnings for commercial banks. In other words loans represent one of the highest yielding assets on banks' balances sheet. It is obvious that the more banks offer loans the more it does generate revenue and more profit; Abreu and Mendes (2000). But then banks have to be courteous in offering more loans because as they offer more loans to customers they expose themselves to liquidity and default risks which impacts negatively on banks' profits and survival; Rasiah (2010). Example is the recent financial crisis which started in the United States of America in 2007 and 2008. It is well known that most banks engaged in the offering of more loans including non-prime loans during this period. And when the housing prices fell most banks suffered large number of defaults on non-prime loans which in turn resulted in loss of profits and the collapsed of some banks; Gaurav & Kelly (2011). Even as the Ghanaian banks are said to be experiencing profits during these years of global financial crisis, (IMF Country Report 2011) has indicated that the commercial banks' in Ghana exposure to stability risk has heightened as a result of continues increase in non-performing loans.

**iii. Deposits**

Banks are said to be heavily dependent on the funds mainly provided by the public as deposits to finance the loans being offered to the customers. There is a general notion that deposits are the cheapest sources of funds for banks and so to this extent deposits have optimistic control on banks productivity if the demand for bank loans is very high. That is, the more deposits commercial bank is able accumulate the greater is its capacity to offer more loans and make profits; Devinaga Rasiah (2010). However, one should be aware that if banks loans are not high in demand, having more deposits could decrease earnings and may result in low profit for the banks. This is because deposits like Fixed, Time or Term deposits attract high interest from the banks to the depositors, Devinaga Rasiah (2010). To capture deposits in the model Anna P. I. Vong et al (2009) presented the effect of deposits (DETA) on profitability as deposits to total assets ratio.

**iv. Capital ratio**

Devinaga Rasiah (2010) and P. I. Vong et al (2009) included capital ratio (EQTA or CTRA) as a variable in their study of determinants of banks profitability and performance because capital also serve as a source of funds along with deposits and borrowings. They argue that capital structure which includes shareholders' funds, reserves and retained profit affect the profitability of commercial banks because of its effect on leverage and risk. They documented that, commercial banks assets could be also financed by either capital or debt. But debt financing could be very risky as compared to capital financing with regards to credits and liquidity risks with which commercial banks are expose to. This is because for instance, if a commercial bank experience loss of profit as result of credit default or liquidity problem the bank still has the obligation to services its debt, on the other hand a commercial bank with enough capital is able take higher risk and also absorb shocks which emanate from liquidity and credits risks.

Sufian F. et al (2008) argued that banks in developing countries needs a strong capital structure, because it provides them strength to withstand financial crises and offers depositors a better safety net in times of bankruptcy and distress macroeconomic conditions. And according to Molyneux (1992) banks with high level of equity can reduce their cost of capital and that could impact positively on profitability. In addition, Both Basel II and III accord admits that most frequent bank insolvencies are mostly coursed by credit losses and for this reason it is prudent for commercial banks to have higher quality of capital in order to be able to absorb more loss hence to better withstand stress periods; (Basel Committee's response to the Financial Crises 2010). Berger (1995) also asserted that lower level of capital put the banks into risky position and impact negatively the bank's profitability; Berger (1995)

The argument presented above makes the decision of the bank of Ghana to continue increase regulatory capital requirement in the banking industry very appropriate because having the strong capital structure would enable them to reduce cost of capital and withstand financial crises hence continues experience in profitability. The Ghanaian

banks' Capital to risk weighted assets is said to have experienced an increased from 9.1 % in 2003 to 19.1% in 2010 whereas, the Tier I capital to risk-weighted assets has also increased from 16.2% in 2005 to 18.6% in 2010 (IMF Country Report 2011). This proves that the total minimum capital of the commercial banks in Ghana is even much higher than the Basel II accord total minimum capital which stands at 8% (Basel Committee's response to the Financial Crises 2010). This might be one of the reasons behind continues experience in profitability by the Ghanaian banks during these years of global financial crisis.

Empirical evidence presented by Karkrah and Ameyaw (2010) on profitability determinants of commercial banks in Ghana revealed that the equity ratio which is the measure of the capital strength of the banks posted a positive relation with the banks ROA. They documented that their finding is in line with the findings of Suffian et al (2008) which reveals positive relation between Philippines banks level of capitalization and profitability.

**v. *Liquidity ratio***

According to Devinaga Rasiah (2010) central stores are obligatory by regulators to hold a certain equal of liquidity properties. And the aim behind this regulation is to make sure that the commercial banks always possess enough liquidity in order to be able to deal with bank runs. He claims that for instance, in a situation where a commercial bank is faced with the problem of bank run, the bank may encounter liquidity problem. In such a situation the bank might be compelled to raise additional liquid funds by borrowings or selling off some of their liquid assets and it is well known that short-term borrowings are usually costive. In addition, the situation where by the bank rush to sell off the liquid assets creates an impression in the minds of investors that the bank is trying to dispose of bad assets and for this reason these liquid assets normally attracts lower prices from investors and as a result there could be loss of income from the sale of liquid assets. These two issues tend to have an adverse effect on commercial banks profitability. This is relative to what happened in the United States in 2007- 2008 at the early stage of the crisis most banks experience bank runs and the inter-bank market freeze lending to counter parties due to the loss of confidence in the banking systems as result of huge default of sub- prime loans and there was strong decline of prices of securities associated with the sub-prime loans. This made it difficult for the banks to refinance these sub-prime loans and borrowing became very expensive for banks. This situation triggered the global financial crisis.<sup>2</sup> For this reason the Basel III accord introduced the liquidity coverage ratio (LCR) with which banks are required to have enough high quality liquid assets to be able deal with stress funding situations (Basel Committee's response to the Financial Crises 2010). This means that commercial banks in Ghana are in better position to withstand stress funding situations hence making profits during these years of global financial crisis. The IMF Country Report 2011 has indicated that Ghanaian banks are more liquid and liquidity with regards to the banks' assets has increased tremendously after the financial crisis. The report estimated that Liquid asset to total assets in 2010 recorded 25.3% and Liquid asset to short- term liabilities in 2010 stood at 32.9%. So, Ghanaian banks having high level of liquidity might be one of the reasons for recording profit in these years of the crisis.

However, Devinaga Rasiah (2010) asserted that the lower returns on liquid assets and excessive fund which has not been invested may also negatively affect the profitability of banks. And because of this, liquidity management serves as an important determinant of commercial bank profitability. It may not be prudent for commercial banks to hold huge amount of an idle funds because it deprive the banks of income and profitability.

**vi. *Non-interest income***

Non-interest income represents other sources besides earnings from loans of the commercial banks. Devinaga Rasiah (2010) stated that the traditional commercial bank business with regards to financial intermediation has gradually been change towards the provision of other financial services as result of on-going financial globalization and liberalization and because of that commercial banks are able to increase their income and profit. This seems to be supported by the empirical findings of Karkrah and Ameyaw (2010) which revealed that non-interest income is an important driver of commercial banks profitability in Ghana and there is a positive relationship existing between non-interest income and profitability in the Ghanaian banking sector. However P. I. Vong et al (2009) cited in their study that the findings of

Gischer and Juttner (2001) prove that non-interest income generating services impact negatively on commercial banks' profitability. According to them, Gischer and Juttner (2001) claim that the negative relationship exhibited by their observation is attributed to the fact that the non-income generating services are more prone to intense competition than the traditional income activities of the banks. Meanwhile, the study of P. I. Vong et al (2009) captured the importance of fee-based services and other income resulting from diversification to commercial banks profitability by the non-interest income to gross income (NIGI).

*vii. Expenses*

Expenses as a variable in the profit determinants model of commercial banks is found in almost all the studies done in this area of study; examples are P. I. Vong et al (2009), Rasiah (2010) etc. But according to P. I. Vong et al (2009), the effect of expenses as a variable on banking performance and profitability is mixed. Which implies that banks with low operation cost makes high profits. This is in line with the observations of Karkrah and Ameyaw (2010) which revealed that non-interest expense represent a significant driver of profitability of commercial banks in Ghana and impacts negatively on profitability.

On the other P. I. Vong et al (2009), further document that the findings of impact positively on European banks profitability because the payment of high wages and salaries to employees reflects on the higher level of productivity of the employees which is in line with the efficiency theory. Moreover, Bennaceur (2003) and Guru et al. (2002) also observed positive relationship between profitability and expenses. Both researchers argued that this relationship.

*C. External Determinants of Commercial Banks Profitability*

According to Karkrah and Ameyaw (2010) macroeconomic variables has been a major components of the external profit determinants in most studies. The most external factors that have been presented in most studies includes competition/market share/firm size, inflation, GDP growth, and interest rate; Haron, Sudin (2004).

*i. Interest rate*

Devinaga Rasiah (2010) advocates that interest rate have been captured in most studies as profitability determinant of commercial banks because net interest income which results from the deference between interest income and interest expenses has enormous impact on banks profitability. He stated that most research papers on banks' profit determinants present the interest rate as external variable because changes in interest rates is mostly cause by government economic policies and supply and demand market conditions. Moreover, He mentioned that the impact of interest rate changes on the commercial banks profitability.

According to Devinaga Rasiah (2010) commercial banks normally alter the rate of return on their assets to offset any differences caused by interest rates fluctuations resulting from economic policies. This is because most of the commercial banks assets for instance short term loans have short maturity and the rates on short term loans are normally flexible and because of that it easy for banks to change the rate of return to suit the changes with the interest rate.

Just like other nations, interest rate has been the main determinant of base lending rates of the banks in Ghana. The stress test performed by IMF team in 2010 indicates that commercial banks in Ghana have the capacity to withstand interest rates changes because most of their lending is based on variable rates. However, the report also claim that increase in interest rates can decrease the income and debt service capacity of borrowers in Ghana which may indirectly affect the balance sheet of the banks hence profitability (IMF Country Report 2011). The data provided by the IMF report indicates that average lending rate which depends on the interest rates from 2004 to 2010 stood between 25% to 30%. Obviously this level of lending rate is much higher than what most banks in western countries charge on loans. Depending on this it not surprising that they are able to make profits in this time of crisis because this could be the reason why non-performing loans on the banks' balance sheet continues to increase.

The finding also exhibits a positive relation between interest rate and profitability; Husni (2011). This finding is in support of the observation of Sufian et al. (2008) which portrays a positive impact of macroeconomic conditions including interest rate on commercial banks profitability in Philippi; Karkrah and Ameyaw (2010). To measure the

effect of interest rate on profitability Devinaga Rasiah (2010) use base-lending rate (BLR) as a proxy for market interest rate and presented it as variable in his studies.

*ii. Inflation rate*

Revell (1979) indicated that inflation is one of the factors which may cause variations in commercial banks profitability. Devinaga Rasiah (2010) in his study asserted that central banks in their capacity to control inflation increase the cost of borrowing and reduce the credit creating capacity thus the funds being given to the commercial banks as loans. As result of this the cost of borrowing becomes higher and the banks becomes more stringent in their lending policies which will subsequently lead to lower demand for funds and a fall in the volume of spending. Obviously the advent of such situation may adversely affect the profitability of the commercial banks because banks earn their revenue mostly from the loans they give to the customer so if the demand of loans falls as a result of the higher cost of borrowing then definitely earnings as well will fall hence the profit. Devinaga Rasiah (2010) further stated that inflation impact negatively on commercial banks profitability by decreasing the real value of bank's assets as compared to their liabilities. This is because commercial banks nominal assets might be larger than their nominal liability due to their nature of being net monetary creditors and because of this in times of high inflation the value of the nominal assets would decrease more relative to the increase in the value of nominal liability. Some empirical evidence seems to support this notion that inflation impact negatively on the profitability of commercial banks.

To this extent Devinaga Rasiah (2010) in his study documented that the impact of inflation on banks profitability to large extent depend on banks' ability to anticipate the occurrence of the inflation. This is because if banks are well assured of the possible inflation then interest rate would be increase to offset the imbalance and this would make the real value of the bank's assets and liabilities to stay unchanged and vice versa.

*iii. Competition (Market share/market growth rate)*

According to Michael Porter there are certain competitive forces that impact on profitability in every industry. These forces are said to be the drivers of competition and profitability in every industry which as well include banking industries around the world. He further stressed that it is difficult for firms which operates in highly competitive industries to earn favorable returns on investment. On the basis of this statement it obvious that commercial banks profitability is highly influence by certain competitive forces and even some studies have argue that intensive competition within commercial banking industry tends to decrease profits (Smith, 1984).<sup>3</sup> Among these forces is what Michael E. Porter termed as "Rivalry among Existing Competitors" with which some of its forms make it appropriate to consider in this study because of the possibility that they could be quantified hence their inclusion in the profitability model. He documented that higher rivalry among existing competitors which takes many forms including the fight for higher market share erodes profitability of an industry. Especially in slow growth markets with numerous competitors who are equal in size and power (Harvard Business Review 2008). There are two variables from this discussion with which some researchers have included in their studies and these include the market shares or the size of various commercial banks and market growth rate of commercial banking industry in particular country.

*iv. Market Share / Bank Size*

Both Vong et al (2009) and Devinaga Rasiah (2010) included market share in their studies. According to Devinaga Rasiah (2010) market share could be included in the profitability model as an external determinant because if commercial banks could be able to expand their market share then they may be able to increase their income as well hence profit. This is because the ability to increase market share requires selling more so in the case of banking if commercial banks are able to for example offer more loans to more customers then they stand a greater chance of increasing interest income as well as profits. More over being able to sell more in order to increase your market share requires efficiency and low cost in your operation and Smirlock (1985) with his efficient structure hypothesis advocate that commercial banks that are in the position to ensure superior efficiency and having low cost structures stand the chance of achieving supernormal profits.

Karkrah and Ameyaw (2010) further presented that the second part which has to do with risk diversification could lead to a negative relationship between bank size and profitability. In the sense that, increased diversification may lead to lower credit risks and as a result cause lower returns. There are quite a number of researchers which seems to support this notion of negative relationship which exists between the bank size and profitability

v. *Market Growth*

Study conducted by Bourke (1989) indicated that total market development could be attributed to higher level of entry barriers which may ensure the incumbent banks in the industry to earn higher profits. The reason for this argument may stem from Micheal Porter's argument that if the market is growing it does attract new entrants into the market and these new firms have the desire to gain some market share. When this happened it courses the market to be very competitive which may result in low profitability of the firms in the industry (Harvard Business Review 2008). For example (IMF Country Report 2011) has indicated that number of licensed banks in Ghana increased from 15 in 2000 to 25 in 2010, whereas the number branches increased from 200 in the year 2000 to 750 in 2010. The higher level of competition within the industry has resulted in the reduction of concentration. The report revealed that the percentage of share of five largest banks in the country has decreased from 61% in 2005 to 46% in 2010. Devinaga Rasiah (2010) documented that earlier studies conducted by researchers like Smirlock (1985), Clark (1987) and Rhoades (1987) used growth in commercial banks total deposits as proxy for market growth.

However, other studies like Bourke (1989), and Molyneux and Thornton (1992) used annual growth in money supply (money in circulation, MSG) as a proxy for market growth. Karkrah and Aaron Ameyaw (2010) finding on profit determinants of commercial banks in Ghana shows that increase in total money in circulation within the years considered in their research was major driver of profitability and there was positive relation between banks profitability and money in circulation.

#### **IV. CONCLUSIONS**

Firstly of all, the study has found out that indeed the commercial banks in Ghana has been experiencing profitability during these years of global financial crisis in spite of many challenges facing financial institution around the world these days as reported by IMF country report 2011. The study also observed that there is deference between the factors which drove profitability of the banks before the global financial crisis and during these years of the crisis. According to the result, (*NIGI*) which relates to the non-income generating services of the commercial banks was only factor which influenced profitability in both pre and post global financial crisis periods. Interestingly, the result shows that profitability of the banks before the global financial crisis was only influence by internal variables namely *CRTA*, *NIGI* and *LOGTA*. And the profitability of the banks during these years of global financial crisis has been mainly influence by all the external variables namely *RGDP*, *BLR*, *INF* and *MSG*.

With regards to pre-crisis period the result of the study indicates that commercial banks in Ghana were making profits before the global financial crisis as a result of their highly capitalized nature (*CRTA*). In other words because of their high level of capital adequacy they were able to reduce their cost of capital through the offering of safety net to depositor and interbank market hence made high profit. Moreover, the findings of the study has revealed that the natural logarithm of individual banks total deposits (*LOGTA*) which relates to bank size/market share had negative impact on profitability, implying that the small banks in Ghana did enjoy economies of scale and scope and as a result earned higher profits than larger banks before the financial crisis.

To answer the main research question of this paper, the study found out that ratio of non-interest income to gross income (*NIGI*), which relates to diversification of the commercial banks have had adverse effect on profitability as it increased in both pre and post financial crisis periods. The result of the study has indicated that excessive concentration of the banks on non-income generating services which are very prone to intense competition than the traditional income activities has actually lessened the profitability of the banks over the past decade which includes the recent years of global the financial crisis.

Furthermore the result proves that even though the Ghanaian economy is growing which should have impacted the banks' profitability positively rather exhibits negative influence on the banks profitability as a result of the increasing level of non-performing loans among the banks.

The result has also shown that the growth of money in supply (MSG) which serves as proxy for the level of competition or growth within the banking industry in Ghana has decrease the profitability of the banks during these years of the global financial crisis. The result shows that the high level of competition as a result of increased in the number of licensed banks in Ghana between 2005 and 2010 as claimed by the IMF Country Report in 2011 have had decreasing effect on the profitability of the banks. Base on the fact that the new banks are gaining market share and making profits at the expense of the incumbent banks. However, BLR and INF have been phenomenal up-ward drivers of the banks' profitability during these years of global financial crisis. The result indicated that the acceleration of inflation which resulted in increase in the interest rates to around 30 percent in Ghana during the period of 2008 and 2009 caused the banks to increase the base lending rates which normally depend on the interest rates in Ghana to offset the imbalances created by the increased in inflation. And as a result the banks were able to record some level of income and profitability in spite of the global financial crisis.

### References

1. Gorton G. (1988); Banking Panics and Business Cycles; Oxford Economic Papers 40, pp. 751-781. In Franklin Allen and Douglas Gale (2007) Understanding Financial Crises, Oxford University Press Inc, pp 1-4. Available at: Arhus School of Business Library.
2. Unfolding the spatial architecture of the East Asian financial crisis; The organizational response of global investment banks; Geographical Perspectives on the Asian Economic Crisis; Marcus A. Beaverstock, Jonathan V.Doel (2001); available at: <http://www.sciencedirect.com/science/article/pii/S0016718500000440>
3. Franklin Allen and Douglas Gale (2007) Understanding Financial Crises, Oxford University Press Inc; pp.1-4. available at: Arhus School of Business Library.
4. Fredric S. Mishkin (2007) Is Financial Globalization Beneficial? The Ohio State University available at <http://web.ebscohost.com/ehost/detail?sid=11f1e3f8-7eb6-4564-851c-478c14fcacf6%40sessionmgr15&vid=1&hid=19&bdata=JnNpdGU9ZWwhvc3QtbGl2ZQ%3d%3d#d=b=bt&AN=24814561>
5. Jaffee, David; Lynch, Anthony W; Richardson, Matthew & Van Nieuwerburgh, Stijn. (2009). Chapter 1: Mortgage origination and securitization in the financial Crisis. In: Acharya, Viral V. & Richardson, Matthew: Restoring financial stability: How to repair a failed system, pp. 70-71. Hoboken, N.J.: John Wiley & Sons available at:
6. [http://www.baser.dk/login?url=http://lib.asb.dk/economidium/10415\\_Acharya.pdf](http://www.baser.dk/login?url=http://lib.asb.dk/economidium/10415_Acharya.pdf)
7. Stephany Grffith-Jones, Jose Antonio Ocampo and Joseph E. Stiglitz (2010) Time for a Visible Hand lessons from the2008 World Financial Crises,Oxford University Press.
8. Greece IMF Country Report No. 11/351 (December 2011) available at <http://www.imf.org/external/pubs/ft/scr/2011/cr11351.pdf>
9. Barry Eichengreen, Ashoka Mody, Milan Nedeljkovic, Lucio Sarno (2012) How the Subprime Crisis went global: Evidence from bank credit default swap spreads; Journal of International Money and Finance; pp. 1299-1318 <http://www.sciencedirect.com/science/article/pii/S0261560612000435>

