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# The Efficiency of Bank Cost, Capital, and Risk in Africa: A Review and Evaluation of Patterns

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# Abstract

- The cyclical routine of banking crisis around the globe is a central debate among scholars and researchers. Lack of a proper adjustment between banks cost efficiency, capital, and risk has been suggested by many studies as the main source of these panics. Thus, a proper selection and measurement of determinants of the efficiency of banks' cost, capital, and risk to measure impacts of the relationship is the linchpin for any banks' long-term survival, stability, and growth.
- The purpose of present paper is to unsympathetically review and evaluate current state and patterns of the connection among the efficiency of banks' cost, risk and capital by reviewing or assessing up to date published studies on this relationship of banks in Africa.
- The concluding remarks from this review study are significant to academic research, policies, and practices about the mentioned relationship.
- Keywords: The Efficiency of Banks' Cost, Capital and Risk Management

## Introduction

- The linchpin of banking in financial and economic system has been emphasized over times through financial deregulation, financial liberalization, financial integration, and most recently technology innovation and progression in financial intermediation.
- Financial intermediary like bank operates beyond their traditional functions. For instance, the bank has traditionally obtained funds from depositors, then lends those funds to borrowers (Gup, Avram, Beal, Lambert, & Kolari, 2007). That is bank bridges different interests between depositors and borrowers in term of liquidity and time preference of money (Monjid, 2013). For banks to operate smoothly and efficiently, there must be a proper adjustment between banks' cost, capital, and risk for long term survival, stability, and growth (Bashir & Hassan 2017).
- The review makes a number of contributions. The profusion literatures data accessible on banks in Europe, banks in the U.S. and banks in Asia (de Guevara, Maudos, & Perrez, 2007; Carbó, Humphrey, Maudos, & Molyneux, 2009; Bashir & Hassan, 2017) yet, there

is not much obtainable literatures on banks in Africa that study connection of efficient cost of banks, capital regulation and risk in Africa. This research inspects conceptually the rapport of capital, efficient cost and risk of banking sector in African. This study comprises of the most recent banking informations; this review tries to fulfill the cracks within the literatures by reviewing and assessing and evaluating up to date published data solely on the bond between profitability, capital control and risk in the African banking sector. The discoveries of this study benefit the African central banks, African bank industry, researchers, and policy and decision makers to assess the consequences of implementation in terms of efficient cost, capital, and risk reduction enhancement.

#### Literatures

- The abstract groundwork of research in progress gasps from theory of agency and intermediation in finance. Although the study of Jensen and Meckling (1976) is reflected as the forerunner, but the input of Fama (1980) is remarkable in this esteem. He stated that mechanism of governance is essential to get into line with the benefits of depositor and bankers. The theory of financial intermediation catches its origins in the theory of asymmetry information and theory of agency. Absence of confidence between debtor and creditor inspires the role of intermediation in finance owing to its capability to optimum distribution of resources as supported by Levine (1997), decreases cost of transaction by means of scale of economies (Scholes, Beston, & Smith, 1976) and its part as "delegated monitors" as discussed by Diamond (1984).
- The literature discusses the consequences of bond concerning profitability, risk and legal capital on the bank's performance. There is a lot of research out there! But there is no consensus on the relationship among the trio.
- Make decisions about capital and risk together interconnect and efficiency is the lubricant for both magnitude and direction (Shrieves & Dahl, 1992; Jacques & Nigro, 1997;Kwan & Eisenbeis, 1997; Altunbas, Gardener & Molyneux, 2007; Deelchand & Pagget, 2009).
- Berger and De Young emphasize that risk-based loans are important for reducing measurable costs. Cost-effectiveness measure before the reduction of problem loans; And the capital reduction of some capital banks before the increase in problem loans. As a result, profitability is an important indicator of future credit problems and banking problems. These economic interrelationships among variables require more sophisticated estimation techniques (Baum, 2006).
- Kwan (1996) shows that less risk adverse institutions choose higher leverage. Under asymmetric information, low risk-taking lead to inefficient investment that generates low NPV investment projects. Hu, Li, and Chiu (2004) offer a slightly different hypothesis regarding the liaison in the risk-taking and the efficiency that has a positive sign. This theory is founded on weakness of the traditional production functions and efficiency estimates that assume risk neutrality. Managers, however, may be more prone to risk aversion, especially when the vital part of their wealth is linked to the company's performance. So in case of risk avoidance, managers may be willing to share their profits to reduce their risk. In Practice, this practice is applied by spending extra expenses to make new loans and administer performance of the loan which would reduce cost efficiencies. This implies that higher loan quality would be associated with lower measure cost efficiencies.
- Bank risk-taking also impacts on leverage and inefficiencies, but also may depend on leverage and efficiencies. Management may persuade to balance advanced capitalization

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through taking higher risk to compensate the expected return. In banking, the leverage decision is also influenced by capital regulation under Basel rule. This guideline effect very strong in the U.S, Europe, also in Asia banking except but very weak in African banking. Higher leverage banks are also more cost efficient because they rely on their own funding for investment. The benefits of high leverage affect firm efficiency or risktaking policy. Under capital regulation framework, any additional risk-takings are only possible when the excess capital exists. Following Furlong and Keeley (1990) it is only possible when the assumption of a perpetual cost of both for capital and external funds applicable. Otherwise, cost efficiency will fall as the bank must spend more to cover interest expenses. Shrives and Dahl (1992) argue that the marginal revenue from risktaking and cost of leverage and deposits determine the direction of the relationship. According to Fiordelisi, Margues-Ibanez, and Molyneux (2011) efficiency directly or indirectly influences the decision-making process in the banking firms. The efficiency determines risk-taking and hypothesis related to bad management and bank efficiency are very strong. Efficient banks tend to make out their capital better. Delloit (2009) reports efficiency as important for the improvement of business performance. Efficiency is also significant in defining risk-taking and capability to manage risk during crisis time.

- The decision process on the bank board is not a single decision process. Simultaneous processes consider both risk, capital and estimated profit. The Bank management may as well consider conditions about the bank itself, such as the capacity, human resources and regulation. An interesting characteristic of modern bank management is the interlink between cost efficiency, risk-taking and capital. Miah and Sharmeen postulate that bank efficiency plays a role as lifeblood in the risk and capital decision process.
- Some were of opinion that supports the adverse effect of stringent requirement of bank's capital cost-effectiveness (Repullo & Suarez, 2008). Nevertheless, others were of persuasion of strict requirement of capital effects positively efficient cost (Pasiouras et al. 2009; Barth et al. 2004). Pioneer study on capital structure and risk was done by Pettway (1976) who explores relation of banks in U.S and their parent companies from 1971 to 1974. He uses ordinary least square method, and finds a positive bond of risk and equity-assets ratio.
- Shrieves and Dahl study connection between capital and risk of 1800 bank holding companies in the United States, and use an equation of simultaneous to estimate effect of risk vicissitudes on capital changes, and defined a positive bond. Berger and De Young explore the relationship between problem with loans and profitability of banks in the United States and make assumptions about misfortune, mismanagement and fraudulent behavior for effective risk, and established a bidirectional relationship between credit quality and profitability, and they could not disagree the unfortunate theory. Therefore, approval of this theory increases nonperforming loans and reduces the efficient cost measurement. They also argues that high-risk loans will allow banks to spend more on these loans. As a result, banks are increasingly focusing on monitoring their credit portfolio. Kwan and Eisenbeis attempt to analyze the relationship between capital risk and measurable inefficiencies. They tested the relationship of 254 large holding companies during the year. 1986-1991 using the equation framework simultaneously and concluding that all three variables were defined simultaneously. They report the negative correlation between risk and cost effectiveness. Jack and Negro examined relations between capital and risk for more than 2,500 banks in the United States using 3 stages least squares technique, and there was an inverse

relationship between capital and risk. Das and Ghosh Study relationship between capital and risk and performance of banks in Indian, and positive effects of efficiency on capital and rsik was reported. Altunbas et al. (2007) used a consistent framework of simultaneous equations to diagnose relationship between efficiency, capital and risk for banks in Europe, there was positive bond between risk and capital. Fiordelisi et al. (2011) tested correlation of capital, risk and efficiency of banks in Europe, there abide negative, albeit weak, relationship between risk and capital. Lee and Hsieh study capital impact on risk of 42 banks in Asia, the results of this study show the inverse relationship between capital and risks facing by banks in the Middle East and Central Asia, while data for high-income countries have a positive impact on risk. Tan and Floros evaluate association of bank capital and risk, there was negative bond. Haq et al. (2014) examined the essence of capital over risk of 218 banks in 15 countries in the Asia-Pacific region and monitor the positive relationship of bank capital at the bank's risk. Miah and Sharmeen examine relation between capital efficiency and risky behaviors, and support different assumptions between capital, risk and performance.

## Method

This mini research adopts a conceptualized literature review (CLR) methodology for a few reasons. Firstly, because of its potential to sustain a logical base for studying the interrelated logic of justification, positioning, operations, and logical themes. This in connection to the purpose of the study, to critically scrutinize, evaluate present patterns of the association amongst the efficient cost of banks, risk, and capital in Africa. Secondly, it conforms to the nature of this work in a manner that there is no quantitative analysis adopted in this work. Greene (2006) illustrates that CLR method suitable for quantitative and qualitative study, and mixed of both.

## Conclusions

- Grounded on the current reviews, the conclusion can be pinpointed that proper adjustment between cost, capital, and risk act as the lifeblood and a lubricant that circulate efficiently the banking system of any nation with no exception to African nations.
- A mixed argument was drawn from the reviews. On one hand, one school of thought vows a negative relationship (Repullo & Suarez, 2008); (Tan & Floros, 2013); (Lee & Hsieh, 2013); (Fiordelisi et al. 2011); (Kwan & Eisenbeis, 1997); (Jacques & Nigro, 1997). On the other hand, another school of thought presents a positive relationship (Pasiouras et at. 2009); (Barth et al. 2004); (Pettway, 1976); (Haq et al. 2014); (Altunbas et al. 2007); (Shrieves & Dahl, 1992); (Das & Ghosh, 2004); (Pettway, 1976).
- The African central banks, African banking industry, researchers, policy and decision makers benefit from the outcomes of this review based on the valuation of the consequences of implementation in relations of reduction of risk, regulation of capital, and enhancement of efficiency.

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