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# EFFECT OF PARTICIPATION IN CAPITAL MARKET ON PROFITABILITY OF COMMERCIAL BANKS IN KENYA

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#### 1. Abstract

Capital market development is an important component of financial sector development and supplements the role of the banking system in economic development. The study conducted a study to establish the effects of participation in capital market on profitability of commercial banks in Kenya. This study adopted a descriptive survey. The study's target population was 44 Commercial Banks in Kenya. Purposive sampling formed a sample size of 44 respondents who were used in this study. The study used a survey questionnaire. Quantitative data collected was analyzed by the use of descriptive statistics. The study established that good liquidity management requires a strategic management plan, possible action plans, and ongoing analysis and monitoring at all levels, liquidity management should be designed to provide required cash at the appropriate time. The study revealed that the role of financial intermediaries in providing liquidity to an economy may be duplicated by trading on security markets. The study recommends that there is need for commercial banks in Kenya to participate in capital market through deposits. There is need for commercial banks in Kenya to engage in financial intermediaries.

*Keywords;* Liquidity, Deposits, Credit, Financial intermediary, Profitability of Commercial banks

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#### **1.** Background to the study

The role of long-term capital in the economic development of a nation cannot be over emphasized. Most economic managers recognize that a well-organized capital market is crucial for mobilizing both domestic and international capital. In many developing countries, however, capital has been a major constraint in economic development. Dailami and Atkin (2010) describe the provision of funds to finance domestic capital formation as a key factor in the prospects for long-term economic growth in developing countries. The authors observe that the reality of a much reduced supply of foreign funds from previous sources, such as commercial banks, compels governments in many developing countries to pay increased attention to capital market development as a way of improving domestic resource mobilization, enhancing the supply of long-term capital and encouraging the efficient use of existing assets. They contend that the ongoing debt crisis is serving to focus attention on the importance of equity rather than debt, particularly in the financing of risky projects with long gestation periods.

Financial systems help to mobilize and pool savings, provide payments services that facilitate the exchange of goods and services as well as efficient allocation of capital among others which enhance long-term economic growth (Demirguc-kunt, 2006). The financial system, according to Garcia and Liu (1999), comprises financial intermediaries (banks, insurance companies and pension funds) and the securities markets.

The financial sector in Africa is dominated by the banking system and the capital markets are relatively new and generally underdeveloped (Jefferis, 1995; Aryeetey, 2003). The financial sector reform programmes implemented by African countries in the late 1980s and early 1990s led to the development of capital markets, especially, stock markets including the Ghana Stock Exchange (GSE) which are seen as crucial in raising savings and investment rates as well as attracting foreign investment (Kenny & Moss, 1998).

The importance of long-term capital in economic development of a country cannot be overemphasized. The capital market, indeed, has played significant role in national economic growth and development, especially in developed and other emerging markets (Ezeoha, Ogamba & Oyiuke, 2009). As economies grow, more funds will be needed to meet the rapid expansion and sustain economic growth. The capital market is expected to provide long-term funds for sustainable economic growth in developing countries, especially in Sub-Saharan Africa which, hitherto, have depended heavily on short-term funds provided by the banking sector (Jefferis, 1995). According to Aryeetey (2003) the dominance of the commercial banks in the formal financial markets of Africa is attributed to the poor development of capital and money markets.

Until recently, the theoretical literature emphasized the role of the banking sector as the only organized capital market in most developing countries. It neglected the potential role of stock markets for efficient capital allocation and risk sharing in a liberalized financial market (Caporale, Howells & Soliman, 2004). In this regard, most of the earlier empirical research on the relationship between finance and economic growth focused on the traditional financial intermediary development, banking, both in developed and developing countries (King & Levine, 1993; Odedokun, 1996). Most economic managers believe that a well-organized capital market is crucial in mobilizing both domestic and foreign capital in the form of equity and debt

for investment (Osei, 1998). The stock market, which is the pivot of the capital market, is expected to play a major role in pooling domestic savings and foreign capital for investment to sustain economic growth, providing liquidity to investors and serving as an avenue for risk diversification. It is also expected to encourage public participation in capital market in particular and deepen financial system in general which in the long run promote economic growth (Levine, 1991, 1997; Caporale *et al*, 2004). The number of banks ATMs increased to 2,487 in December 2013 representing an increase of 106 ATMs. The banking sector registered enhanced performance in the year 2013, with a 15.9 percent increase in the total net assets from Ksh.2.33 trillion in December 2012 to Ksh. 2,.70 trillion in December 2013. Gross loans increased by 18.7 percent from 1,330.4 billion in December 2012 to Ksh. 1,578.8 billion in December 2013. The source of funding in the banking sector, mainly customer deposits grew by 13.5 percent from Ksh.1.7 trillion in 2012 to Ksh.1.94 trillion in December 2013. The growth was attributed to increased deposit mobilisation by banks as they expanded their outreach and opened new branches to tap new customers.

# 2. Statement of the Problem

Given the important role of commercial bank to capital market growth and the fact that previous empirical literature concentrates mainly on the role of commercial bank and stock market development, to the researcher knowledge no known empirical study that has been done on the effects of participation in capital market on profitability of banks , this is the gap that the study sought to fill by conducting a study to establish the effects of participation in capital market on profitability of commercial banks in Kenya. This study, therefore, tried to establish the effects of participation in capital market on profitability of commercial banks in Kenya

# 3. Objectives

The general objective of the study was to establish the effects of participation in capital market on profitability of commercial banks in Kenya

The specific objectives of the study were:

- i. To establish the effect of liquidity on profitability of commercial banks in Kenya
- ii. To find out the effect of deposits on profitability of commercial banks in Kenya
- iii. To examine the effects of credit on profitability of commercial banks in Kenya
- iv. To determine the effects of financial intermediary on profitability of commercial banks in Kenya

# 4. Theoretical Review

# Capital Market Theory

Capital market theory tries to explain and predict the progression of capital (and sometimes financial) markets over time on the basis of the one or the other mathematical model. Capital © Ngunjiri, Muturi ISSN 2412-0294

market theory is a generic term for the analysis of securities. In terms of tradeoff between the returns sought by investors and the inherent risks involved, the capital market theory is a model that seeks to price assets, most commonly, shares (Gunther and Siems, 2003). In general, whenever someone tries to formulate a financial, investment, or retirement plan, he or she (consciously or unconsciously) employs a theory such as arbitrage pricing theory, capital asset pricing model, coherent market hypothesis, efficient market hypothesis, fractal market hypothesis, or modern portfolio theory. The most talked about model in Capital market theory is the Capital Asset Pricing Model. In studying the capital market theory we deal with issues like the role of the capital markets, the major capital markets in the US, the initial public offerings and the role of the venture capital in capital markets, financial innovation and markets in derivative instruments, the role of securities and the exchange commission, the role of the federal reserve system, role of the US Treasury and the regulatory requirements on the capital market (Hughes and Mester, 2004).

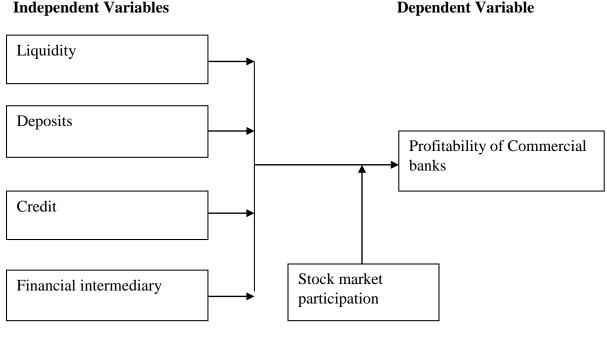
#### **Agency Theory**

Agency theory is defined as the relationship between the principals, such as shareholders and agents such as the company executives and managers. In this theory, shareholders who are the owners or principals of the company, hires the agents to perform work. Principals delegate the running of business to the directors or managers, who are the shareholder's agents (Clarke, 2004). Agency theory suggests that employees or managers in organizations can be self-interested. The agency theory shareholders expect the agents to act and make decisions in the principal's interest. On the contrary, the agent may not necessarily make decisions in the best interests of the principals (Padilla, 2000). Indeed, agency theory can be employed to explore the relationship between the ownership and management structure. However, where there is a separation, the agency model can be applied to align the goals of the management with that of the owners. The model of an employee portrayed in the agency theory is more of a self-interested, individualistic and are bounded rationality where rewards and punishments seem to take priority (Jensen & Meckling, 1976).

#### Stewardship Theory

A steward is defined by Davis, Schoorman & Donaldson (1997) as one who protects and maximizes shareholders wealth through firm performance, because by so doing, the steward's utility functions are maximized. In this perspective, stewards are company executives and managers working for the shareholders, protects and make profits for the shareholders. Stewardship theory stresses not on the perspective of individualism, but rather on the role of top management being as stewards, integrating their goals as part of the organization. The stewardship perspective suggests that stewards are satisfied and motivated when organizational success is attained. It stresses on the position of employees or executives to act more autonomously so that the shareholders' returns are maximized. In this sense, it is believed that the firm's performance can directly impact perceptions of their individual performance. Moreover, stewardship theory suggests unifying the role of the CEO and the chairman so as to reduce agency costs and to have greater role as stewards in the organization. It was evident that there would be better safeguarding of the interest of the shareholders.

# 5. Conceptual Framework



Intervening variables

Figure 1: Conceptual Framework

# 6. Research Methodology

The study adopted a descriptive survey. The target population of the study was 44 Commercial Banks in Kenya. The study being a census survey means that data was collected from all the 44 Commercial banks in Kenya.

Purposive sampling was employed to select financial manager from each bank thus forming a sample size of 44 respondents who were used in this study. The study used a survey questionnaire administered to each member of the sample population. The questionnaire had both open and close-ended questions. The close-ended questions provides more structured responses to facilitate tangible recommendations

The study carried out a pilot study to pretest and validate the questionnaire. Cronbach's alpha methodology, which was based on internal consistency was also used. The pilot study allowed for pre-testing of the research instrument. Quantitative data collected was analyzed by the use of descriptive statistics using SPSS (Version 22) and presented through percentages, means, standard deviations and frequencies. The information was displayed by use of bar charts, graphs and pie charts and in prose-form. Content analysis was used to test data that is qualitative in nature or aspect of the data collected from the open ended questions, multiple regression equation was also used.

#### 7. Results and Discussion

Descriptive and inferential statistics were used to discuss the findings of the study, the study targeted a sample size of 44 respondents from which 42 filled in and returned the questionnaires making a response rate of 95.6%. This response rate was satisfactory to make conclusions for the study as it acted as a representative.

# 8. Liquidity

Statements	Stronaly Aaree	Agree	Neutral	Disagree	Strongly Disagree	Mean	Std Deviation
Investors, lenders and managers tend to assess a company's financial statements, using liquidity measurement ratios to evaluate liquidity risk.	10	31	1	0	0	1.79	0.32
Companies that are over-leveraged must take steps to reduce the gap between their cash on hand and their debt obligations.	11	28	2	1	0	1.83	0.28
Investors and traders can manage liquidity risk by not leaving too much of their portfolios in illiquid markets.	12	27	2	1	0	1.81	0.27
In stock market, the ability to trade equity easily is important for growth.	14	27	1	0	0	1.69	0.29
liquidity management should aim to make investors less willing to own illiquid securities and therefore to necessitate a lower price or higher return to lure them in	15	26	0	1	0	1.69	0.28

#### Table 1: Effect of liquidity on profitability of commercial banks

The study sought to establish the extent to which respondents agreed with the above statements, from the study findings, majority of the respondents agreed that liquidity management should aim to make investors less willing to own illiquid securities and therefore to necessitate a lower price or higher return to lure them in as shown by a mean of 1.69 in each case, investors, lenders

and managers tend to assess a company's financial statements, using liquidity measurement ratios to evaluate liquidity risk as shown by a mean of 1.79, investors and traders can manage liquidity risk by not leaving too much of their portfolios in illiquid markets as shown by a mean of 1.81, companies that are over-leveraged must take steps to reduce the gap between their cash on hand and their debt obligations as shown by a mean of 1.83.

Table 2: Effect of deposits on profitability of commercial banks in Kenya									
Statements	Strongly agree	Agree	Neutral	disagree	Strongly disagree	Mean	Std deviation		
Evolution of domestic financial markets may enhance and lead to high level of capital accumulation	14	25	2	1	0	1.76	0.26		
Domestic funds provide a cheap and reliable source of funds for development of financial markets	18	21	2	1	0	1.67	0.24		
Mobilizing deposits is crucial in developing financial markets countries	13	24	4	1	0	1.83	0.24		
Banks should mobilize deposits by making finances and by investing in various financial markets.	15	26	1	0	0	1.67	0.28		
A well-functioning financial intermediations in channeling the limited resources from surplus units to deficit units would provide efficient allocation of resources thereby leading the other economic sectors in their growth process	18	23	1	0	0	1.60	0.27		
Basically deposit mobilization is related to the creation of credits	14	24	3	1	0	1.79	0.25		

#### 9. Deposit Table 2: Effect of deposits on profitability of commercial banks in Kenya

The study sought to establish the extent to which respondents agreed with the above statements, from the study findings, majority of the respondents agreed that; a well-functioning financial intermediations in channeling the limited resources from surplus units to deficit units would

provide efficient allocation of resources thereby leading the other economic sectors in their growth process as shown by a mean of 1.60, domestic funds provide a cheap and reliable source of funds for development of financial markets, banks should mobilize deposits by making finances and by investing in various financial markets as shown by a mean of 1.67 in each case, evolution of domestic financial markets may enhance and lead to high level of capital accumulation as shown by a mean of 1.76, basically deposit mobilization is related to the creation of credits as shown by a mean of 1.79, mobilizing deposits is crucial in developing financial markets countries as shown by a mean of 1.83.

Table 5: Effect of credit on profitability of commercial banks in Kenya								
Statements	Strongly agree	Agree	Neutral	disagree	Strongly disagree	Mean	Std deviation	
Demand deposits work very well when investors forecast that banks will survive	12	27	1	2	0	1.83	0.27	
Demand deposits can cause severe damage if investors lose faith in banks	16	24	1	1	0	1.69	0.26	
Credit fuels economic activity by allowing businesses to invest beyond their cash on hand, households to purchase homes without saving the entire cost in advance	11	28	2	1	0	1.83	0.28	
When there is a demand for more liquid assets from investors or entrepreneurs, demand deposit contracts serve as a means for quick access to liquidity	10	30	2	0	0	1.81	0.30	
high rate of economic growth leads to a high demand and a well-developed financial sector will automatically respond to this type of demand	18	21	1	1	1	1.71	0.24	

#### 10. Credit Table 3: Effect of credit on profitability of commercial banks in Kenya

The study sought to establish the extent to which respondents agreed with the above statements, from the study findings, majority of the respondents agreed that demand deposits can cause severe damage if investors lose faith in banks as shown by a mean of 1. 69, high rate of economic growth leads to a high demand and a well-developed financial sector will automatically respond to this type of demand as shown by a mean of 1.71, when there is a © Ngunjiri, Muturi ISSN 2412-0294

demand for more liquid assets from investors or entrepreneurs, demand deposit contracts serve as a means for quick access to liquidity as shown by a mean of 1.81, demand deposits work very well when investors forecast that banks will survive, credit fuels economic activity by allowing businesses to invest beyond their cash on hand, households to purchase homes without saving the entire cost in advance as shown by a mean of 1.83 in each case

#### **11. Financial Intermediary**

Table 4: Statement relating	to the	effect	of	financial	intermediary	on	profitability	of
commercial banks in Kenya								

Statements	Strongly agree	Agree	Neutral	-	Strongly disagree	Mean	Std deviation
The presence of financial intermediaries improves on a stock market economy to the extent that transaction costs are present	15	22	3	2	0	1.81	0.23
The role of financial intermediaries in providing liquidity to an economy may be duplicated by trading on security markets	12	24	4	1	1	1.93	0.23
Depending on the proportion of agents with a preference for early consumption, the equilibrium consumption allocation available with an autarkic intermediary a la DD may or may not dominate the one available in a stock market economy.	13	22	1	2	4	2.10	0.21
The consumption allocation available in a competitive stock market economy is dominated by the one available in financial system endowed with infinitely lived intermediaries issuing fully anonymous liabilities.	8	27	4	2	1	2.07	0.26
If intermediaries are allowed to hold assets with each other (earning the prevailing competitive interest rate) then the allocation that intermediaries are able to offer duplicates again the one available in a stock market economy	19	20	2	0	1	1.67	0.24

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The study sought to establish the extent to which respondents agreed with the above statements, from the study findings, majority of the respondents agreed that if intermediaries are allowed to hold assets with each other (earning the prevailing competitive interest rate) then the allocation that intermediaries are able to offer duplicates again the one available in a stock market economy as shown by a mean of 1.67, the presence of financial intermediaries improves on a stock market economy to the extent that transaction costs are present as shown by a mean of 1. 81, the role of financial intermediaries in providing liquidity to an economy may be duplicated by trading on security markets as shown by a mean of 1.93, the consumption allocation available in a competitive stock market economy is dominated by the one available in financial system endowed with infinitely lived intermediaries issuing fully anonymous liabilities as shown by a mean of 2.07, depending on the proportion of agents with a preference for early consumption, the equilibrium consumption allocation available with an autarkic intermediary a la DD may or may not dominate the one available in a stock market economy as shown by a mean of 2.10

#### 12. Regression Analysis

Model		Unstandar Coefficier		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
	(Constant)	1.342	1.023		1.312	.001
1	Liquidity	.311	.118	.213	2.636	.002
	deposit	.341	.125	.207	2.728	.000
	Credit	.322	.124	.206	2.597	.001
	financial intermediary	.336	.114	.211	2.947	.000

#### Table 5: Coefficients<sup>a</sup>

From the data in the above table the established regression equation was

# $Y = 1.342 + 0.311X_1 + 0.341X_2 + 0.322 X_3 + 0.336 X_4$

From the above regression equation it was revealed that holding liquidity, deposits, credit and financial intermediary to a constant zero, the profitability of commercial banks in Kenya would be at 1.342, a unit increase in liquidity would lead to an increase in profitability of commercial banks in Kenya by factors of 0. 311, a unit increase in deposits would lead to increase profitability of commercial banks in Kenya by factors of 0.341, a unit increase in credit would

lead to increase an in profitability of commercial banks in Kenya by a factor of 0.322, and a unit increase in financial intermediary would lead to a increase in profitability of commercial banks in Kenya by a factors of 0.336 and. All the variables were significant as their significant value was less than (p<0.05).

# 13. Conclusions

The study established that good liquidity requires a strategic management plan, possible action plans, and ongoing analysis and monitoring at all levels, liquidity management should be designed to provide required cash at the appropriate time, while, at the same time, allowing for investment policies that maximize returns on investments, thus the study concludes that good liquidity management had a positive impact on financial performance of general commercial banks Kenya

The study revealed that deposits were crucial in developing financial markets, Banks should mobilize deposits by making finances and by investing in various financial markets therefore the study concludes that deposits had positive impact on financial performance of commercial banks in Kenya.

The study revealed that credit positively affect the profitability of commercial banks in Kenya to a great extent, thus the study concludes that credit positively affect profitability of commercial banks in Kenya to a very great extent.

The study revealed that the role of financial intermediaries in providing liquidity to an economy may be duplicated by trading on security markets, thus the study financial convulsed that financial intermediary had a positive effect of on profitability of commercial banks in Kenya.

# 14. Recommendations

The study recommends that there is need for commercial banks in Kenya to enhance their liquidity through participation in capital market as the study revealed that good liquidity risk management had appositive impact on financial performance of general commercial banks Kenya

There is need for commercial banks in Kenya to participate in capital market through deposit mobilization as the study established that deposits were crucial in developing financial markets which in return affected profitability of commercial bank.

The study revealed that credit positively affect the profitability of commercial banks in Kenya to a great extent, thus there is need for commercial banks to participate in capital market through credit provision as it positively affect their profitability.

There is need for commercial banks in Kenya to engage in financial intermediaries as the study revealed that financial intermediary had a positive effect of on profitability of commercial banks in Kenya.

#### **15. References**

- Agusman, A., Monroe, G., Gasbarro, D., (2008)"Accounting and capital market measures of risk: Evidence from Asian Banks during 1998-2003", *Journal of Banking and Finance* 32, 480-488.
- Altunbas, Yener., Carbo, Santiago., Gardener, Edward P.M., et al. (2007)"Examining the relationships between Capital, Risk, and Efficiency in European Banking", *European Financial Management*, Vol.13, No.1. 49-70.
- Anderson, R., Fraser, D. (2000)"Corporate control, bank risk taking, and the health of the banking industry", *Journal of Banking and Finance* 24, 1383-1398.
- Anyanwu, J.C (1998): "Stock Market Development and Nigerian Economic Growth", *Nigerian Financial Review*, 7(2): 6-13.
- Arellano, M. (2002)"Computing robust standard errors for within-groups estimators", Oxford Bulletin of Economics and Statistics 49,431-434.
- Aryeetey, E., & Fosu, A. K. (2002). *Explaining African economic growth performance: The case of Ghana*. A research paper presented at the African Economic Research Consortium, Nairobi, Kenya.
- Baele, L., De Jonghe, O., and Vennet, R., V. (2007)"Does the stock market value bank diversification?", *Journal of Banking and Finance* 31, Issue 7, 1999-2023.
- Baltagi, B.H. (2001) *Econometric Analysis of Panel Data*, second ed. John Wiley and Sons Ltd., Chichester.
- Barber, B. M., Lyon, J.D. (2007)"Firm Size, Book-to-Market Ratio, and Security Returns: A Holdout Sample of Financial Firms", *The Journal of Finance* 52, No.2, 875-883.
- Boyd, J. H., & Prescott, E. C. (1986). Financial intermediary-coalitions. *Journal of Economics Theory*, 38, 211–232.
- Caporale, G. M., Howells, P. G. A., & Soliman, A. M. (2003). Endogenous growth models and stock market development: Evidence from four countries.
- Caporale, G. M., Howells, P. G. A., & Soliman, A. M. (2004). Stock market development and economic growth: The causal linkage. *Journal of Economic Development*, 29(1), 33-50.
- Claessens, S., Klingebiel, D., & Schmukler, S. (2002). Explaining the migration of stocks from exchanges in emerging economies to international centers. Policy Working Paper No. 2816. Washington D.C.: The World Bank
- Cooper, K., Kolari, J., and Wagster, J. (2003)"A note on the stock market effects of the adoption of risk-based capital requirements on international banks in different countries", *Journal of Banking and Finance* 15, Issue 2, 367-381.

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ISSN 2412-0294 12

- Dailami, M. and M. Atkin. (1990). *Stock Markets in Developing Countries Key Issues and a Research Agenda*. Policy Research and External Affairs Working Papers (financial Policy and Systems). The World Bank, WPS 515.
- Demirguc-Kunt, A. (1992). Developing Country Capital Structure and Emerging Stock Markets, World Bank Working Papers WPS 933.
- Demirguc-Kunt, A. (2006). *Finance and economic development: Policy choices for developing countries.* Policy Research Working Paper No. WPS3955. Washington D.C.: The World Bank.
- Demsetz, R.S., Strahan, P.E. (2006) "Diversification, size, and risk at bank holding companies", Journal of Money, Credit and Banking 29, 300–313.
- Docking, D., Hirschey, M., and Jones, E. (2004) "Information and contagion effects of bank loanloss reserve announcements", *Journal of Financial Economics* 43, Issue 2, 219-239.
- Ekineh, S. D. (1996): "The Securities and Exchange Commission and Investor Protection in the Capital Market", *Security Market Journal*, Vol. 9, pp. 1 86.
- Ekundayo, I.K (2002): "Creating a conducive Environment for Investment in the Nigerian Capital Market", Paper Presented at Public Enlightenment on Opportunities in the Capital Market for industrial Development of Kogi stat ' Lokoja 29th March to1st April, 2002.
- Engberg, H.L. 1975. Indigenization of the Business Sector Through the Organized Capital Market: The Lagos Stock Exchange. Journal of Management Studies, University of Ghana, vol. 7, no 4.
- Ewah S.O.E, Esang A.E, Bassey J.U. (2009): "Appraisal of Capital Market Efficiency on Economic Growth in Nigeria", *International Journal of Business and Management*, Vol.4, No.12, pp. 219-225.
- Ezeoha, A., Ogamba, E., & Oyiuke, O. N. (2009). Stock market development and private investment growth in Nigeria. *Journal of Sustainable Development* in *Africa*, 11 (2), 20-35.
- Fama, E.F., French,K. (2003)"The cross-section in expected stock returns", *Journal of Finance* 49, 1579-1593.
- Flannery, M., James, C. (2001)"The effect of interest rate changes on the common stock returns of financial institutions", *Journal of Finance* 39, 1141-1153.
- Furlong, F., Keely,M. (2004)"Bank capital regulation and asset risk", *Economic Review* Federal Reserve Bank of San Francisco, 20-40.
- Garcia, V.F., & Liu, L. (1999). Macroeconomic determinants of stock market development. *Journal of Applied Economics*, 2, 29-59.
  © Ngunjiri, Muturi
  ISSN 2412-0294

- Goldsmith, R. W. (1969). *Financial Structure and Development*. New Haven: CT: Yale University Press.
- Gunther, J.W., Siems, T.F. (2003) "The Likelihood and Extent of Bank Participation in Derivatives Activities", Federal Reserve Bank of Dallas Manuscript.
- Hsiao, C. (2006) Analyis of Panel Data. Cambridge University Press, Cambridge, New York,
- Hughes, J.P., Mester, L.J. (2004) "A quality and risk-adjusted cost function for banks: Evidence on the "too-big to fail" doctrine", *Journal of Productivity Analysis* 4, 293-315.
- Jahankhani, A., Lynge, M.J. (2005) "Commercial bank financial policies and their impact on market determined measures of risk", *Journal of Bank Research* 11, 169-178.
- Jefferis, K. (1995). The Botswana share market and its role in financial and economic development. *World Development*, 23(4), 167-188.
- Keely, M. (2008) "Deposit insurance, risk, and market power in banking" American Economic *Review* 80, 1184-1200.
- Keely, M., Furlong, F.. (2007) "A reexamination of mean-variance analysis of bank capital regulation", *Journal of Banking and Finance* 14, (1990), 69-84.
- Kim, D., Santomero, A. (2001) "Risk in banking and capital regulation", *Journal of Finance* 43, (1988), 1219-1233.
- King, R. G., & Levine, R. (1993). Finance and growth: Schumpeter might be right. *Quarterly Journal of Economics*, *108* (3), 717-738.
- Konishi, M., Yasuda, Y. (2004)"Factors affecting bank risk taking: Evidence from Japan", Journal of Banking and Finance 28, 215-232.
- Levine, R. (2002). Bank-based or market-based financial systems: Which is better? *Journal of Financial Intermediation*, *11*, 398-428.
- Levine, R. (2005). *Finance and growth: Theory and evidence*. Retrieved January 14, 2008 from www.econ.brown.edu/fac/Ross\_Levine/Publication/.
- Levine, R., & Zervos, S. (1996). Stock market development and long-run growth. *World Economic Review*, 10 (2), 323-339.
- Levine, R., & Zervos, S. (1998). Stock markets, banks, and economic growth. *American Economic Review*, 88 (3), 837-558.
- Mansur, I., Zangeneh, H., Zitz, M.S. (2001)"The association between banks performance ratios and market-determined measures of risk", *Applied Economics*, 25, 1503-1510.

- Odedokun, M.O. (1996). Alternative econometric approaches for analyzing the role of the financial sector in economic growth: Time-series evidence from LDCs. *Journal of Development Economics*, 50, 119-146.
- Osaze, B.E. (2000): *The Nigeria Capital Market in the African and Global Financial System*. Benin City: Bofic Consults Group Limited.
- Osei, A. K. (1998). Analysis of factors affecting the development of an emerging capital market: The case of the Ghana stock market. African Economic Research Consortium (AERC) Research Paper No. 76.
- Osei, V. (2005). *Does the stock market matter in Ghana? A granger-causality analysis.* Working Paper No. WP/BOG-2005/13. Accra: Bank of Ghana.
- Pagano, M. (1993): "Financial Markets and Growth: An Overview", *European Economic Review*, Vol.37, No.2-3, pp.613-622.
- Pardy, R. (1992). Institutional Reform in Emerging Securities Markets Policy Research Working Papers (Financial Policy and Systems). The Wold Bank, WPS, 907.
- Rousseau, P. L., & Wachtel, P. (2000). Equity markets and growth: Cross-country evidence on timing and outcomes, 1980-1995. *Journal of Business and Finance*, 24, 1933-1957.
- Schrand, C. (2005)"The Association Between Stock Price Interest Rate Sensitivity and Disclosures about Derivative Instruments", *The Accounting Review*, (Jan.1997), 87-109.
- Shanker, L.(2004) "Derivatives usage and interest rate risk of large banking firms", *The Journal* of Futures Markets 16, 459-474.
- Simons, K. (2003) "Interest rate derivatives and Asset-liability management by commercial banks", *New England Economic Review*. Federal Reserve Bank of Boston (Jan/Feb 1995), 17-28.
- Sinkey, J., Carter, D. (2001)"The Derivatives Activities of US Commercial Banks", Federal Reserve Bank of Chicago. Papers and Proceedings of the 30th Annual Conference on Bank Structure and Regulation, 165-185.
- Stiglitz, J. E. (1985). Credit market and the control of capital. *Journal of Money, Credit and Banking*, 17 (2), 133-152.
- Stiglitz, J. E. (1989). Financial markets and development. Oxford Review of Economic Policy, 5(4), 55-68.
- Stiglitz, J.E., & Weiss, A. (1981). Credit rationing in markets with imperfect information. *American Economic Review*, 71, 393-410.

- Weisbrod, Steven., Lee, Howard., and Rojas-Suarez, Liliana.(2000) "Bank risk and declining franchise value of the banking systems in the United States and Japan", IMF Working Paper Series WP/92/45.
- Woolridge, J.M.(2003) "Cluster-sample methods in applied econometrics", American Economic Review 93, 133-138.