

**IMPACT OF 2007-2009 GLOBAL FINANCIAL CRISIS ON
FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN
KENYA**

**Presented By;
OKEYO. A. MILKA
D61/71147/2009**

**Supervised By;
MRS.KITHINJI**

A MANAGEMENT RESEARCH PROJECT SUBMITTED TO THE SCHOOL OF
BUSINESS IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE
DEGREE OF MASTER OF BUSINESS ADMINISTRATION, UNIVERSITY OF
NAIROBI

NOVEMBER 2010

DECLARATION

This management research project is my original work and has never been presented for a degree in any other university

Signed.....

Date.....

Okeyo .A Milka

D61/71147/2009

This management research project has been submitted with my approval as the University Supervisor

Signed.....

Date.....

Mrs. Angela Kithinji

Lecturer, Department of Accounting and Finance

ACKNOWLEDGEMENT

First and foremost I would like to give thanks to my supervisor Mrs. Angela Kithinji who took me through tirelessly from the time I started doing my project up to the time i finished my project. I would also thank the lecturers who contributed to the success of my project.

Secondly I would like to thank my family especially my lovely husband for the encouragement and the support he gave me throughout my studies and the moral understanding.

I also thank my parents for the encouragement and affection that they showed on the importance of education which gave me morale to pursue my Masters Degree.

ABSTRACT

The banking sector is considered to be an important source of financing for most businesses. The common assumption, which underpins much of the financial performance research and discussion, is that increasing financial performance will lead to improved functions and activities of the organizations. The subject of financial performance and research into its measurement is well advanced within finance and management fields. It can be argued that there are three principal factors to improve financial performance for financial institutions; the institution size, its asset management, and the operational efficiency. To date, there have been little published studies to explore the impact of these factors on the financial performance, especially the commercial banks.

This study proposes that there are measurable linkages among bank's size, asset management, the operational efficiency, and the financial performance. The purpose of this study is to analyze the financial performance and relationship to the global financial crisis on the listed commercial banks for the financial periods 2004-2009. In addition, to examine the relationships among measures such as return on assets (ROA) and to discuss their impact on the bank's performance. Financial analysis is used to quantitatively examine the differences in performance among commercial banks in Kenya, and the banks are ranked based on their financial measures and performance for each bank.

There is substantial uncertainty regarding the future impacts of the crisis, which is a major deterrent to investment, in turn a major driver of economic growth. A decomposition analysis for Kenya estimated that the impact of reduced growth would be to increase the headcount poverty ratio, affecting other human indicators.

Kenya has not articulated a strong view on how to handle the crisis, although the central bank has taken some actions.

TABLE OF CONTENTS

	Page
Declaration-----	ii
Acknowledgement-----	iii
Abstract-----	iv
Table of Contents-----	v
CHAPTER ONE INTRODUCTION-----	1
1.1 Background -----	1
1.2 Statement of the problem-----	3
1.3 Objective of the study-----	5
1.4 Significance of the study-----	5
CHAPTER TWO LITERATURE REVIEW-----	6
2.1 Concept of financial crisis-----	6
2.2 Theoretical Review-----	6
2.3 Causes of financial crisis -----	8
2.4 Forms of global financial crisis -----	12
2.5 Solutions to global financial crisis -----	15
2.6 Positive impact of global financial crisis-----	20
2.7 Empirical studies-----	20
2.8 Summary of Literature Review-----	23
CHAPTER THREE RESEARCH METHODOLOGY-----	24
3.1 Introduction-----	24
3.2 Research Design-----	24
3.3 Population-----	24
3.4 Data Collection-----	24
3.5 Measurement of variables-----	25
CHAPTER FOUR DATA ANALYSIS AND INTERPRATATION OF RESULTS-----	26
4.1 Introduction-----	26
4.2 Return on Assets-----	26
4.3 Return on Equity-----	29
4.5 Conclusion-----	33
CHAPTER FIVE SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATION-----	34
5.1 Summary of findings and conclusion-----	34
5.2 Recommendations-----	35
5.3 Limitations of study-----	36
5.4 Suggestions for further research-----	36
REFERENCES-----	38
APPENDICES-----	42

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The term financial crisis is applied broadly to a variety of situations in which some financial institutions or assets suddenly lose a large part of their value. In the 19th and early 20th centuries, many financial crises were associated with banking panics, and many recessions coincided with these panics. Other situations that are often called financial crises include stock market crashes and the bursting of other financial bubbles, currency crises, and sovereign defaults. Many economists have offered theories about how financial crises develop and how they could be prevented. There is little consensus, however, and financial crises are still a regular occurrence around the world (Shiller, 1999).

The 2007-2009 financial crisis has culminated in one of the most severe economic downturns in modern history probably even the worst since the Great Depression. The causes for the breakdown are manifold. Still, systematically underestimated risks can be seen as major cause for the almost collapse of the global financial system. The roots of the current financial crisis lie in the U.S. housing and mortgage market. A surplus of available funds from abroad generated by the macroeconomic imbalances in the U.S. centric global economy combined with a sustained decrease of U.S. interest rates at the beginning of the new millennium induced a housing boom in the U.S. This boom was heated by a rapid and careless expansion of mortgage lending with an unusually low compensation for risk-taking. Lending decisions were taken under the faulty assumption of ever rising real estate prices (Basse et al., 2009).

Basse et al., (2009) observed that after the burst of the dot-com bubble in 2001, investors around the world searched for investment alternatives that were both, presumed to be safe and profitable. This was also a consequence of declining returns on many traditional safe long-term investments (e.g., government bonds). The financial industry reacted to this new environment and designed capital market instruments which derived their value from mortgage payments and house prices (e.g., mortgage-backed securities (MBS) and collateralized debt obligations (CDO)). In other words, relatively illiquid financial assets were transformed into liquid and tradable capital market instruments. In doing so, market participants all around the world were enabled to participate in the booming U.S. housing

market. Furthermore, by distributing the originated mortgages the financial institutions regained liquidity, which could then be used for additional mortgage activities. As a result, the amount of these financial innovations increased massively in the years leading up to the start of the crisis in 2007 a boom in the mortgage market was unleashed.

Securitized products combined many individual loans in complex, to some extent even abstruse, ways. These new products became so complicated that market participants even the firms that designed the securities were not able to entirely comprehend the risks inherent to these financial innovations. Even authorities (e.g. policy-makers, regulators, supervisors) and rating agencies did not fully understand all aspects of these products (Basse et al., 2009).

The credit boom began to unravel in early 2007 when signs of economic weakness started to appear and a downward spiral was triggered that continues up to now. The rise of interest rates pressurized mortgaging and suppressed real estate demand. House prices in parts of the U.S. began to fall, (sub prime) mortgage delinquencies and defaults rose, forced sales of collaterals increased and the downturn in house prices intensified. Global financial institutions that had borrowed and invested heavily in the financial innovations described above started to experience major problems due to significant losses (Wheelock, 2008).

The crisis deepened in September 2008 when the failure or near-failure of several major financial institutions caused market participants to panic. As a consequence, financial and credit markets froze up. The gloomy economic prospects and the loss of confidence in the financial sector had a huge negative impact on share prices all over the world. Falling stock markets, a swaying financial system, and an emerging credit crunch triggered an extremely rapid and deep contraction in global economy which persisted through the first months of 2009 (Bullard, 2009).

1.1.2 Financial performance measures of Commercial Banks

Generally, the financial performance of banks and other financial institutions has been measured using a combination of financial ratios analysis, benchmarking, measuring performance against budget or a mix of these methodologies (Avkiran, 1995). The financial statements of commercial banks that are published commonly contain a variety of financial ratios designed to give an indication of the bank's performance. (Arzu Tektas, and Gunay, 2005) discussed the asset and liability management in financial crisis, they argued that an

efficient asset-liability management requires maximizing bank's profit as well as controlling and lowering various risks, and their study showed how shifts in market perceptions can create trouble during crisis.

1.2 Statement of the Problem

Most of the financial institutions around the world admitted that they already felt the global economic and financial crisis. The adverse effect of the crisis is first felt in the financial institutions and can turn into worse because of the macroeconomic balances. Following this effect is the relative and significant pressure on the market because of the inflation (ADB, 2008). The 2007-2009 financial crisis can be traced to a decade of low interest rates in the United States of America during the 1990s, which in turn spurred liberal lending practices by commercial banks to clients that had no ability to repay loans (the so called sub-prime clients), thereby compromising the quality of loans held by financial institutions. The widespread nature of lending to the sub-prime market, in turn, promoted a boom in the property market (Nyangito, 2009).

Banks are the first institution that will feel the meltdown of the financial elements due to the global crisis, but because of the other players that keep the engine of the economy going, the support to have a stable economy is very clear (Keat, 2009).

Banks and other financial institutions were highly leveraged, creating incentives for excessive risk taking by equity holders. Added to this 'moral hazard' was explicit deposit insurance available to these institutions, as well as implicit guarantees of bailout for institutions deemed too large or too important to fail in the context of weak corporate governance and ill-advised executive compensation contracts, leading to distorted incentives (Mwega, 2009).

While Kenya's banking system seems poised to withstand the crisis, the Nairobi Stock Exchange has been adversely affected and foreign direct investment and remittances seem likely to be affected in the future. Tourism has suffered a blow and export prices have declined. The crisis has aggravated the current account deficit, depreciating the national currency, and also the budget deficit. Among third-party effects, the decline in the price of oil owing to plummeting demand has brought some relief to the country (Mwega, 2009).

There is now a relatively large literature on the global financial crisis (e.g. Kilonzo, 2008; Krugman, 2008; Senbet, 2008). Senbet and others attribute the US financial crisis to several

factors. First, the housing boom and sub-prime lending, with insufficient collateral or proof of financial condition required by lending institutions. The housing boom created strong incentives for investment in homes, leading to overbuilding. Home ownership increased to about 70% of the population, from about 60% historically. The large amount of home ownership was financed mostly by borrowed money. Banks and other financial institutions bet big on home prices, with about 56% of outstanding mortgage loans in August 2008 being sub-prime.

The Banking industry in Kenya is governed by the Companies Act, the Banking Act, the Central Bank of Kenya Act and the various prudential guidelines issued by the Central Bank of Kenya (CBK). The banking sector was liberalized in 1995 and exchange controls lifted.

The main challenges facing the Banking sector as observed by PWC today include;

New regulations; For instance, the Finance Act 2008, which took effect on 1 January 2009 requires banks and mortgage firms to build a minimum core capital of KShs 1 billion by December 2012. This requirement, it's hoped, will help transform small banks into more stable organizations. The implementation of this requirement poses a challenge to some of the existing banks and they may be forced to merge in order to comply.

Global financial crisis experienced in late 2008 is expected to affect the banking industry in Kenya especially in regard to deposits mobilization, reduction in trade volumes and the performance of assets.

The concern for most Kenyans and investors is the extent to which the contagion effect of the global crisis will affect the domestic economy. Among the questions being asked are: how will the domestic economy be affected? Through what channels will the global crisis permeate the domestic economy? What is the Central Bank or the larger Government of Kenya doing to mitigate any of these effects? What policy actions is the Central Bank and the Government supposed to undertake when such crisis occur? How does the global financial crisis affect economic outlook domestically? (Nyangito, 2009).

1.3 Objective of the Study

The objective of this study will be to:

Examine the impact of 2007-2009 global financial crisis on financial performance of commercial banks in Kenya.

1.4 Significance of the Study

Commercial Banks

This study will bring out how global financial crisis came about and its causes and the suggested solutions: this will help banks in the financial system by striving to provide unbiased, transparent and relevant information about the economic performance and condition of businesses. Effective financial reporting depends on high quality accounting standards as well as the consistent and faithful application and rigorous independent audit and enforcement of those standards.

Academicians and policy makers

The findings of this study will provide an informed basis for further research by academicians to shed more light on global financial crisis and to develop new models to successfully respond to the ongoing global financial crisis. The study will contribute to new findings to already existing literature on effects of global financial crisis to commercial banks and will act as a base for policy formulations and guide for further research in Kenya and the world at large.

Public

To the public the study is of great importance to investors and other financial market participants in their resource allocation decisions and to regulators and other users. The confidence of all these users in the transparency and integrity of financial reporting is critically important to global financial stability and sound economic growth.

CHAPTER TWO

LITRATURE REVIEW

2.1 The Concept of Financial Crisis

The term financial crisis is applied broadly to a variety of situations in which some financial institutions or assets suddenly lose a large part of their value. In the 19th and early 20th centuries, many financial crises were associated with banking panics, and many recessions coincided with these panics. Other situations that are often called financial crises include stock market crashes and the bursting of other financial bubbles, currency crises, and sovereign defaults (Kindleberger and Aliber, 2005, Laeven and Valencia, 2008).

Some economic theories that explained financial crises includes the World systems theory which explained the dangers and perils, which leading industrial nations will be facing (and are now facing) at the end of the long economic cycle, which began after the oil crisis of 1973. While Coordination games, a mathematical approach to modelling financial crises have emphasized that there is often positive feedback between market participants' decisions (Krugman, 2008). Positive feedback implies that there may be dramatic changes in asset values in response to small changes in economic fundamentals, Minsky's theorised that financial fragility is a typical feature of any capitalist economy and financial fragility levels move together with the business cycle, but the Herding and Learning models explained that asset purchases by a few agents encourage others to buy too, not because the true value of the asset increases when many buy (which is called "strategic complementarity"), but because investors come to believe the true asset value is high when they observe others buying (Avery and Zemsky, 1998, Chari and Kehoe, 2004, Cipriani and Guarino, 2008).

2.2 THEORITICAL REVIEW

2.2.1 Uncertainty and Herd Behavior Theory

This describes how individuals in a group can act together without planned direction. The term pertains to the behavior of animals in herds, flocks, and schools and to human conduct during activities such as stock market bubbles and crashes. Large stock market trends often begin with and end with periods of frenzied buying (bubbles) or selling (crashes). Many observers cite these episodes as clear examples of herding behavior that is irrational and driven by emotion-greed in the bubbles and fear in crashes. The work of herding has been studied under behavioral finance by Robert Shiller, Ivo Welch, Tversky, Bikhchandani and Hirshleifer. Hey and Morone (2004) analyzed a model of herd behavior in a market context. Outcome is that herd behavior is from private information not publicly shared. According to research, investors acting on private information and the behaviour of others may end up

choosing the socially undesirable option, which could include panic selling at low prices and this, destroy the financial market.

2.2.2 Monetary Theory and Stock Market Volatility Theory

This theory states that a chain leading to a crisis is typically thought to start when some event causes agents to demand liquidity in excess of their normal cash flows with pressure from depositors on illiquidity local banks. Banks withdraw from the reserves with the central bank to be able to pay the banks. Central bank then liquidates assets and borrows from abroad leading to banks selling their able securities at a loss leading to acute financial stringency in the money market which often degenerates to financial crisis.

It has been said that such a situation occurs when savings are low, savers draw on past savings, and as banks find themselves short of finances, they borrow from the Central bank which in turn borrows from abroad or liquidates assets (Dewald, 1972).

Stock market volatility theory suggests a connection between the stock market volatility and crisis where stock market crashes precede and include banking panics and recessions. The line of argument is that because of bubble volatility in the stock market is higher than normal and the demand for credit to finance, stocks speculation soars, pushing short term interest rates up. Stock speculation is unrelated to fundamentals and builds its momentum to the steady rise of stock prices. When the bubble bursts, the insolvency of those banks that finance public speculation becomes publically knowledge. (Rochet, 2008),

2.2.3 Business Cycle Theory and Interest rates Theory

A crisis is said to occur at the peak of the expansion of the business cycle phase of the business cycle with deterioration of the financial position of several firms. A reduced outlook future profitability leads to creditors revaluating the amount of credit to be issued they refuse to give additional credit, seek liquidation of outstanding loans. The inability of firms to refinance debt forces them to liquidate assets and induces a multiplicative contraction in business profit leading to distress, assets markets crash and financial crisis ensues (Kindleberger & Aliber, 2005).

Sky rocketing interest rates lead to: a decline in asset prices, increased bankruptcy and insolvency leading to substantial drops in the stock of money in circulation, a breakdown in

allocation mechanism of financial capital leading to financial crisis (Kindleberger & Aliber, 2005).

2.3 CAUSES OF FINANCIAL CRISIS

The reasons for this crisis are varied and complex, but largely it can be attributed to a number of factors in both the housing and credit markets, which developed over an extended period of time. Some of these include: the inability of homeowner to make their mortgage payments, poor judgment by the borrower and/or lender, speculation and overbuilding during the boom period, risky mortgage products, high personal and corporate debt levels, financial innovation that distributed and concealed default risks, central bank policies, and regulation (Stiglitz, 2008).

Avgouleas (2008) enumerated the causes of the crisis as: breakdown in underwriting standards for subprime mortgages; flaws in credit rating agencies' assessments of subprime Residential Mortgage Backed Securities (RMBS) and other complex structured credit products especially Collateralized Debt Obligations (CDOs) and other Asset-Backed Securities (ABS); risk management weaknesses at some large Kenyan financial institutions; and regulatory policies, including capital and disclosure requirements that failed to mitigate risk management weaknesses.

Taking the views of the various commentators into consideration, the current financial crisis is caused by the followings;

2.3.1 Asset Price Bubbles and Credit Booms

Nyangito (2009) observed that house prices sharply increased in Kenya and other markets prior to the current crisis. Moreover, the patterns of asset prices in this episode are reminiscent of those in other major financial crises episodes. The overall size of the Kenya housing boom and its dynamics—including rising house prices in excess of 30 percent in the five years preceding the crisis and peaking six quarters prior to the beginning of the crisis—is remarkably similar to house prices developments in the previous banking crises in advanced economies. Such sharp increases in house prices were also common to other countries hard-hit by the crisis and were associated with rapid growth in credit aggregates. House prices rose rapidly in many countries now caught in the financial turmoil. These housing booms were generally fueled by fast rising credit resulting in sharply increased household leverage.

The subprime mortgage market sustained episodes of rapid credit growth generally coincide with large cyclical fluctuations in economic activity—with real output, consumption, and investment rising above trend during the build up phase of credit booms and falling below trend in the unwinding phase. In the upswing, the current account tends to deteriorate, often accompanied by a surge in private capital inflows. Increases in house prices and the real exchange rate often accompany such credit booms. (Mendoza and Terrones, 2008; Claessens, Kose and Terrones, 2008).

Aggregate credit growth in the Kenya's financial sector was less pronounced than in previous episodes, reflecting slower corporate credit expansion, household debt increased sharply. Household indebtedness rose rapidly after 2000, driven largely by outstanding mortgages, with historically low interest rates and financial innovation contributing and in spite of low interest rates, debt service relative to disposable income reached a historical high. The increased leverage left households vulnerable to a decline in house prices, a tightening in credit conditions and a slowdown in economic activity. Similar patterns existed in several current crisis countries (IMF, 2008).

As in other crises, the fast expansion of credit seems to have played a role in the current crisis, or in at least in aggravating the consequences of the crisis in the Kenya's financial market, and a number of other advanced countries and emerging markets. While historically only a minority of credit booms ends up in a financial crisis, the probability of a crisis increases with a boom. Furthermore, the larger the size and duration of a boom episode, the greater the likelihood that it results in a crisis. The mechanisms linking credit booms to crises include increases in leverage of borrowers (and lenders) and a decline in lending standards (IMF, 2008).

2.3.2 Regulation and Supervision

Past crises often followed expansions triggered by financial liberalization not accompanied by necessary regulatory reforms and supervisory enhancements. Imbalances often resulted from badly sequenced regulatory reforms. Poorly developed domestic financial systems were often unable to intermediate large capital inflows in the wake of capital account liberalizations. Poorly designed financial reforms and deficient supervision often led to currency and maturity mismatches and to large and concentrated credit risks (Laeven and Valencia, 2008).

In this crisis, although perhaps in more subtle forms, regulatory approaches to and prudential oversight of financial innovation were insufficient as well. As in the past, but this time in

advanced countries, finance companies, merchant banks, investment banks and off-balance sheet vehicles of commercial banks operated—to varying degrees—outside banking regulations. But as this “shadow banking system” provided increasingly important avenues for intermediation, it grew without adequate oversight and led to systemic risks. Regulators also underestimated the conflict of interests and information problems associated with the originate-to-distribute model. Not only did this harm consumers of financial services, but it also created the potential for chain reactions leading to systemic risk.

As happened often before, the focus of authorities remained primarily on the liquidity and insolvency of individual institutions, rather than on the resilience of the financial system as a whole. This meant an underestimation of the probability and costs of systemic risk. At the international level, insufficient coordination among regulators and supervisors and the absence of clear procedures for the resolution of global financial institutions hindered efforts to prevent and contain the impact and transmission of the crisis (Laeven and Valencia, 2008).

2.3.3 Leverage

Tirole (2002) observed that the build-up of an unusually high degree of leverage of financial institutions and borrowers contributed to the propagation of shocks. Leverage increased sharply in the financial sector, directly at commercial banks in Kenya, and through the shadow banking system and the rising share of investment banks and non-deposit-taking institutions in Kenya moreover, the leverage build-up among households especially differed from previous crises. In the run-up to Kenya’s real estate crisis, for example, while the household debt-to-income ratio increased sharply, measures of households’ leverage (the household debt-to-assets ratio) declined, suggesting that Kenya homeowners built equity in their properties as real estate prices soared.

This high leverage limited the system’s ability to absorb even small losses and contributed to the rapid decline in confidence and increase in counterparty risk early on in the crisis. Loan-to-income values larger than in the past left households highly exposed to shocks, while at the same time high loan-to-value mortgages allowed even moderate declines in house prices to push many households into negative equity. In the financial sector, high leverage meant that initial liquidity concerns gave quickly way to solvency worries. While initial recapitalizations were relatively large and rapid (including through participation of sovereign wealth funds), they were limited to only a few banks and increasingly fell short of losses.

As financial institutions incurred large losses and wrote-down illiquid securities, solvency concerns across markets fueled a process of rapid deleveraging and forced asset sales. Mark-to-market rules forced further deleveraging and fire sales. Hedge funds—facing financing constraints and redemption pressures—further fuelled this rapid unwinding process. This led to further asset price declines, prompting distressed asset sales, rising recapitalization needs, and resulting in a further loss of confidence, coming to a near melt down.

The build-up in leverage (including rising household indebtedness) was not restricted to advanced economies. In some emerging economies, vulnerabilities related to rising reliance on external financing flows grew. Amid global deleveraging, heightened investor risk aversion, and repatriation of funds, many emerging economies suddenly found foreign funding sources increasingly scarce and were confronted with sudden stops or reversals of capital flows. In addition, emerging market corporations faced much higher borrowing costs, limited opportunity to issue equity, and few alternative sources of financing. While official financing filled some of the gaps, emerging markets had to make rapid adjustments, leading to real economic dislocations Árvai et al. (2009).

2.3.4 Government Policies and New Financial Architecture (NFA)

Gary (2007) argues that some critics believed that the crisis was fuelled by US government mortgage policies which encouraged trends towards issuing risky loans. For instance, Fannie Mae Corporation eases credit requirements on loans and this encourages banks to extend home mortgages to people that do not have good enough credit rating.

According to Crotty (2008) NFA is “a globally integrated system of giant bank conglomerates and the so-called ‘shadow banking system’ of investment banks, hedge funds and bank-created Special Investment Vehicles.” This makes excessive risk to build up in giant banks during the boom; and the NFA generated high leverage and high systemic risk, with channels of contagion that transmitted problems in the US subprime mortgage market around the world.

2.4 FORMS OF GLOBAL FINANCIAL CRISIS

2.4.1 Worsening Economic Outlook

According to IMF (2009), the downturn in global growth, the decline in most commodity prices and tighter credit has significantly worsened the economic outlook for sub-Saharan Africa. The institution argues that many countries in sub-Saharan Africa enjoyed robust economic growth in recent years. However, the food and fuel price shocks of 2007–08 that preceded the crisis weakened the external position of net importers of food and fuel, caused inflation to accelerate, and dampened growth prospects.

IMF (ibid) correctly points out that in Africa, frontier and emerging markets were the first to be hit by the crisis. By now however, indirect channels are fully at work in all countries. Risks are mounting that other channels may gain in importance, especially in the financial sector. The frontier and emerging African markets including South Africa, Nigeria, Ghana, and Kenya were first hit through globalization in form of their financial links with other the rest of the world (ROW) especially the developed world. This group of countries, according to IMF (ibid), suffered and suffering from falling equity markets, capital flow reversals, and pressures on exchange rates. Ghana and Kenya for example had to postpone planned borrowing. In South Africa and Nigeria, external financing for corporations and banks is becoming scarce.

2.4.2 Slowdown in Private Capital Flows, Remittances and Aid

As noted by the World Bank (ibid), a slowdown in private capital flows will adversely affect economies that had been relying on these flows to finance much-needed investment, particularly infrastructure investment. Already Ghana and Kenya have postponed sovereign bond issues worth about \$800 million. According to Kiptoo (2009: 16), the sovereign bond for Ghana was to the tunes of \$300 and that of Kenya to the tunes of \$500. Due to the crisis, Tanzania too has cancelled a planned sovereign bond to finance infrastructure.

Connected to the private capital flow are remittances. The World Bank (2008) reports that remittances flowing to Africa from its sons and daughters in the Diaspora is to the tunes of about \$15 billion a year. This will be reduced due to the crisis. Africans in the Diaspora are likely to lose jobs and incomes due to the crisis. Also the flow of migrant workers from Africa and elsewhere to the Diaspora will be substantially reduced by the crisis thank to which labour demand is declining across the globe. There have been protests against employment of foreign labour in such countries as United Kingdom, Spain, Italy and France.

As noted in Ngowi (2009a), Biekpe (2009), World Bank (2008) and Kiptoo (2009), the crisis is likely to lead to reduced foreign aid that flows to the continent in form of Official Development Assistance (ODA). The common arguments among the authors cited here is that donor countries too are affected by the crisis and the countries that depend on ODAs now have increased substantially. This reduces the ability and willingness of donors to keep on giving ODAs.

2.4.3 Increasing Debt and Debt Repayment Pressure

As part of addressing the crisis and its many and far-reaching impacts, African countries are increasingly borrowing from various financial facilities of mainly the IMF, World Bank and Asian countries of China, India and some oil exporting rich countries in the Gulf. The increased borrowing is increasing Africa's indebtedness and associated challenges including repayment capabilities.

Due to the crisis, African countries could face increasing pressure for debt repayment. As the crisis gets deeper and the international institutions and western banks that have lent money to Africa need to shore up their reserves more, one way could be to demand debt repayment. This could cause further cuts in social services such as health and education, which have already been reduced by the crisis and policies from previous epochs. The policies include privatization and the associated cost-sharing. Any aggressive demands of debt repayment will make the situation in most African countries all the more worrisome World Bank (2008).

2.4.4 Banking Crisis and Speculative Bubbles and Crashes

When a bank suffers a sudden rush of withdrawals by depositors, this is called a bank run. Since banks lend out most of the cash they receive in deposits, it is difficult for them to quickly pay back all deposits if these are suddenly demanded, so a run may leave the bank in bankruptcy, causing many depositors to lose their savings unless they are covered by deposit insurance. A situation in which bank runs are widespread is called a systemic banking crisis or just a banking panic. A situation without widespread bank runs, but in which banks are reluctant to lend, because they worry that they have insufficient funds available, is often called a credit crunch. In this way, the banks become an accelerator of a financial crisis. Examples of bank runs include the run on the Bank of the United States in 1931 and the run on Northern Rock in 2007 (Allen & Gale, 2007).

Economists say that a financial asset exhibits a bubble when its price exceeds the present value of the future income that would be received by owning it to maturity. If most market participants buy the asset primarily in hopes of selling it later at a higher price, instead of buying it for the income it will generate, this could be evidence that a bubble is present. If there is a bubble, there is also a risk of a crash in asset prices: market participants will go on buying only as long as they expect others to buy, and when many decide to sell the price will fall. Well-known examples of bubbles and crashes in stock prices and other asset prices include the Dutch tulip mania, the Wall Street Crash, the Japanese property bubble of the 1980s, the crash of the dot-com bubble in 2000-2001, and the now-deflating United States housing bubble (Shiller, 1999, 2006).

2.4.5 International Financial Crises and Wider Economic Crisis

When a country that maintains a fixed exchange rate is suddenly forced to devalue its currency because of a speculative attack, this is called a currency crisis or balance of payments crisis. When a country fails to pay back its sovereign debt, this is called a sovereign default. While devaluation and default could both be voluntary decisions of the government, they are often perceived to be the involuntary results of a change in investor sentiment that leads to a sudden stop in capital inflows or a sudden increase in capital flight. Several currencies that formed part of the European Exchange Rate Mechanism suffered crises in 1992-93 and were forced to devalue or withdraw from the mechanism. Another round of currency crises took place in Asia in 1997-98. Many American countries defaulted on their debt in the early 1980s. The 1998 Russian financial crisis resulted in a devaluation of the ruble and default on Russian government bonds (Krugman, 1995).

Negative GDP growth lasting two or more quarters is called a recession. An especially prolonged recession may be called a depression, while a long period of slow but not necessarily negative growth is sometimes called economic stagnation.

Since these phenomena affect much more than the financial system, they are not usually considered financial crises per se. But some economists have argued that many recessions have been caused in large part by financial crises. One important example is the Great Depression, which was preceded in many countries by bank runs and stock market crashes. The subprime mortgage crisis and the bursting of other real estate bubbles around the world have led to recession in the U.S. and a number of other countries in late 2008 and 2009. Nonetheless, some economists argue that financial crises are caused by recessions instead of

the other way around. Also, even if a financial crisis is the initial shock that sets off a recession, other factors may be more important in prolonging the recession. In particular, Milton Friedman and Anna Schwartz argued that the initial economic decline associated with the crash of 1929 and the bank panics of the 1930s would not have turned into a prolonged depression if it had not been reinforced by monetary policy mistakes on the part of the Federal Reserve (Friedman & Schwartz, 1971).

2.5 SOME POSSIBLE SOLUTIONS TO GLOBAL FINANCIAL CRISIS

2.5.1 Monetary and Exchange Rate Policies

As inflation falls, monetary policy could be eased. The plunge in global fuel prices, along with the more modest decline in food prices, is providing a disinflationary impulse that in many countries has reduced the need to tighten monetary policy and in others has allowed monetary easing, as has happened in several advanced economies. On the other hand, countries still experiencing demand pressures and excessive inflation may need to tighten Monetary policy IMF (2009)

Exchange rate changes may help to restore competitiveness and growth should commodity price falls prove permanent. In countries with flexible exchange rate regimes that have experienced an adverse terms of trade shock, real exchange rates should be allowed to depreciate to keep the economy stable. Careful coordination with monetary and fiscal policy is needed to avoid a devaluation-inflation spiral. For countries such as those in the CFA franc zone, the decline in the euro against the U.S. dollar has already contributed to real effective exchange rate depreciation. Countries should avoid sliding into protracted exchange rate overvaluation, which would impair longer-term growth and could eventually trigger a disorderly adjustment. IMF (2009)

Using reserves to support a fundamentally overvalued exchange rate would probably be futile. Where the capital outflow seems generalized or where a persistent current account deficit can no longer be financed by the inflows available, a depreciation of the exchange rate would generally be necessary to help smooth the adjustment. However, this decision should be informed by an assessment of the possible negative balance sheet effects should the exchange rate weaken suddenly. This might warrant implementation first of measures to

address weaknesses in bank balance sheets so that the depreciation can support the adjustment.

Introducing new controls on capital outflows should generally be avoided. Experience suggests that they are unlikely to be effective. Moreover, because circumventing them during the height of the crisis would have high returns, they would be hard to enforce. In sub-Saharan African low-income countries in particular, capital controls have been ineffective even in normal conditions. Nevertheless, each country's own circumstances should be independently evaluated; it is conceivable that some controls could make sense in specific circumstances.

2.5.2 Financial Sector Policies and Regulatory Perimeter

There is a need to strengthen supervision and enhance contingency planning. Sub-Saharan Africa has not faced a systemic financial crisis in recent months and its banks have few direct linkages with the toxic assets affecting major financial centers. However, as the slowdown continues monetary authorities need to safeguard against financial vulnerabilities like rising credit risk and possible cross-border contagion, considering that many financial institutions in Africa are foreign-owned. Moreover, supervisory and regulatory oversight should be extended to encompass the entire financial sector. (IMF, 2009)

Monetary authorities should identify banking system vulnerabilities. For this, they should first identify the banks that are most likely to experience difficulties in the current environment. Banking supervision should also insist on high-frequency data to continually assess bank liquidity and solvency and conduct credit risk diagnostics and stress testing. Supervision should be as comprehensive as possible, covering foreign currency risk, bank risk management practices, lending standards, and funding reliability. It should extend to all deposit-taking and credit creating institutions, including nonbank financial institutions. (IMF, 2009)

Procedures for handling a systemic crisis or failures within all the financial services markets should be drawn up promptly in preparation for contingencies.

The region should track current G20 initiatives to strengthen regulation of cross border financial flows and restore investor confidence in order to unfreeze international credit markets and encourage capital inflows and intraregional lending (IMF, 2009)

The potential scope of regulation and supervision needs to be broadened to ensure that all financial activities that pose systemic risks are adequately captured needs. Investors and authorities must be able to better assess and prevent the build-up of systemic risk and address the tendency for activity to shift to unregulated or off-balance sheet entities. This requires a broader perimeter of regulation, especially when institutions become systemically relevant, to enable corrective actions. In addition, robust conduct of business regulation needs to be applied to all institutions whose activities have a substantial role in affecting the flow of credit. At the same time, it should be noted that it is complex to build a new regulatory structure on the distinction of systemically and non-systemically important institutions given that, in the event of a loss in confidence, even small institutions may become systemically relevant. Supervisors should therefore have the mandate and flexibility to extend (and conversely exempt) the perimeter to any segment of the financial system which meets preset criteria. Given the regulatory inconsistencies that could arise by transposing specific supervisory measures for one type of institution to systemically important institutions that do not feature similar activities and risk, it may be more appropriate to focus a broadening of the regulatory perimeter on regulating financial activities instead of institutions per se (IMF, 2009)

Collection and disclosure of information on systemically important institutions and activities needs to be enhanced. The collection, disclosure and analysis of information need to encompass a much larger set of institutions and activities, from insurance companies to hedge funds and to off-balance sheet entities, and to be of much higher quality and timeliness, than is currently the case. The costs of such information collection, disclosure and analysis are likely to be less than the benefits of enhanced risks analysis of systemically-relevant activities of both banks and non-bank financial institutions. This does not necessarily imply identical rules across all types of institutions, whose risk profiles can differ significantly. It does imply that the systemic consequences of their behavior are covered in such a way that contagion risks resulting from their potential failure is contained. A way of achieving this could be to require that financial transactions be fed through clearing houses with effective safeguards. The key is greater transparency. It is not sufficient for there to be more information to be available, it needs also to be readily interpretable and comparable (IMF, 2009).

2.5.3Remittances

Migration is an important issue in Kenya, with the country both a significant destination and source of migration. It is a major destination, particularly for refugees running away from civil conflicts in the region (about 234,000 in the early 2000s). It is also a major source of migrants going both within and outside the region. According to one estimate, there are more than 47,000 Kenyans in the US, 21,000 in Canada, 15,000 in the UK, 7000 in Australia, 5000 in Germany and 1300 in Sweden (Okoth, 2003). Overall, there are about 200,000 Kenyan migrants in Organization for Economic Co-operation and Development (OECD) countries (Lucas, 2005). Harsch (2009) notes that ‘between 750,000 and 1 million Kenyans working in the US and another 200,000 in the UK’.

One way to gauge the importance of migration is to look at the revealed desire to migrate to the US through its Diversity Programme. There are only 50,000 slots available but thousands of Kenyans participate in this so-called Green Card lottery every year. About 3000 won in a typical recent year.

Remittances have increased systematically over time, with the number of Kenyan migrants having increased over time (Lucas, 2005).

Remittances are therefore an important source of domestic household incomes, hence reducing poverty. The World Bank (2006) estimates that remittances reduce the number of people living in absolute poverty in Kenya by 8.5%, even though the poorest do not often have relatives abroad, so do not benefit from remittances directly. Remittances also alleviate credit constraints and therefore improve economic growth.

2.5.4 Other Possible Policy Responses

The current macro-economic and social challenges posed by the global financial crisis require a much better understanding of appropriate policy responses. Some recommended policy responses which can be applied to the situation in Kenya financial sector are enumerated as follows as suggested by Avgouleas (2008)

There needs to be a better understanding of what can provide financial stability, how cross border cooperation can help to provide the public good of international financial rules and systems, and what the most appropriate rules are with respect to development;

There needs to be an understanding of whether and how Kenya and other developing countries can minimize financial contagion;

Kenya and other developing countries will also need to manage the implications of the current economic slowdown – after a period of strong and continued growth in developing countries, which has promoted interest in structural factors of growth, international macroeconomic management will now move up the policy agenda.

Kenya and other developing countries need to understand the social outcomes and provide appropriate social protection schemes.

Central Banks should regulate issue of foreign exchange to companies during this time of crisis to avoid creating a deep in foreign reserves.

Non-bank financial sector such as Pension Funds should also be regulated. This is to protect pension funds from being invested in some of this complex instruments to enable them meet their liquidity obligation as at when due.

African countries should strengthen domestic and regional markets and boost intra-African trade and it is also important to promote domestic tourism.

There is a need for new stability of the global financial system in which the voice of every nation, every continent is heard and their concerns taken into account.

2.6 POSITIVE IMPACT OF GLOBAL FINANCIAL CRISIS

The crisis is far from being threat and challenge only to Africa. There are a number of potentially positive impacts on Africa that are emerging from the crisis. Among such opportunities include reduced commodity prices, which is an opportunity for the countries

that are net importers of such commodities. Other and probably most important opportunities include the need to rethink the way most African countries run their economies.

The crisis is a blessing in a disguise in that African countries have to rethink on a number of policies and practices. The policies and practices include but are not limited to heavy donor dependence in which most African countries become heavily dependent on donors for their budgets. The crisis should be an opportunity to learn that even donors are vulnerable to various shocks as the crisis has revealed. Recognizing the need to be as independent as possible is more important now for African countries as ever.

The crisis is also an opportunity for African countries to reduce dependency on foreign markets especially of unprocessed and none-value added commodities. The crisis had made it difficult and in some places impossible for most African countries to export a number of produced commodities. If the countries had appropriate and adequate value-adding and processing facilities, the burden associated with the inability to export unprocessed commodities would have been less severe (Ngowi, 2009)

2.7 EMPIRICAL STUDIES

Study done by Robert Schiller (November 1987) on Investor Behavior in the October 1987 Stock Market Crash the objective was to learn the general patterns of investor behavior after a couple of major stock market drops and to see what can be learned from these drops. They analyzed the investor driving force under various circumstances which could include fear of downward trend in the market, expected price increase and investor talks and expectations. Schiller and Pound used questionnaire surveys which were aimed at collecting specific facts about individual behavior. In total, there were 3250 questionnaires sent out and 991 completed questionnaires received, for an overall response rate (adjusting for 227 addressee unknown or deceased returns) of 32.8%.

The survey results showed that no news story or rumor appearing on the 19th or over the preceding weekend was responsible for investor behavior, investors' importance rating of news appearing over the preceding week showed only a slight relation to decisions to buy or sell. There was a great deal of investor talk and anxiety around October 19, much more than suggested by the volume of trade, many investors thought that they could predict the market. Both buyers and sellers generally thought before the crash that the market was overvalued,

most investors interpreted the crash as due to the psychology of other investors, many investors were influenced by technical analysis considerations, portfolio insurance is only a small part of predetermined stop-loss behavior, and some investors changed their investment strategy before the crash. All individuals act based on the expectations of what their rivals are doing. This has led to development of herding in that people are forced to follow masses whenever they are dealing with the expectation that if I lose, others will lose as well or all of us to gain.

Matu (2001) conducted a study on the applicability of predictive banking failures in Kenya. The objective of the study was: To test the applicability of the theories of financial crisis predictive model to bank failures in Kenya and to identify the key macroeconomic variables in predicting bank failures in Kenya.

The study covered the period 1984 to 1998 when a total of 37 banks failed in Kenya. The methodology used was a multivariate bank failure predictive model to test the significance of each of the macroeconomic (independent) variables in predicting bank failure. The annual average changes in the macro economic variables were regressed against the percentage of failed banks to the total banks per year as the dependent variable.

He found that the theory of interest rates in predicting banking failure is applicable in Kenya as they are the key macro economic variables useful in predicting banking failure. The monetary theory of financial crisis is not applicable in Kenya because reserve money is a statutory cash ratio set by central bank which is a monetary policy used to control inflation. This study was operationalised using GDP growth stock returns as rate. Where it was found that GDP is not significant in predicting bank failures He found that stock market volatility is applicable in Kenya and it is a key macro- economic variable in predicting bank failure in Kenya.

Mwega (2009) conducted a study on the global financial crisis discussion series paper 7 which the objective was to examine the effects of the global financial crisis, possible impacts (economic, financial and social), the scope and limitations of current policy responses. Mwega studied various financial sectors which included banking sector, capital market and foreign investments. On banking sector firstly he carried a survey on the 43 banks to establish the Capital held by commercial banks in Kenya, 2006 and 2007. This covered capital adequacy ratios covering minimum core capital, gearing ratio, core capital/total risk-weighted assets (TRWA) and total capital/total risk weighted assets. His analyzed data showed that all

the banks meet the four minimum capital requirements, even though the excess amounts and ratios vary from one bank to another.

Secondly, he carried out a trend analysis on Composition of commercial banks assets, 1999-2007. His analysis showed that securities investment and exposure to new financial instruments assets of the banking system in Kenya are dominated by loans and advances, government securities and cash reserves at CBK. Kenyan commercial banks hold minimal derivatives or asset-based securities in their portfolios. They hold mainly risk-free government securities.

On the capital market sector, he carried out trend analysis Net portfolio equity flows, 2000-2007. His findings showed that foreign investors had increased their investments in the Nairobi Stock Exchange (NSE), attracted by high returns. There was a decline in net portfolio flows in 2005-2006, from a peak in 2005. Consequently; the crisis had adversely affected the stock market, with foreign sales exceeding foreign buys in many counters, as foreign investors diversify away from the market. The NSE 20-share index has therefore taken a hit since mid-2008 on the back of the post-election violence and the crisis. This has significantly reduced market capitalization.

On foreign investments, he carried out a trend analysis on Net FDI flows to Kenya, 2000-2007. He identified that the performance of FDI has improved recently. Net FDI increased on average. The data showed that this good performance was driven by a big jump of net FDI flows to the country in 2000 and 2007. The 2000 jump owed to new investments by mobile phone companies (involving mergers and acquisition) and accelerated offshore borrowing by private companies to finance electricity generation activities, which became necessary as a result of the drought. The 2007 upsurge in FDI owed to the coming in of a new mobile telephone operator and the privatization of Telkom Kenya.

2.8 SUMMARY OF THE LITRATUREW REVIEW

The major focus of this work has been on the impacts of the current global financial and economic crisis on Africa in general. It is concluded in this work that the crisis is real and

relevant for Africa contrary to prior held views. The continent has already felt the indirect impacts of the crisis in its economies in general.

What comes out clearly from the causes, impacts and needed solutions to the crisis is that there is a need to confront the crisis squarely and decisively. To do so *inter alia*, it is extremely necessary to strengthen public administration and management systems across the globe in general and in Africa and countries in them in particular.

The reform agenda is enormous, much remains to be done, and new questions have come up for the design of more stable national and global financial systems. The global nature of the financial crisis has made clear that financially integrated markets, while offering benefits in the long run, pose significant short-term risks, with large real economic consequences, and that reforms are needed to the international financial architecture to safeguard the stability of an increasingly integrated global financial system. Such reforms need to be guided by the right principles rather than being formulated as rushed responses to the public pressure. In particular, the reforms should rely on economic reasoning to identify the market failures and the externalities as well as to devise the best way to solve the incentive problems.

Vested interests in the financial services industry are large in most countries and political lobbying will therefore be a key determinant of the final outcome of this process. Intense efforts by the financial industry to protect these interests can create obstacles to implementation of the necessary reforms.¹⁵ Hence, policymakers should not underestimate the ability of the financial industry to influence the reform process as well as the ability of the markets to find loopholes to get around restrictions and recognize limits on what regulation and supervision can realistically achieve.

While there are many lessons for financial reform going forward, as summarized in this paper, there remain many areas of unknowns where further policy research would be useful. These include such areas as competition policy for a stable financial system, approaches to consumer protection in financial services, and the political economy of financial regulation, financial openness, and financial crises.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses the research design, target population, sampling procedure and design, data collection instruments and procedures and data analysis.

3.2 Research Design

The study used trend analysis methodology. In this study profitability of the selected banks 2004-2009 was analyzed.

3.3 Population

According to (Mugenda and Mugenda 1999), a target population is one that the researcher wants to generalize the results of the study. The population for this research comprised of all the listed commercial banks in Kenya that have been in existence in the last five years, licensed and registered under the Banking Act. This therefore excluded any banks that may have gone under during the period, or been brought under statutory management of the Central Bank of Kenya. According to the Central Bank of Kenya, there were 43 licensed banks in Kenya as at 31st December 2009.

3.4 Data Collection

Secondary data was collected from financial statements, newsletters, journals obtained from central bank and commercial banks. This consisted of the past and the present data of the quoted banks in study. Data collected was based on the variables that affect global financial crisis and these variables analyzed.

Financial data was collected for the period three years before (2004-2006) and the years during the financial crisis (2007-2009)

3.5.1 Data Validity and Reliability

All the secondary data was valid and obtained from reliable sources; which eliminated biases and inappropriate data collected.

3.6 Data Analysis

Bailey (1984) defined data analysis as the process of packaging collected information, evaluating it ,putting it into order and structuring its main component in a way that the

findings can be easily and effectively be communicated.’ In data analysis, the data was edited, coded, tabulated and interpreted to check for clarity, completion and consistency of the information in relation to the research objectives. The analysis of quantitative data was carried out using Excel spreadsheet and SPSS version 19 and presented in tables, linear graphs and charts.

T-tests were used to determine whether there is a significant difference in performance during and after the financial crisis period.

3.6.1 Measurement of variables

The measurement of performance in this study is profitability which was measured using ROTA (return on total assets) and ROE (return on equity).

3.6.2 ROTA (Return on total assets)

$$\text{ROTA} = \frac{\text{Net Income}}{\text{Total Assets}}$$

ROTA indicates what earnings were generated from invested capital (assets). ROTA for public companies can vary substantially and was highly dependent on the industry. This is why when using ROTA as a comparative measure, it is best to compare it against previous ROTA numbers. The assets of the company are comprised of both debt and equity. Both of these types of financing are used to fund the operations of the company. The ROTA figure gives investors an idea of how effectively the company is converting the money it has to invest into net income. The higher the ROTA the better, because the company is earning more money on less investment.

3.6.3 ROE (Return on Equity)

$$\text{ROE} = \frac{\text{Net Income}}{\text{Shareholders' equity}}$$

A business that creates a lot of shareholder equity is a sound investment, because the original investors will be repaid with the proceeds that come from the business operations. Businesses that generate high returns relative to their shareholder equity pay their shareholders handsomely and create substantial assets for every shilling invested. These businesses are typically self-funding and require no additional debt or equity investments.

CHAPTER FOUR

DATA ANALYSIS AND INTERPRATATION OF THE RESULT

4.1 Introduction

This chapter presents the results on data analysis on the profitability of the listed banks at Nairobi stock exchange using Return on Assets and Return on equity. There effect of global financial crisis on financial performance of the listed Banks evaluated.

Analysis for each bank will be done three years before the financial crisis and two years after the financial crisis

Analysis was done on Return on equity (ROE) and Return on assets (ROA) for each bank and their relationship to the global financial crisis.

4.2 Return on Assets Measure

Return on assets is given by: $\frac{\text{Net income}}{\text{Net assets}}$.

Net assets

It is an indicator of how profitable a company is relative to its total assets.

ROA gives an idea as to how efficient management is at using its assets to generate earnings.

As shown in table four the net income for each bank is indicated from 2004-2009. Net income was used to calculate both ROE and ROA. Total assets figures for each bank is shown in table five from the years 2004-2009.

These figures are from the financial statement of the nine banks in study.

Table 1

	2004	2005	2006	2007	2008	2009
--	------	------	------	------	------	------

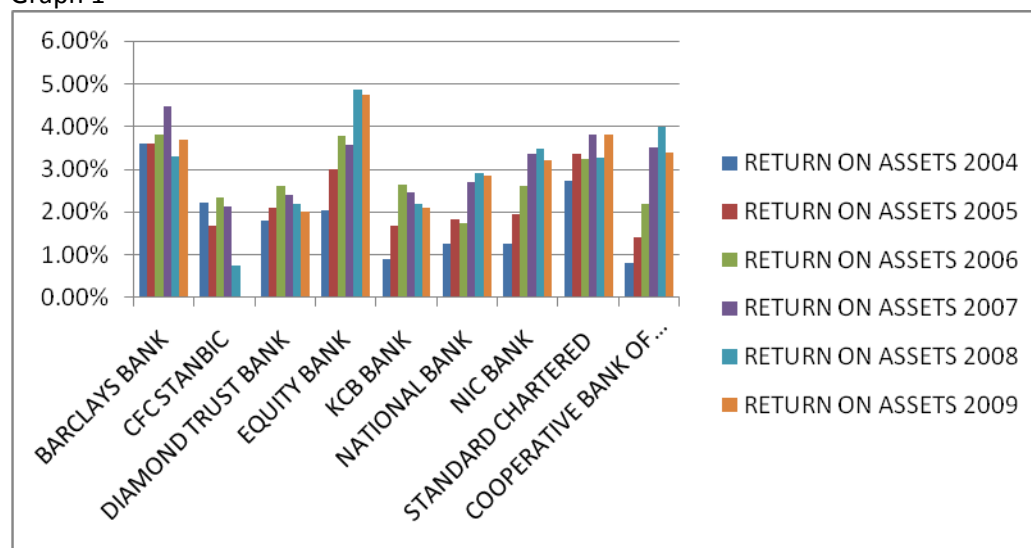
BARCLAYS BANK	3.60%	3.60%	3.82%	4.48%	3.30%	3.70%
CFC STANBIC	2.23%	1.67%	2.33%	2.14%	0.76%	0.03%
DIAMOND TRUST BANK	1.80%	2.10%	2.60%	2.40%	2.20%	2%
EQUITY BANK	2.03%	3%	3.77%	3.56%	4.87%	4.73%
KCB BANK	0.91%	1.69%	2.63%	2.47%	2.19%	2.09%
NATIONAL BANK	1.25%	1.84%	1.73%	2.70%	2.90%	2.84%
NIC BANK	1.25%	1.95%	2.60%	3.36%	3.48%	3.21%
STANDARD CHARTERED	2.73%	3.37%	3.25%	3.81%	3.28%	3.82%
COOPERATIVE BANK OF KENYA	0.80%	1.40%	2.20%	3.50%	4.00%	3.40%
Total	16.60%	20.62%	24.93%	28.42%	26.98%	25.82%
Average	1.84%	2.29%	2.77%	3.16%	3.00%	2.87%

RETURN ON ASSETS

Source: Research data

The result of ROA is given above in the form of table for each listed bank from the year 2004-2009 and the analysis done for each Bank below. The table for ROA is represented in the form of graph as shown below.

Graph 1



Source: Research Data

4.2.1 Barclays Bank of Kenya

In 2004 and 2005 ROA was the same 3.60% but in the year 2006 it slightly went by 0.22% this is an indicator that the company is converting its investments into profits. In 2007 the bank's ROA was the highest as compared to other years this means the company earned more

money hence it had a higher net income. In 2008 it was more hit by the global financial crisis which culminated hence the ROA was lowest at 3.30% but in 2009 it slightly went up by 0.40%.

4.2.2 CFC Stanbic Bank

The company has very low ROA over the years in study, 2004 the ROA was higher than 2005 which went and rose by small percentage in 2006 in 2007 ROA went and dropped again to 2.14%. In 2008 global financial crisis manifested itself by the bank being affected the most which led to its ROA to decline to 0.76% the financial crisis presented itself most in 2009 by ROA declining tremendously to 0.03% this certainly meant that less money was coming in to invest to net income.

4.2.3 Diamond Trust Bank

ROA in the year 2004 was the lowest at 1.80% in 2005 and 2006 it showed an upward trend and from 2007 to 2009 the ROA declined yearly, this is an indication that the global financial crisis started hitting the bank from 2007.

4.2.4 Equity Bank

In 2004 the bank had the lowest ROA as compared to other years, from 2005 to 2007 the bank was adjusting steadily to the global financial crisis with its ROA slightly low but in 2008 and 2009 its ROA was the highest this meant that for both years the net income was high as compared to other past years.

4.2.5 KCB Bank

In 2004 the bank had very low ROA 2005 and 2006 it showed an upward trend then from 2007-2009 it started declining this meant that global financial crisis played a role in the decline in its profitability.

4.2.6 National Bank of Kenya

In 2004 the bank had a lower ROA at 1.25% and the highest in the year 2008 at 2.90% as observed the ROA over the years is quite low, the ongoing global financial crisis started hitting the bank from 2004-2006.

4.2.7 NIC Bank

ROA for the bank kept on fluctuating over the years 2004 being the year that it had the lowest ROA at 1.25% which from 2005-2007 it showed an increasing trend up to 2008, in 2009 it had a slight decline in ROA to 3.21%.

4.2.8 Standard Chartered Bank

The lowest ROA was in the year 2004 at 2.73% this is the year the bank had the lowest net income which implies that the global financial crisis affected its profitability in that year. In 2005 the ROA increase by a small percentage of 0.64% and went again and declined in 2006 in 2007 it rose to 3.81% and decline in 2008 and again 2009 ROA rose to 3.82%.

4.2.9 Cooperative Bank of Kenya

The bank had the lowest ROA in the year 2004 at 0.80% as compared to other years in study this year was greatly hit by the global financial crisis that led to the net income to be low. ROA started increasing from the year 2005 to 2008 this meant that there was more money converted into net income. In 2009 the ROA decline to 3.40% as observed in 2009 the company had higher total assets as compared to other years and the net income was also higher than other years, this means that the company converted some of its money into assets thus led to a decline in ROA.

4.3 Return on Equity

As earlier mentioned in chapter three ROE is give by:

Net income

Shareholder's Equity.

Shareholder's equity is found in the company's balance sheet and at times it is referred to as stockholder's return on investment. It tells the rate that shareholders are earning on their shares. It indicates what a company is generating on the owner's investment. For high growth companies you should expect a higher ROE.

ROE is given in table 2 for net income and shareholder's equity is given in table six.

Table 2

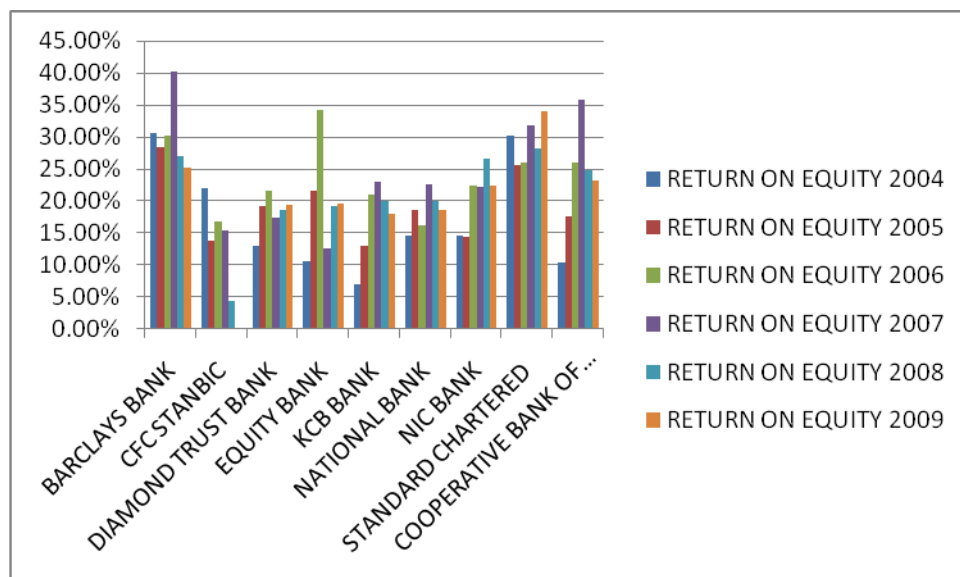
RETURN ON EQUITY

	2004	2005	2006	2007	2008	2009
BARCLAYS BANK	30.62%	28.30%	30.20%	40.30%	27%	25.16%
CFC STANBIC	21.91%	13.89%	16.76%	15.38%	4.40%	0.18%
DIAMOND TRUST BANK	13.00%	19.10%	21.60%	17.50%	18.70%	19.40%
EQUITY BANK	10.70%	21.60%	34.27%	12.67%	19.10%	19.55%
KCB BANK	7%	13%	21%	23%	20%	18%
NATIONAL BANK	14.56%	18.55%	16.22%	22.53%	20%	18.49%
NIC BANK	14.56%	14.43%	22.30%	22.16%	26.67%	22.48%
STANDARD CHARTERED	30.22%	25.57%	26%	31.78%	28.27%	34%
COOPERATIVE BANK OF KENYA	10.50%	17.60%	26%	35.90%	24.90%	23.10%
TOTAL	153.07%	172.04%	214.35%	221.22%	189.04%	180.36%
AVERAGE	17.01%	19.12%	23.82%	24.58%	21.00%	20.04%

Source: Research Data

The figures for ROE are shown above in table form from the years 2004-2009 and those figures are presented graphically as shown below and the analysis for each listed bank analyzed as below.

Graph 2



Source: Research Data

4.3.1 Barclays bank of kenya

ROE in 2004 was quite high at 30.62% which gave an implication that the bank's shareholders earned high on their shares. In the year 2005 ROE dropped to 28.30%, in the years 2006 and 2007 ROE increased meaning that it had higher return relative to their shareholder's equity. In 2008 and 2009 ROE declined by a substantial margin this meant the bank returns was low thus a lower ROE, this is the year that the global financial crisis affected the bank and thus the shareholders earnings was low.

4.3.2 CFC Stanbic Bank

The ongoing financial crisis manifested itself in the year 2009, this is the year that the bank earned very low returns thus the ROE was at 0.18%. The highest ROE was in the year 2008 which stood at 4.40% where the net income was high relative to its shareholder's equity.

4.3.3 Diamond Trust Bank

From the year 2004 to 2006 ROE showed an upward trend which meant that the net income rose over the years, the shareholders were earning a higher return on their on the shares invested into the bank. In the year 2007 it declined to 17.5% this is the year that global financial crisis affected the bank most thus the shareholder's didn't earn much on their share invested into the company. In the years 2008 and 2009 the ROE increased in both years thus a higher return to the shareholders.

4.3.4 Equity Bank

ROE showed an upward trend from the years 2004 to 2006, in 2006 ROE was the highest at 34.27% which meant a higher return to the shareholders to their shares invested. The global financial crisis affected the bank in the year 2004 which ROE stood at 10.70% this year the shareholders earned less on the shares invested.

4.3.5 KCB Bank

The bank had a very low ROE in the year 2004 at 7% this meant that the global financial crisis led to the bank to be less profitable thus affecting its ROE. After 2004 the ROE increased up to the year 2007 for the three years the shareholders earned a higher return on their shares invested, in 2008 and 2009 ROE declined by a small margin which meant that the profitability also declined.

4.3.6 National Bank

ROE over the years in study was fluctuating 2004 being the year that the global financial crisis affected the profitability of the bank thus the shareholders earned less on their shares, in the year 2005 ROE increased to 18.55% it went again and declined in 2006 to 16.22% but rose in 2007 to 22.53%, in the years 2008 and 2009 ROE declined which meant that the global financial crisis affected the profitability of the bank thus less return to the shareholders equity.

4.3.7 NIC Bank

In the year 2005 the bank had a lower ROE at 14.43% which meant that the profitability was low relative to the shareholders equity this year the global financial crisis affected the bank. ROE rose in the year 2006 to 22.3% and went and declined again in 2007 by a minimal marginal but in the year 2008 ROE was the highest at 26.67% which meant that the shareholders earned more on their shares invested to the bank, in 2009 ROE declined by quite a large margin thus profitability was also low.

4.3.8 Standard Chartered bank of Kenya

ROE over the years kept on fluctuating, in 2004 ROE was quite high then it went and declined in 2005 by large margin, this year was the most hit by the global financial crisis where the shareholders earned less on their shares invested. In 2006 and 2007 ROE increased and declined in the year 2008, in 2009 it had the highest ROE at 34% where the profitability of the bank was high thus high ROE, this is the year that the shareholders had the highest return on their shares invested in the bank.

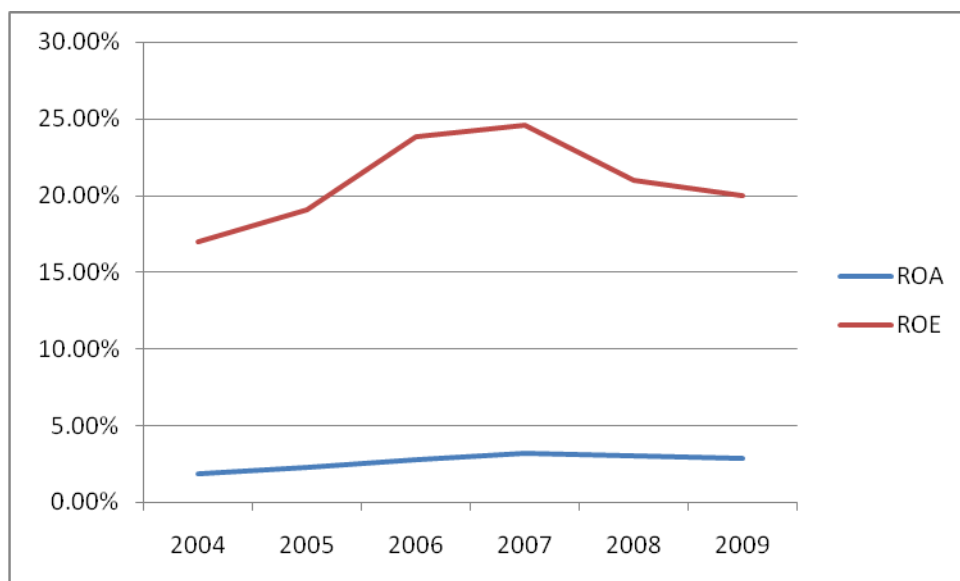
4.3.9 Cooperative bank of Kenya

In the year 2004 the bank had the lowest ROE at 10.50% this was the year worse hit the global financial crisis, from 2005 to 2007 ROE increased and 2007 being the highest at 35.90% where the profitability of the bank was high thus the shareholders had high return on the shares invested. In 2008 and 2009 the bank was slightly hit by the global financial crisis which led to ROE declining.

4.4 Graph for ROA and ROE and Interpretation

The averages for ROA and ROTA are presented in the form of graphs as shown below.

Graph 3



Source: Research Data

As observed from the graph the average ROE for all the listed banks from 2004 to 2006 there was an increase trend this meant that global financial crisis did not have an impact for the listed banks. From 2007-2009 we can observe a decreasing trend In ROE this implied that the global financial crisis had an impact on the profitability of the banks after 2007.

As observed on ROA there is a small percentage difference from the year 2004-2007 which is increasing trend this implied that during that period global financial crisis did not have much impact on the profitability of the banks, 2008 and 2009 showed a declining trend on the average of ROA this meant that the global financial crisis had an impact on the profitability of the listed banks.

4.5 Conclusion

The data collected on the listed banks on ROA and ROE and the relationship to the global financial crisis indicates that from the years 2004-2006 global financial crisis did not affect the listed banks as such, as observed from graph 3 there was an increasing trend on the average of ROA and ROE. 2007-2009 is when the financial crisis affected most listed banks. The big banks like Barclays bank of Kenya and Standard Chartered as observed were not affected significantly with the global financial crisis as the small banks.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS.

5.1 Summary of Findings and Conclusions

5.1.1 Summary of Findings

Data analysis of this study revealed that the ranking of Kenya's listed banks based on their total assets is ranked as: Barclays bank of Kenya, KCB, Standard chartered bank, Cooperative bank, CFC Stanbic bank, Equity bank, National bank, NIC bank, Diamond Trust bank. Shareholders equity is ranked as: CFC Stanbic bank, Barclays bank of Kenya, KCB, Standard chartered bank, Equity bank, Cooperative bank, National bank, NIC bank, Diamond Trust bank.

Based on the bank return on assets, the higher rank is Barclays bank of Kenya, Equity bank, Standard chartered bank, NIC bank, Cooperative bank, Diamond Trust bank, National bank, KCB, CFC Stanbic bank. Findings also indicate that the ranking of the banks based on their return on equity is classified as Barclays bank of Kenya to be the first, Standard chartered bank, Equity bank, Cooperative bank, NIC bank, Diamond Trust bank, National bank, KCB and CFC Stanbic bank. Based on the reported ranking, it is concluded that the bank with higher predictors of total assets or shareholder equity does not always mean that it has better profitability performance.

Findings also indicate that in the year 2004-2006 before the financial crisis impacted on the banks before the global financial crisis ensued as indicated by performance as indicated by ROTA and ROE was higher in 2007 than in the pre-financial crisis years. This could be attributed to the fact that the effect of the financial crisis had not taken effect on the banking sector. Findings also indicate that after 2007 most banks ROE and ROA dropped by a great margin an indication of negative effect of the financial crisis. Additional changes in the economy such as the general elections could have impact negatively on the performance of the commercial banks.

The results of correlations analysis between independent variables and dependent variable showed that existence of strong positive correlation between financial performance and the operational efficiency. A moderate positive correlation relationship (3.7%) exists between ROA and average assets. Moreover, there is a significant positive correlation between

financial performance and ROA. Based on these correlations, then the first hypothesis was accepted. Thus, there is a positive relationship among return on assets and return on equity. The summary result of the analysis of variance is shown in table 7 for testing the hypothesis. The testing rule is to accept alternate hypothesis (H1) if the calculated F.Sig less than 0.05. Therefore, there is a positive and negative impact of independent variables of financial performance measured by ROE and ROA respectively. It is clear from table 7 that values of F.Sig 0.790 which is more than 0.05 shows there is lower bound of the true significance between the financial performance and the global financial crisis and 0.037 for ROA is less 0.05 level which shows there is true significance between ROA and global financial crisis over the years in study. Therefore, the hypothesis was accepted and not accepted which means that there is and there is no an impact of ROA and ROE on the financial performance of the Kenya Commercial banks.

5.1.2 Conclusions

The importance of this study may be viewed from its contribution to fill an important gap in literature. That is, findings of this study can add to the existing body of the literature, and can serve as a starting point on which future studies can be done. On the practical dimension, this study may help bank decision makers to focus on the major banking activities that may increase the bank ranking and financial performance positions comparing with other banks. Such information should help the management of commercial banks in creating appropriate financial strategies for attaining the required planned financial performance. Finally, the study provides bank managers with understanding of activities that would enhance their banks financial performances. The results of this study imply that it might be necessary for a bank management to take all the required decisions to enhance the financial positions of the bank and these decisions will help to solve the global financial crisis which is affecting most banks.

5.2 RECOMMENDATIONS

A financial crisis is a global phenomenon which tends to recur. Financial economists and socialists ought to study and come up with realistic solutions to global financial crisis. The global financial crisis has revealed the need to rethink fundamentally how financial systems are regulated. It has also made clear a systemic failure of the economics and finance

profession. Over the past three decades, finance scholars and economists have largely developed and come to rely on models that disregard key factors—including heterogeneity of decision rules, revisions of forecasting strategies, and changes in the social context—that drive outcomes in asset and other markets.

It is notable that no theories have been put forth on the solutions to global financial crisis. This is an area of finance that would need to be studied.

The crisis is still in its relevance infancy stage of development. Its impacts are and will still continue to unfold as time passes. There is a need for more detailed, country specific and cross country field-based empirical studies on the crisis, its impacts, solutions and mechanisms to prevent a future one. There is also a need to be proactive instead of being reactive in addressing the crisis in general and its impacts in the African economies in particular. Among other things, there is a need to be vigilant as the crisis keeps on unfolding and taking measures to reduce its negative impacts. Among the measures at macro-level include expansionary fiscal and monetary policies and cooperation with the global community.

5.3 Limitations of the Study

The time factor was one of the limitation, only some of the important selected areas was selected, not all areas could be studied due to time factor.

The study has not been researched in depth so the data had to be obtained in many different sources that contained areas on the topic in study.

Secondary data was used in the data collection, most of the data was not available in the financial statement so calculation had to be done for some of them and it was not easy to get the right information if telephone interview was done.

5.4 Suggestions for Further Research

There is so far no study done to predict an occurrence of a financial crisis despite having many recurring crises, for instance the stock market crash of 1929 in starting USA and a similar one recurred, starting in Hong Kong in 1987, spreading to Europe. Various articles and theories have been written on the possible causes, indicators and solutions to a financial crisis. However, none of these have been fully empirically tested and documented to bring forth a blue print or to form a seminal paper.

Various articles and theories have been written on the possible causes, indicators and solutions to a financial crisis. However, none of these have been fully empirically tested and documented to bring forth a blue print or to form a seminal paper

A financial crisis is a global phenomenon which tends to recur. Financial economists and socialists ought to study and come up with realistic solutions to global financial crisis. The global financial crisis has revealed the need to rethink fundamentally how financial systems are regulated. It has also made clear a systemic failure of the economics & finance profession. Over the past three decades, finance scholars and economists have largely developed and come to rely on models that disregard key factors—including heterogeneity of decision rules, revisions of forecasting strategies, and changes in the social context—that drive outcomes in asset and other markets.

It is notable that no theories have been put forth on the solutions to global financial crisis. This is an area of finance that would need to be studied.

There is so far no study done to predict an occurrence of a financial crisis despite having many recurring crises, for instance the stock market crash of 1929 in starting USA and a similar one recurred, starting in Hong Kong in 1987, spreading to Europe.

REFERENCES

- African Development Bank (2007, 2008) The Impact of High Oil Prices on African Economies. Economic Research Working Paper 93.
- Allen. F., & Gale, D. (2007). Understanding Financial Crises.
- Arzu Tektas, and Gokhan Gunay, (2005),” *Asset and liability management in financial crisis*”, The Journal of Risk Finance, Vol. 6,
- Árvai, Zsófia, Karl Driessen, and Inci Ötker, 2009, “Regional Financial Interlinkages and Financial Contagion within Europe,” IMF Working Paper No. 09/6.
- Avgouleas, E. (2008) ‘Financial Regulation, Behavior Finance, and the Financial Credit Crisis in Search of a New Regulatory Model’
- Avery, C., and Zemsky, P. (1998), ' Multidimensional Uncertainty and Herd Behavior in Financial Markets' American Economic Review 88, pp. 724-748.
- Avkiran, N.K. (1995),”*Developing an instrument to measure customer service quality in branch banking*”, International Journal of Banks Marketing, Vol.12 No. 6,
- Basse, T. (2009). *REITs and the financial crisis: Empirical evidence from the U.S.* International Journal of business and management, 4,11.
- Biekpe, N. (2009). Impact of Credit Crunch on Foreign Aid in Africa. In “Africa Growth Agenda”. Vol. 6. April – June 2009 Issue.
- Bullard, J. (2009). Three funerals and a wedding. Federal Reserve Bank of St. Louis Review, 91, 1-12. Chandrashekar, V. (1999). Time-series properties and diversification benefits of REIT returns.
- Chari, V., and Kehoe, P. (2004), '*Financial crises as herds: overturning the critiques*' Journal of Economic Theory 119, pp. 128-150.
- Cipriani, M., and Guarino, A. (2008) '*Herd Behavior and Contagion in Financial*

- Crotty, J. (2008) “Structural Causes of the Global Financial Crisis: A Critical Assessment of the ‘New Financial Architecture’” Political Economy Research Institute (PERI)
- Dewald, W. (November 1972). The national monetary commission: A look back, *Journal of monetary credit and Banking* 4,930-56, cited in Canova F, Were financial crises predictable?
- Friedman, M. & Schwartz, A. (1971). A Monetary History of the United States.
- Harsch, E. (2009) ‘Africa Braces for Global Shockwaves’. *Africa Renewal* 22(4)
- Hey, J. D & Morone, A, 2004. "Do Markets Drive Out Lemmings-or Vice Versa?," *Economica*, London School of Economics and Political Science, vol. 71(284), pages 637 ...
- International Monetary Fund 2009b, “Lessons of the Global Crisis for Macroeconomic Policy,” Washington, D.C., February.
- International Monetary Fund, 2006-2009, Global Financial Stability Report, various Issues, Washington, D.C.
- International Monetary Fund, 2006-2009, World Economic Outlook, various issues, Washington, D.C.
- International Monetary Fund, 2008, “Reaping the Benefits of Financial Globalization.” Occasional Paper No. 264.
- International Monetary Fund, 2009a, “Initial Lesson of the Crisis,” SM/09/37, Washington, D.C. February 6.
- International Monetary Fund, 2009c, “Lessons of the Financial Crisis for Future Regulation of Financial Institutions and Markets and for Liquidity Management,” Washington, D.C., February.

- Keat ,H .S .(2009) The impact of the global financial crisis on Asia
- Kindleberger, C. P., & Aliber, R. (2005). *Manias, Panics, and Crashes: A History of Financial Crises*.
- Kilonzo, S. (2008) The Global Financial Crisis: Its impact on Kenya and possible strategies to mitigate the effects, CMA, May 2008
- Kiptoo, C. (2009). The Potential Impacts of the Global Financial Crisis on African Economies. In “Africa Growth Agenda”. Vol. 6. April – June 2009 Issue. (14 –18).
- Krugman, P. (1995). *Currencies and Crises*.
- Krugman, P. 'The widening gyre', New York Times, Oct. 27, 2008.
- Laeven, L., and Valencia, F. (2008), 'Systemic banking crises: a new database' International Monetary Fund Working Paper 08/224.
- Lucas, R.E.R. (2005) ‘Migration and Economic Development in Africa: A Review of Evidence’. Paper presented at the AERC Biannual Research Workshop. Nairobi, 28 May to 2 June.
- Mendoza, Enrique and Marco E. Terrones, 2008, “An Anatomy of Credit Booms: Evidence from Macro Aggregates and Micro Data.
- MacKinlay, A. C(March 1997).. “*Event Studies in Economics and Finance*,” Journal of Economic Literature Vol. XXXV, Issue 1
- Minsky, H. P. (1986, 2008). *Stabilizing an Unstable Economy*.
- Mwega, F (2009). Global Financial Crisis Discussion Series Paper 7: Kenya by School of Economics, U.O.N, May 2009
- Rochet, Jean-Charles (2008) "The Lifecycle of the Financial Sector and Other

- Ngowi, H. P. (2009e). The Global Financial Crisis and its Impacts on Investment in Human Capital. Arusha Tanzania. (April 2009)
- Nyangito, H.O (2009) Impact of the global financial crisis on the Kenyan banking System
- PriceWaterHouseCoopers (PWC) site
- Schiller, R. J. (1999). Irrational Exuberance.
- Stiglitz, J. (2008a), Let's throw away the rule book; Bretton Woods II must establish Economic doctrines that work in emerging economies as well as in Capitalism's heartland.
- Senbet, L.W. (2008) 'The 2008 Financial Crisis: Diagnostic and Policy Responses'. Presentation to the AERC workshop. December.
- Tirole, J. (2002). Financial Crises, Liquidity, and the International Monetary System.
- Wheelock, D. C. (2008). The federal response to home mortgage distress: Lessons From the great depression. Federal Reserve Bank of St. Louis Review.
- World Bank (2006, 2008). World Bank Offers to Help Africa.

APPENDICES

Table 3

Listed banks at Nairobi stock exchange

1. Barclays bank of Kenya
2. CFC Stanbic bank
3. Diamond Trust Bank
4. Equity bank
5. Kenya Commercial Bank
6. National bank of Kenya
7. National Industrial Corporation Bank
8. Standard Chartered Bank
9. Co-orporative Bank

Source:NSE

Table 4

	NET INCOME			IN MILLIONS		
	2004	2005	2006	2007	2008	2009
BARCLAYS BANK	3,820.00	3,729.00	4,492.00	7,078.00	5,518.00	6,091.00
CFC STANBIC	665.00	552.00	940.00	924.00	846.00	35.00
DIAMOND TRUST BANK	262.00	426.00	684.00	1,055.00	1,126.00	1,354.00
EQUITY BANK	136.00	344.00	754.00	1,890.00	3,753.00	4,563.00
KCB BANK	633.00	1,326.00	2,431.00	2,974.00	4,190.00	4,083.00
NATIONAL BANK	382.00	598.00	624.00	1,119.00	1,240.00	1,462.00
NIC BANK	382.00	403.00	677.00	1,049.00	1,484.00	1,526.00
STANDARD CHARTERED	1,832.00	2,452.00	2,634.00	3,469.00	3,250.00	4,732.00
COOPERATIVE BANK OF KENYA	356.00	714.00	1,256.00	2,319.00	3,359.00	3,736.00

Source: Research Data

Table 5

TOTAL ASSETS

	2004	2005	2006	2007	2008	2009
BARCLAYS BANK	106,195.00	104,226.00	117,722.00	157,927.00	168,510.00	164,875.00
CFC STANBIC	29,828.00	33,112.00	43,262.00	34,464.00	111,126.00	127,690.00
DIAMOND TRUST BANK	11,172.00	16,384.00	21,737.00	35,997.00	56,145.00	66,679.00
EQUITY BANK	6,707.00	11,456.00	20,024.00	53,076.00	77,135.00	96,512.00
KCB BANK	69,600.00	78,315.00	92,526.00	120,479.00	191,211.00	195,011.00
NATIONAL BANK	30,593.00	32,583.00	36,122.00	41,414.00	42,695.00	51,404.00
NIC BANK	30,593.00	20,699.00	26,062.00	31,281.00	42,619.00	47,558.00
STANDARD CHARTERED	67,113.00	72,841.00	81,014.00	91,121.00	99,019.00	123,778.00
COOPERATIVE BANK OF KENYA	44,540.00	49,938.00	57,435.00	65,324.00	83,486.00	110,678.00

Source: Research Data

Table 6

SHAREHOLDER'S EQUITY

	2004	2005	2006	2007	2008	2009
BARCLAYS BANK	12,475.00	13,177.00	14,862.00	17,563.00	20,463.00	24,210.00
CFC STANBIC	29,828.00	33,112.00	40,368.00	43,262.00	111,128.00	127,690.00
DIAMOND TRUST BANK	1,437.00	1,652.00	2,868.00	5,052.00	5,905.00	6,998.00
EQUITY BANK	1,271.00	1,593.00	2,200.00	14,917.00	19,659.00	23,338.00
KCB BANK	8,580.00	10,081.00	11,620.00	13,204.00	21,086.00	22,803.00
NATIONAL BANK	2,624.00	3,223.00	3,847.00	4,967.00	6,207.00	7,907.00
NIC BANK	2,624.00	2,792.00	3,036.00	4,737.00	5,565.00	6,792.00
STANDARD CHARTERED	6,063.00	9,589.00	10,129.00	10,916.00	11,498.00	13,917.00
COOPERATIVE BANK OF KENYA	3,394.00	4,067.00	4,834.00	6,460.00	13,609.00	16,185.00

Source: Research Data

Table 7

Descriptives

		Statistic	Std. Error
CASE	Mean	3.50	.764
	95% Confidence Interval for Mean		
	Lower Bound	1.54	
	Upper Bound	5.46	
	5% Trimmed Mean	3.50	
	Median	3.50	
	Variance	3.500	
	Std. Deviation	1.871	
	Minimum	1	
	Maximum	6	
	Range	5	
	Interquartile Range	4	
	Skewness	.000	.845
	Kurtosis	-1.200	1.741
ROE	Mean	20.9200	1.17281

	95% Confidence Interval for	Lower Bound	17.9052	
	Mean	Upper Bound	23.9348	
	5% Trimmed Mean		20.9344	
	Median		20.5000	
	Variance		8.253	
	Std. Deviation		2.87280	
	Minimum		17.00	
	Maximum		24.58	
	Range		7.58	
	Interquartile Range		5.42	
	Skewness		.083	.845
	Kurtosis		-1.137	1.741
ROA	Mean		3.1567	.59801
	95% Confidence Interval for	Lower Bound	1.6194	
	Mean	Upper Bound	4.6939	
	5% Trimmed Mean		3.0719	
	Median		2.9000	
	Variance		2.146	
	Std. Deviation		1.46481	
	Minimum		1.84	
	Maximum		6.00	
	Range		4.16	
	Interquartile Range		1.57	
	Skewness		1.911	.845
	Kurtosis		4.229	1.741

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
CASE	.122	6	.200 [*]	.982	6	.961
ROE	.177	6	.200 [*]	.956	6	.790
ROA	.376	6	.008	.778	6	.037

a. Lilliefors Significance Correction

*. This is a lower bound of the true significance.

