

## **Effect of Financial Sector Policies on Commercial Bank Performance in Kenya: A Critical Review**

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**Abstract:** *This paper examines the purview to which financial sector policies influence commercial bank performance in Kenya. The banking environment in Kenya has, for the past decade, undergone many regulatory and financial reforms, such as capital adequacy, liquidity management, credit risk management and interest rate management policies to include risk and consumer protection. These reforms have brought about many structural changes in the sector and have also encouraged foreign banks to enter and expand their operations in the country. Kenya's financial sector is largely bank-based as the capital market is still considered narrow and shallow. Banks dominate the financial sector in Kenya and as such the process of financial intermediation in the country depends heavily on commercial banks. The performance of the banking industry in the Kenya improved tremendously during the 2003-2013 period and it has mixed feelings on the reason behind the growth, it's attested to financial innovation and financial sector deepening. Financial sector policies and performance of commercial banks has been a concern in the financial industry around the world. Commercial Bank performance from the point of view of shareholders of a bank is obtaining profit by maximizing the revenue and minimizing the costs. Therefore, this article develops a conceptual framework that analyses the relationship between financial sector policies influences commercial bank performance in Kenya.*

**Keywords:** *Financial Sector Policies, commercial bank, Performance.*

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### **I. Introduction**

One key component to any financial market is the banking system. Banks facilitate financial development by mobilizing and allocating funds to investment projects with the greatest long term economic benefits (Muiruri, 2015). Moreover, it is widely acknowledged that a well-structured banking system, defined by its supervisory practices, risk taking, and governance, promotes greater financial performance and economic stability (Vianney, 2013). The economic pillar of the Kenya Vision 2030 identifies the banking sector as one of the six key sectors that are intended to move the economy up the value chain. The strategies taken by the banking industry should therefore be analyzed in the view of understanding their contribution to improve the health of the entire financial system in Kenya (Government of Kenya, 2008). Currently, Kenya's financial system is made up of the Central Bank commercial Banks, the non-bank financial Institutions, development finance companies funded mainly by the government and external development agencies, a National Social Security Fund, Insurance companies, Pension Funds and the Nairobi Security Exchange (NSE).

The existence of an effective banking sector is necessary for every economy because it creates the necessary environment of economic growth and development through its role in intermediating funds from surplus sector to deficit sector of the economic units. Commercial Banks are financial intermediaries whose activities are for collection of savings and lending, thus standing in between the ultimate lender and the borrower and matching the investment requirement of the lender. This stimulates investment as well as international trade and balance of payments. In playing this important role of financial intermediation, the banking sector is seen as effective institution in the use of monetary policy, which relies on the control of money stock in order to influence financial and economic activities (Al-Tamimi, 2010, Aburime, 2005, CBK, 2007).

### **II. Background of study**

Commercial banks play a vital role in the economic resource allocation of countries. They channel funds from depositors to investors continuously. They can do so, if they generate necessary income to cover their operational cost they incur in the due course. In other words for sustainable intermediation function, banks need to be profitable. Beyond the intermediation function, the financial performance of banks has critical

implications for economic growth of countries. Good financial performance rewards the shareholders for their investment. This, in turn, encourages additional investment and brings about economic growth. On the other hand, poor banking performance can lead to banking failure and crisis which have negative repercussions on the economic growth. Thus, financial performance analysis of commercial banks has been of great interest to academic research since the Great Depression.

According to Central Bank of Kenya (2014) out of the 43 commercial banks 30 of them are domestically owned and 13 are foreign owned. In terms of asset holding, foreign banks account for about 35% of the banking assets as of 2014. In Kenya the commercial banks dominate the financial sector. In a country where the financial sector is dominated by commercial banks, any failure in the sector has an immense implication on the economic growth of the country. This is due to the fact that any bankruptcy that could happen in the sector has a contagion effect that can lead to bank runs, crises and bring overall financial crisis and economic tribulations. Despite the good overall financial performance of banks in Kenya, there are a couple of banks declaring losses (Oloo, 2011). Moreover, the current banking failures in the developed countries and the bailouts thereof motivated this study to evaluate the financial performance of banks in Kenya. Thus, to take precautionary and mitigating measures, there is dire need to understand the performance of banks and its determinants.

The extent to which financial sector policies influences financial and economic activities has been widely argued over the years, it is equally accepted that monetary policy affects economic and financial performance of any economy (IMF, 2012). There are divergence views on the extent of the effects and the channels through which these effects are achieved, most financial intermediaries are often apathetic towards channeling resources to productive investment even in the face of high interest rates. An expansionary monetary policy consequently often results in inflation rather than output growth. Investment fuelled by the banking sector is recognized as the catalyst for attaining the twin goals of broad based sustainable economic development and poverty alleviation as investment allows for entrepreneurship and employment creation opportunities that increase incomes for the poor and rich alike. Investment is created through internally generated funds such as profits, retained earnings, and financing from shareholders, or externally generated finances through private placement, public offerings of shares on the stock market (IPO's). Other sources of investment include short term financial sector credit (overdrafts, trade finance, debentures, mortgages, loans), long term capital raising from the secondary markets through corporate debt (preference shares, corporate and infrastructure bonds) and finally foreign direct investment,(Olweny et al,2012).

### **III. Financial Sector Policy And Commercial Bank Performance**

Most economists have agreed that unregulated system of enterprise tends to achieve optimal resource. The argument of Dowd's defense of panoply of government intervention into financial sector is that the central government sponsors deposit insurance. He further argued that government policies of financial system should be abolished (Benston and Kaufman, 1996). However the researcher disagrees with Dowd's defense of free or laissez-faire banking (or free banking) but focus instead on how banks should be regulated to an existing non-laissez-faire structure to achieve best for both international and local. Different financial policies were applied to commercial banks and NBFIs. For example, commercial banks were subjected to lower loan rate ceilings, higher liquidity requirements and limits on private sector credit expansion. They could not levy non-interest fees and service charges that were governed by a variety of liquidity and prudential requirements and were supervised more closely by central bank. With the different regulations, the NBFIs sector expanded rapidly in the 1980s.

Commercial banks set up NBFIs to circumvent central bank regulation and supervision. However, the low entry barriers and inadequate supervision of NBFIs rendered many of them undercapitalized and poorly managed (Ngugi&Kabubo, 1998). However the first, regulatory interventions and capital injections are associated with less liquidity creation. Second, these types of interventions also reduce risk taking. These liquidity creation and risk-taking reduced the effects that recently bailed out institutions in countries such as Northern Rock in the U.K. and UBS in Switzerland that were considered excessive liquidity creators. Third, liquidity creation interventions reduced their bank exposure to credit risk by rebalancing their loan portfolio (Berger, *et al.*, 2010).

A large literature in central banking has investigated the link between inflation rates and central bank independence. However, the 2008-09 global financial crisis reopened the debate on central bank design (Alesina& Stella, 2010). Events that unfolded during this recent crisis have brought attention to the idea that conventional monetary policy aimed only at price stability in fact may increase financial instability. As a result, a wave of reforms concerning the involvement of central banks in banking and financial supervision followed (for example in UK in 2012, Hungary in 2013, Russia in 2013 and Euro area members in 2014). Central banks are now perceived as public policy institutions with the goal to promote monetary and financial stability, a double mandate that might bring a new form of time inconsistency problem (Ueda & Valencia, 2014).

Minimum Capital Requirement is one of the bank specific factors that influence the level of bank profitability. Capital is the amount of own fund available to support the bank's business and act as a buffer in case of adverse situation (Athanasoglou et al. 2005). Banks capital creates liquidity for the bank due to the fact that deposits are most fragile and prone to bank runs. Moreover, greater bank capital reduces the chance of distress (Diamond, 2000). Liquidity is another factor that determines the level of bank performance. Liquidity refers to the ability of the bank to fulfill its obligations, mainly of depositors. According to Dang (2011) adequate level of liquidity is positively related with bank profitability. Ilhomovich (2009) used cash to deposit ratio to measure the liquidity level of banks in Malaysia. However, the study conducted in China and Malaysia found that liquidity level of banks has no relationship with the performances of banks (Said and Tumin, 2011).

Despite banking prudential regulations of 2006 governing commercial banks in Kenya, there have been profound issues in the sector such as liquidity issues such as chase bank and Dubai bank, and frauds which the financial policies could not detect such as imperial bank and charter house bank (Central Bank of Kenya, 2015). High interest rate regime has been a key element of the banking sector which has being argued as the reason for high profitability which has undermined the effectiveness of the Central Bank Rate (CBR) and overall monetary policy, this has necessitated the Capping of interest Rates in Kenya (Central Bank of Kenya, 2016). Obiero, (2002) proposed a high capital requirement to reduce banking failures. Financial regulatory structure reform in Kenya and the perception of financial intermediaries in Kenya and Njeule (2013) studied the effects of Central Bank of Kenya Prudential Regulations on financial performance of Commercial Banks in Kenya. Njeule (2013) study focused on capital adequacy, risk classification of assets and provisioning, foreign exchange risk exposure and corporate governance) the study also analyzed one of the measures of performance referred to as the Return on Asset, the study posited that corporate governance and capital adequacy were key to enhancing performance of commercial banks (Olweny&Omondi,2011).

In all the studies cited, it was evident that the findings were conflicting in terms of major policies which enhance performance and the regulatory frameworks in use, also studies from different regions providing different conclusions, This study therefore sought to investigate the effects' of financial sector policies on commercial bank performance in Kenya . This study was built on the premise that the passage of time and the numerous and significant changes in the commercial banks operating environment have led to different operating environment. Hence this paper analyses the effect of such financial policies on the performance of the financial sector.

#### **IV. Theoretical Framework**

In an attempt to explain the relationship between financial sector policies and commercial bank performance, the researcher focused on five theories as discussed by various scholars: The Efficient Market Hypothesis Theory, Liquidity Preference Theory, Basel II Theory, Adverse Selection Theory, Interest rate parity Theory

##### **The Efficient Market Hypothesis Theory**

In financial economics, the efficient-market hypothesis (EMH) states that it is impossible to "beat the market" because stock market efficiency causes existing share prices to always incorporate and reflect all relevant information. According to the EMH, stocks always trade at their fair value on stock exchanges, making it impossible for investors to either purchase undervalued stocks or sell stocks for inflated prices. As such, it should be impossible to outperform the overall market through expert stock selection or market timing, and that the only way an investor can possibly obtain higher returns is by purchasing riskier investments

There are three major versions of the hypothesis: "weak", "semi-strong", and "strong". The weak form of the EMH claims that prices on traded assets (e.g., stocks, bonds, or property) already reflect all past publicly available information. The semi-strong form of the EMH claims both that prices reflect all publicly available information and that prices instantly change to reflect new public information. The strong form of the EMH additionally claims that prices instantly reflect even hidden or "insider" information. Critics have blamed the belief in rational markets for much of the late-2000s financial crisis. In response, proponents of the hypothesis have stated that market efficiency does not mean having no uncertainty about the future, that market efficiency is a simplification of the world which may not always hold true, and that the market is practically efficient for investment purposes for most individuals

This paper focuses on the semi strong hypothesis since it is the form that government regulation plays is incorporated in enhancing market efficiency thus performance. Indeed, the semi strong hypothesis is used to investigate the positive or negative relationship between market performance and macroeconomic variables since it postulates that economic factors are fully reflected in the price of stocks. Public information can also include data reported in a company's financial statement, the financial situation of company's competitors. Though many empirical patterns emerge four studies report empirical findings running against the EMH; one study views its empirical findings as consistent with the EMH; and, three studies report empirical findings which can be viewed as either consistent or inconsistent with the EMH. Suffice it to say that empirical studies

question the validity of the EMH begin to appear, Fama (1991), after reviewing empirical studies conducted after the publication of his article argues market efficiency per se is not testable. It must be tested jointly with some model of equilibrium, an asset-pricing model.

The Efficient Market Hypothesis has been praised by some security analysts as an enduring truth about financial markets. Ever since Eugene Fama coined the theory of the efficient markets in 1970, it has held a prominent position in investment theory. According to him, "in an efficient market any new information would be immediately and fully reflected in equity prices. Consequently, a financial market quickly, if not instantaneously, discounts all available information. Therefore, in an efficient market, investors should expect an asset price to reflect its true fundamental value at all times." (Stanley & Samuelson, 2009) Seeing the apparent logical soundness of the EMH, Michael Jensen had famously stated that "there is no other proposition in economics which has more solid empirical evidence supporting it than the Efficient Market Hypothesis." (Stout, 2003) Looking back in retrospect, it is easy to see how popular the EMH had been during the middle of the century. In fact, not only did 'market efficiency' become a buzzword among financial analysts by the 1980s but the concept was recognized as fact even by regulators, judges and research scholars from other allied fields. (Shleifer & Summers, 1990) But the fad has faded over the last three decades

### **Liquidity Preference Theory.**

In macroeconomic theory, liquidity preference refers to the demand for money, considered as liquidity. The concept was first developed by John Maynard Keynes in his book *The General Theory of Employment, Interest and Money* (1936) to explain determination of the interest rate by the supply and demand for money. The demand for money as an asset was theorized to depend on the interest foregone by not holding bonds (here, the term "bonds" can be understood to also represent stocks and other less liquid assets in general, as well as government bonds). Interest rates, he argues, cannot be a reward for saving as such because, if a person hoards his savings in cash, keeping it under his mattress say, he will receive no interest, although he has nevertheless refrained from consuming all his current income. Instead of a reward for saving, interest, in the Keynesian analysis, is a reward for parting with liquidity. According to Keynes, money is the most liquid asset. Liquidity is an attribute to an asset. The more quickly an asset is converted into money the more liquid it is said to be.

According to Keynes, demand for liquidity is determined by three motives, the transactions motive: people prefer to have liquidity to assure basic transactions, for their income is not constantly available. The amount of liquidity demanded is determined by the level of income: the higher the income, the more money demanded for carrying out increased spending. Secondly the precautionary motive: people prefer to have liquidity in the case of social unexpected problems that need unusual costs. The amount of money demanded for this purpose increases as income increases. Lastly speculative motive: people retain liquidity to speculate that bond prices will fall. When the interest rate decreases people demand more money to hold until the interest rate increases, which would drive down the price of an existing bond to keep its yield in line with the interest rate. Thus, the lower the interest rate, the more money demanded (and vice versa). The liquidity-preference relation can be represented graphically as a schedule of the money demanded at each different interest rate. The supply of money together with the liquidity-preference curve in theory interacts to determine the interest rate at which the quantity of money demanded equals the quantity of money supplied.

Keynes theory, too, has met with criticism. Firstly, it has been pointed out that the rate of interest is not purely a monetary phenomenon. Real forces like productivity of capital and saving by the people also play an important role in the determination of the rate of interest. Keynes makes the rate of interest independent of the demand for investment funds. Actually, it is not so. The cash-balances of the businessmen are largely influenced by their demand for saving for capital investment. This demand for capital investment depends upon the marginal revenue productivity of capital. Therefore, the rate of interest is not determined independently of the marginal productivity of capital, liquidity preference is not the only concern concerning the rate of interest. The Keynesian theory only explains interest in the short run. It gives no clue to the rates of interest in the long run, the borrower's intention is not how much to reward parting with liquidity as to get a return on investment (Ahmet, 2008).

### **Basel II Theory**

Basel II uses a "three pillars" concept: minimum capital requirements (addressing risk), supervisory review and discipline. The Basel I accord dealt with only parts of each of these pillars. For example: with respect to the first Basel II pillar, only one risk, credit risk, was dealt with in a simple manner while market risk was an afterthought; operational risk was not dealt with at all. The first pillar deals with maintenance of regulatory capital calculated for three major components of risk that a bank faces: credit risk, operational risk, and market risk. Other risks are not considered fully quantifiable at this stage. The credit risk component can be calculated in three different ways of varying degree of sophistication, namely standardized approach, Foundation IRB, Advanced IRB and General IRB2 Restriction. IRB stands for "Internal Rating-Based

Approach"(OECD, 2011).

For operational risk, there are three different approaches – basic indicator approach or BIA, standardized approach or TSA, and the internal measurement approach (an advanced form of which is the advanced measurement approach or AMA). For market risk the preferred approach is VaR (value at risk). As the Basel II recommendations are phased in by the banking industry it will move from standardized requirements to more refined and specific requirements that have been developed for each risk category by each individual bank. The upside for banks that do develop their own bespoke risk measurement systems is that they will be rewarded with potentially lower risk capital requirements. In the future there will be closer links between the concepts of economic and regulatory capital. The second pillar is a regulatory response to the first pillar, giving regulators better 'tools' over those previously available. It also provides a framework for dealing with systemic risk, pension risk, concentration risk, strategic risk, reputational risk, liquidity risk and legal risk, which the accord combines under the title of residual risk. Banks can review their risk management system. The Internal Capital Adequacy Assessment Process (ICAAP) is a result of Pillar 2 of Basel II (Firzil, 2012)

This third pillar aims to complement the minimum capital requirements and supervisory review process by developing a set of disclosure requirements which will allow the market participants to gauge the capital adequacy of an institution. Market supplements regulation as sharing of information facilitates assessment of the bank by others, including investors, analysts, customers, other banks, and rating agencies, which leads to good corporate governance. The aim of Pillar 3 is to allow market discipline to operate by requiring institutions to disclose details on the scope of application, capital, risk exposures, risk assessment processes, and the capital adequacy of the institution. It must be consistent with how the senior management, including the board, assess and manage the risks of the institution (Firzil, 2012).

When market participants have a sufficient understanding of a bank's activities and the controls it has in place to manage its exposures, they are better able to distinguish between banking organizations so that they can reward those that manage their risks prudently and penalize those that do not. These disclosures are required to be made at least twice a year, except qualitative disclosures providing a summary of the general risk management objectives and policies which can be made annually. Institutions are also required to create a formal policy on what will be disclosed and controls around them along with the validation and frequency of these disclosures. In general, the disclosures under Pillar 3 apply to the top consolidated level of the banking group to which the Basel II framework applies (BIS, 2012).

### **Adverse Selection Theory**

The first analysis of adverse selection was by Akerlof (1970) based on the Lemon Principle. He gave the example of extortionate rates which the local moneylender charges his clients. The illustration depicts the high rates of interest in India. Large banks have prime interest rates of between 6 – 10 per cent and the local money lender charges interest from 15 – 50 per cent. The significant difference in the interest charged by the two entities is based on the means of enforcing the transaction contract or personal knowledge of the character of the borrower. Therefore if a middleman tries to arbitrage between the rates of the two moneylenders he is apt to attract all the "lemons" (Akerlof, 1970). The same principle applies to the new and used automobiles example where the bad cars tend to drive out the good cars in the market.

In a general perspective, adverse selection problems arise when the buyer is unable to observe either the seller's characteristics or the contingencies under which the seller operates (Nayyar, 1990). With regards to financial transactions especially in the banking sector, adverse selection occurs when potential bad credit risks are the ones who most actively seek out a loan (Mishkin, 1999). Lenders are often unable to observe the characteristics which induce adverse selection problems and consequently lenders ration credit or charge high borrowing rates (Jappelli & Pagano, 1999). However, those who want to take on big risks are likely to be most eager to take out a loan even at a high rate of interest (Mishkin, 1999). Ultimately, in the case of capital markets, partially informed lenders shy away from making loans at high interest rates because they fear that someone borrowing at a high interest rate is more likely to be a defaulter. This form of screening out good from bad credit risk to tackle the problem of adverse selection is imperfect and in the end will reduce the quantity of loans the lender might otherwise make (Mishkin, 1999)

Nayyar (1990) describes moral hazard as the problems associated with the buyer's inability to observe actions taken by the seller. Additionally, it is impossible for the buyer of services to evaluate whether the seller's actions were proper and adequate because it is difficult to judge the service quality, the service is irreversible and service outcome is uncertain because of exogenous factors. The difference between moral hazard and adverse selection is that adverse selection takes place before the transaction because one party has inadequate information regarding the other party's characteristics. On the other hand, moral hazard ensues after the transaction has taken place because the borrower or the buyer may engage in activities that are undesirable and unknown to the lender (Mishkin, 1999). Banks face both adverse selection or moral hazard problems in its lending activity. Moral hazard arises from the lender's inability to observe borrower's actions that affect the

probability of repayment (Japelli & Pagano, 2000). A borrower may have the incentive to misallocate funds for personal use or to undertake investment in unprofitable projects that serve only to increase personal power or stature (Mishkin, 1999). If the projects fail, the lender is subjected to a loss. This opportunistic behavior by the borrower is a moral hazard to the bank (Japelli & Pagano, 2000). Mishkin (1999) notes that lenders often impose restrictions on borrowers so that borrowers do not engage in behavior that makes it likely to pay back the loan. Nonetheless, such restrictions are costly to enforce and to monitor and inevitably limited in their reach.

### **Interest rate parity Theory**

Interest rate parity is a no-arbitrage condition representing an equilibrium state under which investors will be indifferent to interest rates available on bank deposits in two countries. The fact that this condition does not always hold allows for potential opportunities to earn riskless profits from covered interest arbitrage. Two assumptions central to interest rate parity are capital mobility and perfect substitutability of domestic and foreign assets. Given foreign exchange market equilibrium, the interest rate parity condition implies that the expected return on domestic assets will equal the exchange rate-adjusted expected return on foreign currency assets. Investors then cannot earn arbitrage profits by borrowing in a country with a lower interest rate, exchanging for foreign currency, and investing in a foreign country with a higher interest rate, due to gains or losses from exchanging back to their domestic currency at maturity (Mishkin, 2006). Interest rate parity takes on two distinctive forms: uncovered interest rate parity refers to the parity condition in which exposure to foreign exchange risk (unanticipated changes in exchange rates) is uninhibited, whereas covered interest rate parity refers to the condition in which a forward contract has been used to cover (eliminate exposure to) exchange rate risk. Each form of the parity condition demonstrates a unique relationship with implications for the forecasting of future exchange rates: the forward exchange rate and the future spot exchange rate.

Economists have found empirical evidence that covered interest rate parity generally holds, though not with precision due to the effects of various risks, costs, taxation, and ultimate differences in liquidity. When both covered and uncovered interest rate parity hold, they expose a relationship suggesting that the forward rate is an unbiased predictor of the future spot rate. This relationship can be employed to test whether uncovered interest rate parity holds, for which economists have found, mixed results. When uncovered interest rate parity and purchasing power parity hold together, they illuminate a relationship named real interest rate parity, which suggests that expected real interest rates represent expected adjustments in the real exchange rate. This relationship generally holds strongly over longer terms and among emerging market countries (Natsuko, 2007).

Covered interest rate parity (CIRP) is found to hold when there is open capital mobility and limited capital controls, and this finding is confirmed for all currencies freely traded in the present-day. One such example is when the United Kingdom and Germany abolished capital controls between 1979 and 1981. Maurice Obstfeld and Alan Taylor calculated hypothetical profits as implied by the expression of a potential inequality in the CIRP equation (meaning a difference in returns on domestic versus foreign assets) during the 1960s and 1970s, which would have constituted arbitrage opportunities if not for the prevalence of capital controls. However, given financial liberalization and resulting capital mobility, arbitrage temporarily became possible until equilibrium was restored. Since the abolition of capital controls in the United Kingdom and Germany, potential arbitrage profits have been near zero. Factoring in transaction costs arising from fees and other regulations, arbitrage opportunities are fleeting or nonexistent when such costs exceed deviations from parity. While CIRP generally holds, it does not hold with precision due to the presence of transaction costs, political risks, tax implications for interest earnings versus gains from foreign exchange, and differences in the liquidity of domestic versus foreign assets.

Researchers found evidence that significant deviations from CIRP during the onset of the global financial crisis in 2007 and 2008 were driven by concerns over risk posed by counter parties to banks and financial institutions in Europe and the US in the foreign exchange swap market. The European Central Bank's efforts to provide US dollar liquidity in the foreign exchange swap market, along with similar efforts by the Federal Reserve, had a moderating impact on CIRP deviations between the dollar and the euro. Such a scenario was found to be reminiscent of deviations from CIRP during the 1990s driven by struggling Japanese banks which looked toward foreign exchange swap markets to try and acquire dollars to bolster their creditworthiness.

This equation represents the unbiasedness hypothesis, which states that the forward exchange rate is an unbiased predictor of the future spot exchange rate. Given strong evidence that CIRP holds, the forward rate unbiasedness hypothesis can serve as a test to determine whether UIRP holds (in order for the forward rate and spot rate to be equal, both CIRP and UIRP conditions must hold). Evidence for the validity and accuracy of the unbiasedness hypothesis, particularly evidence for integration between the forward rate and future spot rate, is mixed as researchers have published numerous papers demonstrating both empirical support and empirical failure of the hypothesis.

UIRP is found to have some empirical support in tests for correlation between expected rates of currency depreciation and the forward premium or discount. Evidence suggests that whether UIRP holds

depends on the currency examined, and deviations from UIRP have been found to be less substantial when examining longer time horizons. Some studies of monetary policy have offered explanations for why UIRP fails empirically. Researchers demonstrated that if a central bank manages interest rate spreads in strong response to the previous period's spreads, that interest rate spreads had negative coefficients in regression tests of UIRP. Another study which set up a model wherein the central bank's monetary policy responds to exogenous shocks, that the central bank's smoothing of interest rates can explain empirical failures of UIRP. A study of central bank interventions on the US dollar and Deutsche mark found only limited evidence of any substantial effect on deviations from UIRP.

## **V. Conceptual Model**

The purpose of this study is to develop a model to show the relationship between financial sector policies and the performance of commercial banks in Kenya. As hypothesized in the earlier discussions, financial sector policies is the independent variable whereas performance of commercial banks is the dependent variable in this study. This is diagrammatically illustrated in Figure 1.

### **Capital Adequacy Policy and Commercial Bank Performance**

Capital adequacy refers to the sufficiency of the amount of equity to absorb any shocks that the bank may experience (Kosmidou, 2009). The capital structure of banks is highly regulated. This is because capital plays a crucial role in reducing the number of bank failures and losses to depositors when a bank fails as highly leveraged firms are likely to take excessive risk in order to maximize shareholder value at the expense of finance providers (Kamau, 2009). Although there is general agreement that statutory capital requirements are necessary to reduce moral hazard, the debate is on how much capital is enough. Regulators would like to have higher minimum requirements to reduce cases of bank failures, whilst bankers in contrast argue that it is expensive and difficult to obtain additional equity and higher requirements restrict their competitiveness (Koch, 1995). Beckmann (2007) argue that high capital lead leads to low profits since banks with a high capital ratio are risk-averse, they ignore potential [risky] investment opportunities and, as a result, investors demand a lower return on their capital in exchange for lower risk.

The argument that Companies and firms with more capital are better off than those with less capital itself does not exist. The performance depends on production efficiency Companies and societies. Therefore, to create wealth, capital must be combined with labor, the work of individuals who exchange their time and skills for money. When people invest in capital by foregoing current consumption, they can enjoy greater future prosperity. Individuals or companies can claim ownership to their capital and use. They can also transfer ownership of their capital to another individual or corporation and keep the sale proceeds. Government regulations limit how capital can be used and diminish its value; the tradeoff is supposed to be some benefit to society. The capital structure of banks is highly regulated. This is because capital plays a crucial role in reducing the number of bank failures and losses to the stakeholders. According to Hardy & Bonaccorsi di Patti (2001) and Nwankwo, (1991) capital adequacy is a widely acknowledged key factor in bank performance measurement and evaluation. It is the first of the five CAMEL factors recognized and adopted by the Basel system of bank performance assessment of the Bank for International Settlement (BIS). The used capital adequacy ratio was adopted in the Nigeria banking system in 1990 as stipulated by the bank monitoring and supervising authority which is the Central Bank of Nigeria (CBN).

Beckmann (2007) argue that high capital lead to low profits since banks with a high capital ratio are risk-averse, they ignore potential (risky) investment opportunities and as a result, investors demand a lower return on their capital in exchange for lower risk. The regulation that exists in most countries is capital requirement. Capital adequacy requirements can take a variety of forms. Most countries know their minimum level of required capital. Therefore, many countries require the maintenance of some capital- or solvency- ratio; that is, a minimum ratio between capital and an overall balance sheet magnitude, such as total assets or liability, or some weighted measure of risk assets. The Basel Accord was modified in 2004 introducing more sophisticated ways of computing capital requirements and increasing the focus on risk-management policies and systems in banks. In particular the new regulation, which will start to be implementation from the end of 2006, encourages banks to develop, with supervisory oversight, their own systems to compute minimum capital requirements (Biggar, & Heimler, 2005).

Acharya (2003) noted that minimum capital requirements are an ex ante mechanism to prevent bank failures and closure policies are an ex post mechanism to manage the cost of bank failures. He showed that from bank owners' perspective, the optimal level of bank capital decreases in the extent of regulatory forbearance. In contrast, from regulators' perspective, the optimal minimum level of required bank capital is increasing in the extent of regulatory forbearance. Capital requirement regulations represent a mainstay of banking sector policies around the world. Many rules and policies determine the precise amount and nature of capital that banks must hold. In terms of the amount of capital, this is typically characterized in terms of the ratio of capital to total

banks assets. In terms of the nature of capital, there are policies concerning the definition of capital beyond cash or government securities, the definition and valuation of bank assets, and whether the regulatory and supervisory authorities verify the sources of capital (Barth, Caprio & Levine, 2013) Chen, Robinson, and Siems (The Wealth Effects from a Subordinated Debt Policy: Evidence from Passage of the Gramm-Leach-Bliley Act) examined safety and soundness protection via minimum capital requirements by looking at the passage of regulations advocating a mandatory subordinated debt policy especially for large banks. They find that over the period of time in which the Gramm-Leach-Bliley Act was passed, a portfolio of banks with relatively high amounts of subordinated debt experienced positive and significant wealth effects. Portfolios made up of all banks, and those with no subordinated debt, however, experienced statistically insignificant wealth effects. The results suggested that policymakers should indeed consider the use of subordinated debt as a way to enhance market discipline and thus the safety and soundness of commercial banks.

Bris and Cantale (2004) suggested that bank capital regulation should allow different banks to hold different capital levels based on characteristics such as separation of ownership and control, which lead to underinvestment and lower risk taking due to managers' self-interests. Gorton and Rosen (1995), in contrast, argue that "the risk-avoiding behavior of managers stressed in the corporate finance literature presumes that conservative behavior is sufficient for job and perquisite preservation. When bad managers predominate, conservative behavior may not allow most managers to keep their jobs and perquisites. These managers may find it optimal to take excessively risky actions. Gudmundsson, Ngoka-Kisinguh and Odongo (2013) study sought to find out the role of capital requirements on bank competition and stability in Kenya for 36 commercial banks in the period 2000-2011. The study adopted the Lerner index and the Panzar and Rosse H-statistic to measure competition in Kenya's banking industry. Approximations of both the Lerner index and the H-statistic showed that competition in the Kenyan banking sector had reduced over the study period. The study approximated the fixed effects of capital requirements on bank competition and stability for using a panel regression model. The log of core capital was positive and significant while squared log of core capital was negative and significant which is an implication that an increase in core capital reduces competition up to a point and then increases competition. Return on equity showed a positive relationship in support of the evidence that capital regulation improves the performance of banks and financial stability.

Odunga *et al.* (2013) examined the effects of liquidity and capital adequacy on the operating efficiency of 40 commercial banks in Kenya for the period 2005-2011. They found that bank's performance is influenced by how a bank moves forward in an effort to streamline its operational strategies. They added that commercial banks with enough liquid assets tend to draw more confidence with customers because of the ability to address short-term financial obligations. It is therefore important for the central bank to ensure full compliance with the minimum liquidity requirement by commercial banks. Regardless of such regulatory framework, the major intention of holding capital is to build the internal strength of the bank to withstand losses during crisis (Dang, 2011). However some authors argue that capital also affects performance via creating liquidity, hence banks with strong capital position are able to reduce their financing costs, for example by paying low interest rates on their debt). However, holding high capital level is not without drawbacks: a higher CAR ratio reduces the ROE due to two mechanisms: a high ratio indicates a lower risk and the theory of markets to balance advocating a strong relationship between risk and profitability would lead us to infer a lower profitability (Diamond and Rajan, 2001). Kamau (2009) asserted that adequate capital requirements help to lessen the chance that banks will become insolvent if sudden shocks occur.

### **Deposit Insurance policy and commercial bank performance**

Simplified stated, one of the major characteristics of banks is their function within maturity transformation. This means, that the majority of a bank's assets consists of illiquid loans while the majority of liabilities consists of liquid deposits. This allows for risk sharing with depositors but also, as described above, makes the banks vulnerable to simultaneous withdrawals of deposits (Allen & Carletti, 2010). History has shown several instances where either well-reasoned nervousness or simple rumors have made depositors line up in front of banks to retrieve their deposits. This creates a liquidity shortage within the bank and in the worst case scenario forces it to foreclose. Hence, because of this instability of the banking system, depositors have a significant incentive to monitor the banks. Most depositors are however small, which courses considerable monitoring costs for the individual depositor leading to extensive free-riding problems Demirgüç-Kunt & Detragiache (2002, ).

To protect both banks, depositors and the financial system many countries have introduced deposit insurance systems, which cover deposits in the banks, sometimes de-signed with a limit on the maximum amount covered (Barth, Caprio & Levine 2006). These systems exist in two major forms, implicit and explicit systems, where implicit systems are characterized by the fact that governments through their actions or previous history show that they will guarantee the losses of depositors and maybe even creditors if a bank goes into

bankruptcy. However, some implicit deposit insurance systems can never be expected to always apply in all specific cases, this section will concentrate on explicit deposit insurances.

Deposit insurance systems has by now become such a used measure for protecting financial systems against sudden financial panic, that it has become a principal feature of policy advice given to developing countries by outside experts (Demirgüç & Kane 2002). Furthermore, within the recent financial crisis, the increased nervousness in the markets has led several countries to increase the coverage of their deposit insurance systems or to introduce such systems if they did not already exist (Chu, 2011). In theory these deposit insurance systems should make the banking system more stable by decreasing the risk of bank runs and lowering the need of individual depositors to monitor the bank, as at least part of the customers' deposits would be insured. The implementation of deposit insurance systems however also introduces new problems of moral hazard. In this context moral hazard is defined by Hoelscher, Taylor, and Klueh (2006) as "the incentive for excessive risk taking by banks or those receiving the benefit of (deposit insurance) protection". This happens as in the presence of deposit insurance the ability of banks to attract depositors no longer reflects the risk profile of their asset portfolio, and that banks therefore gain an incentive to make high-risk high-return investments (Demirgüç-Kunt & Detragiache 2002). Deposit insurances hence increase the expected payoffs of risky investments by limiting the downside risk to the banks and allowing banks to borrow at below the risk free rate from depositors (Keeley, 1990).

Furthermore, as the introduction of deposit insurance systems secures the deposits of regular depositors this lowers their incentive to monitor the banks. Hence, market discipline disappears both because of the lack of monitoring, but also because depositors will no longer ask for an excess risk premium on their deposits, as they would otherwise have done if their deposits were uninsured (MacDonald & Koch, 2009). As these problems about the increased moral hazard incentives has long been known, several design modifications to the standard deposit insurance system has been introduced in different countries. First of all, the answer to the question of who should finance the deposit insurance system, the banks or the government, is argued to have an effect on the moral hazard incentives of banks. If the government funds the system, the banks have no incentive to prevent losses on the deposit insurance fund. However, if the banks themselves fund the deposit insurance system, they would have increased costs when the deposit insurance fund is used. In this type of funding, there however is an extensive free rider problem hidden if the deposit insurance system is based on a fixed funding premium. If this is the case and the deposit insurance system is prefunded, the excess costs of refunding the system will be passed on to the remaining banks, and the cost to the individual bank can hence be viewed as a sunk costs Hoelscher, Taylor, & Klueh (2006). If however, the deposit insurance system is funded after the bankruptcy of the bank, there is no cost to the individual. Hence, it can therefore be argued that there is an incentive for the individual bank to increase its risk taking no matter which of these funding methods are used. It can however, also be argued that an ex post funding system gives incentives for banks to monitor each other, which can then act as a substitute for the before mentioned lost market discipline (Hoelscher, Taylor, & Klueh 2006).

To minimize the potential problems of fixed rate deposit insurances, some deposit insurance systems are based on risk based financing by the banks, meaning, that the premium paid by the individual bank is based on some kind of assessment of the riskiness of the bank's asset portfolio. This effectively functions as a risk premium, which can substitute the lost risk premium on deposit stemming from the deposit insurance Hoelscher, Taylor, & Klueh (2006). Another way to design deposit insurance systems to mitigate the moral hazard problems is to design it with a co-insurance feature, meaning that at least some depositors are not covered for their full amount on deposits. This can be done either by introducing a ceiling on the nominal amount covered, or by only covering a certain percentage of deposits. This type of co-insurance reintroduces some of the depositors' incentive to monitor the bank, but still retains some of the effects of reducing the risk of bank runs. However, how effective co-insurance is in increasing monitoring without increasing the risk of bank runs is not clear Hoelscher, Taylor, & Klueh (2006). There has however not yet been done an extensive amount of empirical research about the effects on risk based funding and co-insurance.

### **Liquidity Management Policy and commercial Bank performance**

Liquidity is simply the ease with which assets of banks can be cashed in times of need or its fair value. It is that quality of an asset, which enables a bank to respond to any financial situation requiring urgent infusion of money. Liquidity is required to meet regular financial obligations of the bank especially without dipping into its reserves. When banks hold high liquidity, they do so at the opportunity cost of some investment which could generate high returns. The trade-offs that generally exist between return and liquidity risk are demonstrated by observing that a shift from short-term securities to long-term securities or loans raises a bank's return but also increases its liquidity risks and the inverse is true. Thus a high liquidity ratio indicates a less risky and less profitable banks (BIS, 2013).

Liquidity indicates the ability of the bank to meet its financial obligations in a timely and effective manner. There are variations among scholars with regard to the measurement ratios. The most common financial ratios that reflect the liquidity position of a bank according to Samad (2004) are customer deposit to total asset and total loan to customer deposits. Other scholars use different financial ratio to measure liquidity. For instance Ilhomovich (2009) used cash to deposit ratio to measure the liquidity level of banks in Malaysia. Another important decision that the managers of commercial banks take refers to the liquidity management and specifically to the measurement of their needs related to the process of deposits and loans. The importance of liquidity goes beyond the individual bank as a liquidity shortfall at an individual bank can have systemic repercussions (CBK, 2009). It is argued that when banks hold high liquidity, they do so at the opportunity cost of some investment, which could generate high returns (Kamau, 2009).

The CBK requires institutions to maintain minimum cash balances with it as a reserve against their depositors and other liabilities. Currently the ratio is 10%. These requirements are legally binding and the central bank may impose a penalty interest charge on any institutions, which fails to maintain the minimum cash balances. The banking sector in Kenya looks very competitive judging by the number of local and foreign banks in the industry. CBK Bank Supervision Report (2014) as of 31 December 2014 there were 44 commercial banks, 13 of which are foreign-owned. However, Beck and Fuchs (2004) noted that most customers in Kenya below the top tier of corporate and wealthy borrowers face a non-competitive banking market and are often effectively tied to one bank, with very high switching costs hence the interest rate spread and margins in the country.

In Kenya the statutory minimum liquidity requirement is 20%. However, according to CBK Bank Supervision Annual Report (2009), the average liquidity ratio for the sector was 39.8% in 2009, 37.0 % in 2008, and way above the minimum requirements. This has baffled many financial analysts as to how banks could withhold such amount of cash in a credit needy economy such as Kenya (Kamau, 2009). The CBK attributes this to the banking industry's preference to invest in the less risky government securities, while Ndung'u and Ngugi (2000) as cited by Kamau (2009) attributes this liquidity problem to the restrictions placed on commercial banks at the discount window, coupled with thin interbank market, a high reserve requirement and preference of government securities. Thus given the above foregoing analysis, the Kenyan banking sector provides an interesting case to assess the effects of liquidity on profitability.

Kamau (2009) argued that when banks hold high liquidity, they do so at the opportunity cost of some investment, which could generate high returns. The author added that trade-offs generally exist between returns and liquidity risks that are demonstrated by a shift from short term securities to long term securities. This shift in securities raises a bank's return thereby increasing bank's liquidity risks and the inverse is true. Recent studies suggest that by combining exposure to liquidity risk in both deposit-taking and lending yields a risk-reducing, synergy Strahan (2008) cited that Kashyap *et al.*, (2002) argued that as long as liquidity demands from depositors and borrowers of credit are not too correlated, an intermediary reduces its cash buffer by serving both customers. Holding cash raises costs for both agency and tax reasons. Thus, their model yielded a diversification synergy between transactions deposits and unused loan commitment. Diamond and Dybvig (1983) argued that the liquid deposit account offered through a financial intermediary nurtures households insurance against liquidity risk and promotes consumption smoothing. In their model, a bank is a mechanism to allow investors to finance illiquid with high return projects. This model does not suggest a true synergy between lending and depositing. Recent studies have suggested that by combining exposure to liquidity risk in both deposit-taking and lending yields a risk-reducing synergy.

Odunga *et al.*, (2013) examined the effects of liquidity and capital adequacy on the operating efficiency of 40 commercial banks in Kenya for the period 2005-2011. They found that bank's performance is influenced by how a bank moves forward in an effort to streamline its operational strategies. They added that commercial banks with enough liquid assets tend to draw more confidence with customers because of the ability to address short-term financial obligations. It is therefore important for the central bank to ensure full compliance with the minimum liquidity requirement by commercial banks. An empirical study conducted by Loutskina (2005) examined the relationship between securitization and liquid assets among commercial banks. The author observed that when faced with a sudden interest rate hike, banks that securitize will utilize internal source of funding rather than borrow at a high cost in order to maintain their lending activities. Loutskina study also revealed that banks with more loans that are securitizable are more liquid and therefore less sensitive to fund shocks that arise from changes in the monetary policy. For a bank to improve its performance, it must pursue both liquidity and profitability. Kamau (2009) argued that when banks hold high liquidity, they do so at the opportunity cost of some investment, which could generate high returns.

### **Credit Risk Management Policy and Commercial Bank Performance**

A credit risk is the risk of default on a debt that may arise from a borrower failing to make required payments. In the first resort, the risk is that of the lender and includes lost principal and interest, disruption to cash flows, and increased collection costs. The loss may be complete or partial. In an efficient market, higher levels of credit

risk will be associated with higher borrowing costs. Because of this, measures of borrowing costs such as yield spreads can be used to infer credit risk levels based on assessments by market participants. To overcome the challenge of NPLs, an institution is required to monitor the behavior of credit consumers (Gaitho, 2013). When financial institutions compete with each other for customers, multiple borrowing and over – indebtedness increase loan default unless the financial institutions have access to databases that capture relevant aspects of clients' borrowing behavior (Gaitho, 2013). The information monopoly on the other hand also does more harm than good. Bad loan borrowers who know banks operate in isolation exploit the information asymmetry to create multiple bad debts (Kipyego&Wandera, 2013). Therefore banks are encouraged to share credit information amongst them.

Competition between lenders reduces information sharing but the impact of competition seems to be only of second order importance (Brown & Zehnder, 2007). Countless theoretical and empirical research, document various positive impacts of credit information sharing (CIS). Turan&Koskija (2014) outline the benefits of CIS as: increasing transparency among financial institutions, helping banks to lend prudently, decreasing the risk level of the banks, acting as a borrower's discipline against defaulting and reducing the borrowing cost. Ahmad (2013) also highlights that one of the factors that leads to the growth or decline of NPLs is information sharing. Jappelli&Pagano (1999) also finds out that information sharing is associated with broader credit markets and lower credit risk. Credit information sharing thus undoubtedly plays a pivotal role in reducing information asymmetry that exists between banks and borrowers (Gaitho, 2013). With regard to this aspect, the idea of Credit Reference Bureaus (CRBs) or Credit Reporting Agencies (CRAs) to facilitate credit information sharing (CIS) was born. Historically, the concept of CRAs or CRBs in the 1860s in the US involved compiling a list of names of one's clientele. This enabled merchants to keep track of their customers, especially those of poor credit risk (Shisia, et al., 2014). In recent times, this concept led to the development of renowned CRAs such as Dun & Bradstreet, TransUnion, Experian, Creditinfo just to name a few, which are operational in various parts of the world. In Kenya non-performing loans (NPLs) posed a great challenge to the banking sector. Kenya's biggest banks such as Kenya Commercial Bank and National Bank of Kenya had 51% and 56 % respectively of total loans being NPLs in 2001. Other banks such as Delphis Bank Ltd and Daima Bank Limited had 76% and 72% of total loans being NPLs (Central Bank of Kenya, 2001). According to the Central Bank of Kenya (CBK), poor credit risk management was the main cause of the large number of bank failures witnessed in the last two decades (Central Bank of Kenya, 2001). 10 banks had collapsed between 1984 and 1990 and another 14 banks collapsed between 1991 and 1994 (Central Bank of Kenya, 1994). As early as 2001, there was a change to the banking legislation to grant powers to CBK and banking institutions to share information as a means to assist banks in credit assessment of their borrowers to bring down the levels of NPLs in the sector Central Bank of Kenya, 2001). It is evident that the percentage of NPLs to total loans has been decreasing from two digits values to one digit values over the period of almost 20 years. The significant drop in NPLs of 10.7 % between 2006 was attributable to write-offs and recoveries (Central Bank of Kenya, 2007). The increased from 4.7 percent in December 2012 to 5.2 percent in December 2013 signaled an increase in credit risk which was largely attributable to the lag-effect of the high interest rates in the first half of 2012, and the slowdown in economic activities due to the general elections in March 2013 (Central Bank of Kenya, 2013).

### **Interest rate Management Policy and Banking Sector Performance**

The interest rate can be defined as the annual price charged by a lender to a borrower in order for the borrower to obtain a loan. This is usually expressed as a percentage of the total amount loaned. Traditional theories define interest rate as the price of savings determined by demand and supply of loanable funds. Ngugi and Kabubo (1998) states that the primary role of interest rate is to help mobilize financial resources and ensure the efficient utilization of resources in the promotion of economic growth and development. Chen *et al* (1986) indicated that interest rate had positive impact on banking sector performance.

Wong bangpoet *al* (2002) observed interest rate had a negative impact on Southeast Asian countries. In the industrial analysis, Nguyen (2007) found interest rate spreads had a significant effect on the riskiness of capital-intensive industries. Chiang *et al* (2009) realized interest rate was negative toward Singapore hotel stock return. Specifically, Rapachet *al* (2005) pointed out the interest rate was the most reliable variable. However, Chan *et al* (1998) thought interest rate didn't have any relationship with stock return. Besides, Chen *et al* (2005) also found the interest rate was not significant for Taiwan hotel stock return. Kandir (2008) studied the Turkish market and found a positive relationship between interest rates and stock return. Jefferis and Okeahalam (2000) study the relationship between stock prices and selected economic variables for South Africa, Zimbabwe and Botswana. For South Africa, they show that the stock market is negatively influenced by the long-term interest rate.

#### **2.4.6 Commercial Bank Performance**

Central bank lending is widely regarded as a vital part of the public safety net supporting the stability of the banking system and financial markets more generally. A central bank that is financially independent and

has a sizable portfolio of securities can provide large amounts of liquidity to institutions on very short notice. Indeed, central bank lending has been a prominent part of regulatory assistance to troubled financial institutions for a long time. The Central Bank of Kenya (CBK), like most other central banks around the world, is entrusted with the responsibility of formulating and implementing monetary policy directed at achieving and maintaining low inflation as one of its two principal objectives; the other being to maintain a sound market-based financial system. Central Bank of Kenya (CBK) was established under the Central Bank Act (CAP 481), 1966. The Act assigned to the CBK the statutory objectives to assist in the development and maintenance of a sound monetary and credit, and banking system in Kenya, conducive to the orderly and balanced economic development of the country and the external stability of the currency among other functions (Mwega, 2009).

Kenya is currently using most aspects of Basel I, however, it is worth noting that the CBK has decided to incorporate certain features of Basel III in the Prudential Guidelines, particularly in relation to capital adequacy. Kenya is not a member of the Basel Committee on Banking Supervision, but the CBK does adopt and incorporate Basel standards when possible. The introductions of prudential guidelines reflect Kenya's continued efforts towards strengthening its banking environment so that she can achieve its goal under Vision 2030 to be an international financial center.

The Prudential Guidelines deal with a wide range of issues including; licensing requirements, corporate governance, capital adequacy requirements, Liquidity Management, stress testing, foreign exchange exposure limits, prohibited business, anti-money laundering, consumer protection, enforcement of banking laws and regulations, agent banking, and representative offices. The reasons behind these new Prudential Guidelines is best summarized by reference to the circular issued by the CBK which states that; "Pursuant to its mandate of fostering the liquidity, solvency and proper functioning of a stable market-based financial system, the Central Bank of Kenya conducted a comprehensive review of the prudential guidelines and risk management guidelines which is currently in use. The review has been necessitated by developments in the national, regional and global arenas and the need to proactively strengthen the regulator (Thumbi, 2014).

Since its establishment in 1966, the CBK has essentially used a monetary-targeting framework to pursue the inflation objective. During the early years, the CBK relied mainly on moral suasion. It enlisted the support of banking institutions through regular meetings with the chief executives of banks to explain the thrust of monetary policy initiatives. Being the regulator of commercial banks and non-bank financial institutions, the CBK had some influence in this regard. The persistent failure of monetary policy to deliver on its inflation objective in the late 1980s and the early 1990s, the CBK effected significant changes to monetary policy implementation procedures, including the introduction of new instruments (Mwega, 2009).

Barth, Caprio, and Levine, (2013) studied the bank regulatory and supervisory policies in 180 countries from 1999 to 2011. They measured data on permissible bank activities, capital requirements, the powers of official supervisory agencies, information disclosure requirements, external governance mechanisms, deposit insurance, barriers to entry and loan provisioning. The dataset also provides information on the organization of regulatory agencies and the size, structure and performance of banking systems. They found that developed summary indices of key bank regulatory and supervisory policies facilitate cross-country comparisons and analysis of changes in banking policies over time.

Naceur and Kandil, (2009) used bank scope data base for 28 banks for the period 1989-2004 to analyze the effects of capital regulations on the performance and stability of banks in Egypt. The study analyzed two measures of performance: cost of intermediation and banks' profitability, measured by return on assets. The findings showed that as the capital adequacy ratio internalizes the risk for shareholders, banks increase the cost of intermediation, which supports higher return on assets and equity pointing out the importance of capital regulation to the performance of banks and financial stability in Egypt. The study recommends the use of structural reforms aimed at establishing more competition in the banking industry to ensure that performance indicators are commensurate with the optimal practices of the intermediation function that guarantees financial stability over time. Yona and Inanga, (2014) carried out a study on financial sector reforms in bank regulations and supervision and its impact on service quality of Commercial Banks in Tanzania. They found that regulations also plays major role in minimizing the entry barriers and facilitating the market entry. Banking regulations such as the ones in Tanzania prescribe minimum conditions of entry and exit into banking industry and provide minimum capital requirements for banks. Barth, Caprio, and Levine, (2001) carried out a study on bank regulation and supervision in 107 countries to examine the relationship between bank regulation/supervision and bank performance and stability. They used (1) assess different broad governmental approaches to bank regulation and supervision and (2) evaluate the efficacy of specific regulatory and supervisory policies. More specifically, we first assess two broad and competing theories of government regulation.

Epure and Lafuente, (2012) examined bank performance in the presence of risk for Costa-Rican banking industry during 1998-2007. The results showed that performance improvements follow regulatory changes and that risk explains differences in banks and non-performing loans which negatively affect efficiency and return on assets while the capital adequacy ratio has a positive impact on the net interest margin. The study

further confirmed that appointing CEOs from outside the bank is associated with significantly higher performance ex post executive turnover, thus suggesting the potential benefits of new organizational practices. Using bank level data for 80 countries in the 1988–95 period, Demirgüç-Kunt and Huizinga, (1998) analyze how bank characteristics and the overall banking environment affect both interest rate margins and bank returns. Results suggest that macroeconomic and regulatory conditions have a pronounced impact on margins and profitability. Stiglitz, (2001) noted that all the arguments that support the application of regulation to banks are naturally extended to nonbanks. However, the extent and nature of the regulation may differ markedly between banks and non-banks depending on the role the latter institutions play in the economy. Some issues involved in prudential regulation of non-banking institutions are different from the ones applied to banks because for the former ones, systemic risk, contagion and the potential disruption of the payments system do not constitute threatening issues. In the case of Micro Finance Institutions (MFIs), the task involves establishing an appropriate and cost-effective regulation that is compatible with the objectives of regulation of the financial system as a whole; and that allows sufficient margin for innovation and flexibility to facilitate the growth of the industry.

Obiero, (2002) in his study on the adequacy of the banking sector regulatory framework in reducing bank failure analyzed 39 banks, which failed in Kenya in the period 1984 to 2001. He identified ineffective board and management malpractices as the most dominant reason for bank failure. Other causes of bank failure include; high incidences of nonperforming loans, unsecured insider loans, undercapitalization and insolvency, poor lending practices, run on deposits, persistent violations of the banking act leading to closure and heavy reliance on parastatal deposits. He further noted that although the legal provisions of the banking regulatory framework is fairly comprehensive in coverage and adequate in content to reduce probability of failure, timely intervention by CBK is important if they are to be effective. In the Kenyan context, research devoted to bank performance and efficiency has been growing and can be categorized as having been studied in the context of different models.

Studies utilising Data Envelopment Analysis for instance (Kamau, 2011; Kamau, 2009) apply the DEA model to measure the productivity and efficiency of Kenyan Banks. Aikaeli, (2008) also applies the DEA model to analyzed commercial bank performance in Tanzania while (Githinji, 2010; Olweny&Shiphoo, 2011) use the CAMEL model to measure performance while utilizing the ROA and ROE as the independent variables. Olweny and Shiphoo, (2011) adopt the CAMEL model with the exclusion of the Earnings component which is provided by ROA, since they use it as the independent variable to measure profitability of banks in Kenya. They in addition include Foreign Ownership and Market Concentration to the model to cater for market factors. Using data for the period from 2002 to 2008 they find that all the components have a significant effect on profitability with Capital Adequacy the most important followed by operational efficiency, asset quality and Liquidity respectively. However, no effects of the market factors are found to affect bank performance.

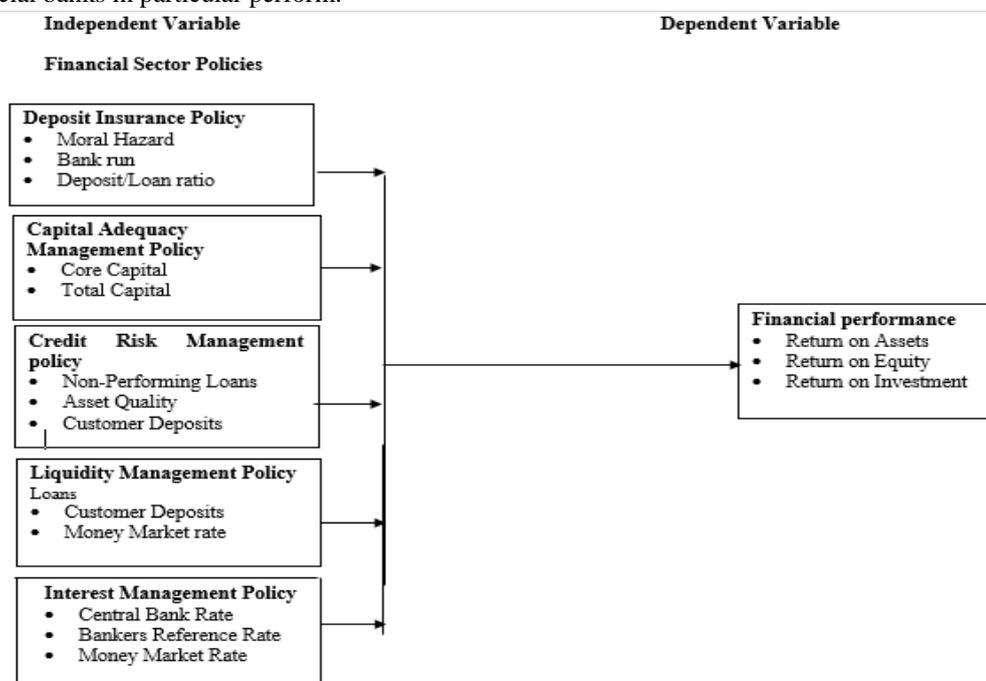
Naceur and Kandil, (2009) used bank scope data base for 28 banks for the period 1989-2004 to analyze the effects of capital regulations on the performance and stability of banks in Egypt. The study analyzed two measures of performance: cost of intermediation and banks' profitability, which was measured by return on assets. The findings showed that as the capital adequacy ratio internalizes the risk for shareholders, banks increase the cost of intermediation, which supports higher return on assets and equity pointing out the importance of capital regulation to the performance of banks and financial stability in Egypt. The study recommends the use of structural reforms aimed at establishing more competition in the banking industry to ensure that performance indicators are commensurate with the optimal practices of the intermediation function that guarantees financial stability over time.

Njeule, (2013) did a comparative study on the effects of CBK prudential regulations of 2006 on the financial performance of commercial banks. The study covered a twelve-year period from 2001 to 2012; six years prior to implementation of the prudential regulations (2001-2006) and six years after implementation of the prudential regulations (2007-2010). The study used only secondary quantitative data to determine the effects of CBK prudential regulations of 2006 on the financial performance of commercial banks, Evidence from the study indicated that there was great positive variation on the financial performance of commercial banks due to changes in capital adequacy, liquidity management, risk classification of assets and provisioning, foreign Exchange risk Exposure and corporate governance. The study recommended the need for CBK to enhance their regulatory requirements on commercial banks in Kenya, as it was revealed that Central bank of Kenya regulatory requirements enhance the financial performance of commercial banks in Kenya.

### **Summary and Concluding Remarks**

This paper has reviewed the relevant literature and the considerable discussion and deconstruction of financial sector policies with regard to performance of commercial banks. Economic theories show that, in the situation of perfect competition, profit maximization is equal to minimizing costs. However, financial sector policies such as changes in capital requirement, liquidity management, interest rate policies and other regulatory

policies that would affect desired financial performance such as there is a general agreement that statutory capital requirements are necessary to reduce moral hazard, the debate is on how much capital is enough. Besides regulators would like to have higher minimum requirements to reduce cases of bank failures, whilst bankers in contrast argue that it is expensive and difficult to obtain additional equity and higher requirements restrict their competitiveness. It is therefore factual that understanding of the backgrounds of financial sector policies allows academics, consultants, advisors and policy makers to get an informed viewpoint how financial institutions and the commercial banks in particular perform.



**Figure 1: Conceptual Frame work**

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