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## The Impact of Market Risks on Market Capitalization Performance of Listed Commercial Banks in Kenya

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### **Abstract:**

*Capital markets play a very important role in capitalization efforts of listed firms or firms seeking to list in the securities exchange. They also serve as a veritable means of gauging the state and performance of the economy and consequently the investment climate. Rigorous market risk analysis by listed firms prior to issuing securities is important so as to optimize the performance of the securities. However, previous studies have not provided evidence to show whether market risk affects market capitalization of commercial banks. Therefore, the purpose of the study was to determine the influence of market risk on performance of market capitalization of commercial banks in Kenya listed in the Nairobi Securities Exchange. Descriptive study design was adopted for the study which also used quantitative methods. The target population comprised the three top executives in each of the 11 banks listed in the Nairobi Securities Exchange as well as 6165 branch managers. From these, a sample size of 98 branch managers was randomly selected for the study, 81 respondents completed and returned the questionnaires administered to them. Both descriptive and inferential statistics were used to analyze data with the aid of STATA statistical package. The study found evidence suggesting that market risk has a statistically significant effect on market capitalization performance of listed commercial banks in Kenya. The study recommends that the banks should make securities issuing more sensitive to the market actors than the market itself so as to address the investor characteristics which are more deterministic of the investment decisions.*

**Keywords:** *Listed commercial banks, market risks, market capitalization performance, pecking order, Nairobi securities exchange*

## 1. Introduction

### 1.1. Background of the Study

Financial markets play an important role in mobilizing capital for investments in viable areas that bring the most value to the economy. Banking institutions, on the other hand, play a fundamental role in the economy globally, regionally and locally. Most of these institutions trade in securities. Characteristically the financial markets consist of three important segments which include the money market; the discount market; the capital markets. Capital markets have two subsidiary markets. The first one is referred to as the security markets which constitute markets for long-term securities such as shares, debentures and government stocks; while the second one is long-term markets which comprise of the market for financing long term projects such as long loan mortgages finance, lease finance and hire purchase finance (CBK, 2014). Of these the security market plays a very fundamental role in providing a vital interface between the investors and the producers in terms of providing veritable platform for raising finance to fund their projects both in the short term and in the long term. Hence, its market capitalization performance is critical. According to Manasseh (2001), capital markets are markets for long-term funds that will be available for a period of 7 years and above. These markets also serve as a veritable means of gauging the state and performance of the economy and consequently the investment climate (Manasseh, 2001).

The theme of market capitalization has, however, attracted considerable debate amongst development economists and business decision makers over the years. The bone of contention has been whether market capitalization occasions economic growth or it is an aftermath of enhanced economic activity. It has also been debatable whether or not stock price movements influence capitalization. In Nigeria, for example, the return on investment and value traded has been found to have the most immense influence on the level of market capitalization (Eriemo, 2014). Further, the value of equity

positively and significantly relates to the level of market capitalization. According to Levine et. al., (1998), certain factors can be used as a measurement of stock markets development and as such, they have direct relation with the economic growth of the country as well. Some of these factors include liquidity and stock market capitalization as well as the turnover of stocks in the market (Mian, et. al., 2010). In their theoretical work, Miller and Modigliani (1958) argued that the firm's value was dependent on the operating profits and future prospects of growth for the firm. High future growth prospects result in high market value and high share prices. Bose (2010), however, observed that the theory was based on the assumptions that: there were no taxes, the borrowing costs were same for both investors and companies, information was symmetrical both for the investors and the companies thus reducing the chances of agency costs and investors would be rational in the decision making process, transaction costs for selling and buying shares were nonexistent, debt financing did not affect the earnings before interest and taxes (EBIT), therefore, the market value of the firm is not dependent on the capital structure policy adopted by the firm. Leveraging decisions have also been cited as a market capitalization factor. In fact, according to the second proposition of the Miller and Modigliani (1958) capital structure irrelevancy theory, as the firm increases leverage, shareholders perceive a higher risk and a higher return thus leading to an escalation in cost of equity. An escalation in the debt-equity ratio leads to a hike in cost of capital. This suggests that leveraging can constitute market risk for the securities. Fan (2012), however, argued that whether a firm decides to take up more debt and become a highly leveraged firm or whether it decides to have a lower debt component was completely irrelevant to the value of the firm.

Further, according to Villami (2000) Modigliani and Miller's third proposition states that the market value is unconstrained by the dividend policy. Whether a firm decides to pay higher dividends or no dividends at all, the firm's value will be unaffected by the dividend policy implemented by the firm. Stern and Chew (2003) argued that market values of firm are affected by the dividend policy and even though they acknowledged the work of Modigliani and Miller, they provided evidence that proves that movements in stock prices are affected by the capital structure decision and the dividend policies that firms implement. Therefore, it is also possible for dividend decisions to influence market capitalization of securities. Stiglitz (1969) disputed the assumptions under which the M&M theory was based on. He pointed out that it was impossible for corporates and individuals to borrow at the same market rate and bankruptcy costs do exist. Furthermore, taxes are existent and capital markets are imperfect. Assumptions should be close to reality and most of the assumptions in the M&M seem to be based in a control environment. In the real world individuals borrow at higher market rates than corporate organizations. While there is abundant empirical research on the relationship between capital structure and performance is significant (for example, Berger, 1995; Berger and di Patti, 2002; Eriotis et al., 2002; Hutchison and Cox, 2006), the results are inconclusive and constructs such as market risks and market capitalization have either been subsumed or failed to be examined altogether. With the attention currently shifting to market capitalization performance at the firm, industry and at the macroeconomic level, factors affecting it such as market risks are expected to become more prominent. It is worth noting that the early theoretical works largely assumed perfect market conditions and, hence, market risks were not defined or subjected to rigorous examination. Hence, it became imperative for the present study to examine the effect of market risks on market capitalization performance.

#### 1.1.1. Market Capitalization Performance in Kenya

In Kenya the business of dealing in shares and stocks started in the early 1920's and was initiated by the British colonialists. The first formal stock broking firm was established in 1951 by Francis Drummond. In 1954, the Nairobi Stock Exchange was constituted and registered under the Societies Act. The bourse has witnessed unprecedented transformation including changing its name to Nairobi Securities Exchange (NSE) - which effectively expands its mandate - and being supervised by another government entity - Capital Markets Authority. The CMA in a bid to nurture and reform the market to be more efficient and reliable encourages capital investment in the economy for example through establishment of a Central Depository System (CDS) and introduction of various rules and regulations (CMA, 2013).

The country's financial markets are currently more developed compared to the colonial times over six decades ago since they have been institutionalized. Presently, NSE is one of the most vibrant stock markets on African continent (Gatua, 2013). The NSE All Share Index (NASI) which tracks the performance of all the stocks at the exchange was up 6.3 per cent in 2015 at 173 points, while the NSE 20 share index was down 0.4 per cent at 5091 points. The NSE performance was relatively good in 2015 at position two with the top performer being the Tunis Stock Exchange which was up 8.9 per cent for the year (African Alliance, 2016). In order for investors to trade in financial assets they need assurance that there will always be a ready market for these securities and will be always properly priced. This can only be achieved if the stock exchange market is efficient. This is dependent on many aspects among them symmetry of the market information and the capital structure of the listed firms (CBK, 2015).

#### 1.1.2. Commercial Banks in Kenya

Commercial banks contribute to economic growth of the country by making funds available for investors to borrow as well as for financial deepening in the country (Kiruri, 2013). According to the Central Bank of Kenya (2015), there are forty-three licensed commercial banks in Kenya. Three of the banks are public banking institutions with majority shareholding being the Government and state corporations. The rest are private banking institutions. Of the private banks, twenty-seven of them are local commercial banks while thirteen are foreign commercial banks (CBK, 2014). Of all the licensed commercial banks in Kenya only eleven are listed in the Nairobi Securities Exchange. The Kenyan banking sector remained stable and resilient in 2014 as evidenced by the enhanced performance recorded. The sector supported various economic sectors through provision of loans and advances. The gross loans increased from Ksh.1.53 trillion in December

2013 to Kshs 1.88 trillion in December 2014. Economic sectors that received the highest growth in demand for credit in 2014 were Personal/Household, Trade, Real Estate and Manufacturing.

The total net assets which grew by 18.5 per cent from Ksh. 2.70 trillion in December 2013 to Ksh.3.2 trillion in December 2014, with the growth being supported by the increase in loans and advances (CBK, 2015). Customer deposits increased by 18.42 per cent from Ksh.1.93 trillion in December 2013 to sh.2.29 trillion in December 2014 and were attributed to increased deposit mobilization by banks. Analysis of the pre-tax profit for the banking sector shows that it increased by 12.2 per cent from Ksh.125.8 billion in December 2013 to Ksh.141.1 billion in December 2014. The growth was largely supported by the growth in the credit portfolio, investment in government securities and commissions and earnings from foreign exchange trading. Gross loans increased by 22.75 per cent from Ksh.1, 532.3 billion in December 2013 to Ksh.1, 881.0 billion in December 2014. The growth in loans is attributed to increased demand for credit by the various economic sectors. The liquidity ratio stood at 37.7 per cent as at December 2014 compared to 38.6 per cent registered in December 2013 (CBK, 2015). Despite the relatively good performance of the banking sector, some banks have been performing worse than others and there have been changes in the ranking of the banks in terms of market share and asset base. The factors leading to this poor performance need an investigation as has been the focus of many studies in other countries such as China, Nigeria, Singapore, UAE, UK, USA, among others (CBK, 2015). The market capitalization of banking institutions has become an increasingly prominent issue in the world of finance, particularly in the wake of the 2008 banking collapse and the ensuing government bailouts and institutional restructuring efforts (Kiruri, 2013).

### *1.2. Problem Statement*

Various studies have shown that linking the firms' preferred capital structure to the investor behavior as contrasted to other factors likely to inform their beliefs presents a more analyzable situation. For example, if the firms' insiders' optimism about the firms' future prospects are outweighed by the optimism of the firms' outsiders, they are likely to issue equity. They are also likely to issue debt in a reversal of this situation. The equilibrium of these two belief situations will determine the firms' financing decisions and consequently the optimal stock price. However, while the implications of heterogeneous beliefs among investors for long-run stock returns have been examined in some detail, the corporate governance implications of such beliefs have not been adequately studied. The Kenyan market capitalization performance has room for improvement which can be enhanced through rigorous market risk analysis prior to issuing stocks as opposed to the pecking order approach. However, previous studies have not examined the impact of market risk on performance of market capitalization of listed commercial banks in Kenya. This provided the motivation for the present study.

### *1.3. Objective of the Study*

The study sought to analyze the impact of market risk on performance of market capitalization of listed commercial banks in Kenya

### *1.4. Hypothesis*

- $H_0$ : Market risk has no significant influence on performance of market capitalization of listed commercial banks in Kenya
- $H_a$ : Market risk has a significant influence on performance of market capitalization of listed commercial banks in Kenya

## **2. Literature Review**

### *2.1. Market Timing Theory*

The market timing theory of capital structure was advanced by Baker and Wurgler (2002). It states that firms time their equity issues in the sense that they issue new stock when the stock price is perceived to be overvalued, and buy back own shares when there is undervaluation. Consequently, fluctuations in stock prices affect firms' capital structures. There are two versions of equity market timing that lead to similar capital structure dynamics. The first assumes economic agents to be rational. Companies are assumed to issue equity directly after a positive information release which reduces the asymmetry problem between the firms. Helwege and Liang (1996) find that the probability of raising external finance is unrelated to the internal funds deficit, and that firms that could have obtained bank loans often choose to issue equity instead. This also contrasts with the static pecking order model. The decrease in information asymmetry coincides with an increase in the stock price. In response, firms create their own timing opportunities.

The second assumes the economic agents to be irrational (Baker & Wurgler, 2002). Due to irrational behavior there is a time-varying mispricing of the stock of the company. Managers issue equity when they believe its cost is irrationally low and repurchase equity when they believe its cost is irrationally high. It is important to know that the second version of market timing does not require that the market actually be inefficient. It does not ask managers to successfully predict stock returns. The assumption is simply that managers believe that they can time the market. According to Graham and Harvey (2001) managers try to time the equity market, and most of those that have considered issuing common stock report that "the amount by which our stock is undervalued or over-valued" was an important consideration. According to Baker and Wurgler (2002), equity market timing has a persistent effect on the capital structure of the firm. They define a market timing measure, which is a weighted average of external capital needs over the past few years, where the weights used are market to book values of the firm. They find that leverage changes are strongly and positively related to their market timing measure, so they conclude that the capital structure of a firm is the

cumulative outcome of past attempts to time the equity market. The market timing theory mentioned above shows that managers believe they can time the market, but does not immediately distinguish between mispricing and dynamic asymmetric information. The theory therefore has a relevance to the current study as it relates capital structure to the market capitalization performance of banking institutions at the NSE. Managers seek to issue equity when they believe its cost is irrationally low and repurchase equity when they believe its cost is irrationally high as they try to strike a deal that is best for the firm. Any time equity is sold or repurchased it creates a change in the capital structure as well as in the performance of the market capitalization of listed commercial banks in Kenya.

## 2.2. Market Risk and Market Capitalization

Risk is defined as the exposure to the chance of occurrences of events adversely or favorably affecting project objectives as a consequence of uncertainty (Walewski, 2003). The Global Fund (2015) also defines risk as the effect of uncertainty on the achievement of the organization's objectives. The source of risk includes inherent uncertainties and issues related to the company's fluctuating project margin, competitive bidding process, job site productivity and the political situation, inflation, contractual rights, and market competition (Willmott, 2010). Any product or instrument in the market is exposed to market risks.

The International Academy of Business and Economics (2008) found that parametric statistical tests on a select sample of NYSE stocks over the 1997-2006 period support the belief that corporations that have a higher than market adjusted beta, on average, yield greater accounting returns than those with lower than market adjusted beta. Corporations under risk classes measured by another market measure (unadjusted beta) and two book measures (financial leverage and interest coverage capacity) do not exhibit any significant differences in both accounting and market rates of return. On the other hand, nonparametric analyses of the same data provide support only to the belief that corporations that have a lower (less than 4 times) interest coverage ratio (riskier), on average, yield greater accounting returns than companies with a higher (greater than or equal to 4 times) interest coverage ratio (less risky). Most studies look at the market returns on common stock and not the accounting metrics of risk or return. Two accounting measures of risk have been considered with two market measures of the same and their effects have been observed on one market measure and two accounting measures of returns (Blawatt, 2008).

The accounting measures of risk used are the degree of financial leverage and the interest coverage capacity of the corporation. The higher the degree of leverage and lower the interest coverage capacity, the higher is the risk of the company, and vice versa. The market measures of risk used are beta and adjusted beta. If either is greater than or equal to one, then the company is considered to be a high risk one, and vice versa. The accounting measures of returns are accounting returns on total assets, and accounting returns on common equity. The market measure of return is the average market return on common stocks (Blawatt, 2008).

A study by Abiero (2012) investigated the effect of market risk management on firm value with specific reference to those listed at the Nairobi Securities Exchange (NSE). Management of market risk is of essence at the NSE as investors have put huge sums of their capital to get value in return. Some of the components of market risk are foreign exchange risk, commodity risk and exchange rate risk. The study sought to know from the CEOs of the listed companies their views regarding the effect of market risk management on firm value with use of questionnaires as a research instrument. The objective of the study was to determine the effect of market risk management on the value of the firm among companies listed at the NSE.

The findings revealed that the CEOs used commodity risk, foreign exchange and interest rate instruments to hedge risk and reported their effectiveness to an extent but the value added to firms on their usage could not be determined except for foreign exchange instruments usage. The researcher recommended that CEOs and the board should infuse a risk culture in the organization and this integrated in performance goals and compensation decisions to achieve value from risk management activities (Abiero, 2012).

## 2.3. Concept of Market Capitalization Performance

A study by Saeedi and Mahmoodi (2011) examined the relationship between capital structure and performance of listed firms in the Tehran Stock Exchange. They found that market measures of performance are positively related to capital structure and whereas ROA is positively related to capital structure, no significant relationship exists between ROE and capital structure. The findings indicate that financial leverage may affect different measures of performance in different ways. A study by Totala and Pachori (2012) explored the effect of financial leverage on shareholders' return and market capitalization of automotive cluster companies of Pithampur, India. The seven major automotive public companies were undertaken for representation of the cluster. Simple linear regression analysis was carried out to judge the impact of financial leverage on shareholders' return and market capitalization individually to find out the state of influence of the leverage. It was suggested that bankers and debt providers should help the industry out by charging lower cost of debt. The results by Totala and Pachori (2012) show that leverage is an important factor when considering the source of finance. It affects the market capitalization of listed institutions. In his study, Jalloh (2015) sought to understand whether or not stock market capitalization influences economic growth in Africa as evidenced by panel data. The author acknowledged that the prevailing empirical evidence on the nexus between stock market capitalization and economic growth is still mixed. Jalloh's study focused on a sample of African countries whose stock markets are well-functioning. The study adopted a dynamic panel estimation approach with the aim of assessing the relative impact of stock market capitalization on economic growth in Africa. The study found that raising stock market capitalization by a marginal average of 10% results in growth by 5.4% in the countries the study was conducted. The study led to inference that African countries should explore stock markets as a potential avenue for expediting their economic growth. A study by

Mihasonirina and Yartey (2009) examined the growth of African financial markets focusing on the determinants of financial market development in Africa. The emphasis was on banking systems and stock markets. The study revealed that the main determinants of the stock market development included political risk, domestic savings, banking sector development, and stock market liquidity.

The study noted that the implication of political risk in stock market development underpins the fundamental role played by politics in economic development of African countries. A study by Kaumbuthu (2011) was carried out to determine the relationship between capital structure and return on equity for industrial and allied sectors in the Nairobi Securities Exchange during the period 2004 to 2008. Capital structure was proxied by debt equity ratio while performance focused on return on equity. The study applied regression analysis and found a negative relationship between debt equity ratio and ROE. A study by Aduda, Masila and Onsongo (2012) analyzed the determinants of stock market development. The study focused on the Nairobi Stock Exchange. The study relied on secondary data for a five years period (2005 to 2009). The study established that macroeconomic factors such as stock market liquidity, institutional quality, income per capita, domestic savings and bank development are crucial determinants of stock market development in the NSE.

### 3. Research Methodology

#### 3.1. Research Design

The study adopted a descriptive research design which specifically involved a survey of the 11 banking institutions listed in the Nairobi Securities Exchange. The descriptive research design was appropriate because it enabled the researcher to collect information from the target population and also to draw conclusions based on the study objectives (Whittemore & Knafl, 2005). The approach for the study entailed collection of quantitative data. Use of quantitative techniques ensured that the study was able to capture the factors influencing performance of market capitalization of banking institutions listed at the NSE and enable the researcher explain the interrelationships between the same

#### 3.2. Target Population

The target population refers to the aggregate members of a population of interest who share certain common characteristics, and to whom the study findings are generated. In the context of the present study, the target population comprised of the three top executives in each of the 11 banking institutions listed in the NSE (total = 33) as well as the branch managers and their assistants for the branches of same banks (6165 individuals), making a total target population of 6198 (CBK Bank Supervision Annual Report, 2015). Data was collected relating to a 7-year period between January 2010 and December 2016.

#### 3.3. Sample Size and Sampling Technique

Simple random sampling was used to select the sample for this study because the target population was sufficiently large - 6165 branch managers - and had heterogeneous characteristics, thus, making it possible to randomly select bank branches and respondents. The sample size for the study was, thus, determined using the formula proposed by Nassiuma (2000);

$$n = \frac{Nc^2}{c^2 + (N-1)e^2}$$

Applying the formula yielded a total of 98 respondents who were branch managers who were drawn from the branches of each of the 11 banks listed at the NSE. Participants were selected from all these branches.

#### 3.4. Research Instrumentation

According to Mugenda and Mugenda (2009), research questionnaires are convenient to use and are also able to capture a wide scope of data pertinent to the study objectives. The study adopted a structured questionnaire developed by the researcher to collect primary data from the branch managers of the 11 listed banks. The questionnaire was structured in that the questions therein were not only be close-ended but also conformed to the study objectives. Secondary data was collected from critical analysis of securities exchange reports and banking institutions annual reports using a data collection sheet.

#### 3.5. Pilot Testing, Validity and Reliability of the Research Instruments

A pilot study was conducted among branch managers of 6 of the 11 listed banking firms with branches in Nakuru Town. A total of 12 questionnaires for pilot testing were issued in the month of February, 2017. The banks selected randomly in order to avoid bias. The essence of conducting the pilot study was to verify both the reliability and validity of the research instrument.

Mugenda and Mugenda (2003) define validity as the accuracy and meaningfulness of inferences which are based on research findings. An instrument can be validated by proving that its items or questions are representative of the skills or characteristic that it is intended to measure. The researcher ensured that the research instrument produces the expected results by pre-testing it in order to ensure that the questions are well framed and that they were understood. The Principal Axis Factoring (PAF) method was the primary test of the instrument's validity. The validity threshold was Eigen values greater than 1 (Girden, 2001). The instrument constructs achieved the aforesaid threshold meaning the items in the

constructs brought out what they were meant to enquire. The researcher rephrased and edited items that were found to be unsuitable to the purpose of the inquiry.

The Cronbach alpha coefficient was used to test the instrument's reliability. According to Kimberlin and Winterste in (2008), the use of Cronbach alpha coefficient is the most widely used and recommended reliability testing. An Alpha coefficient of at least 0.7 ( $\alpha \geq 0.7$ ) is considered appropriate as a reliability threshold of the research instrument. The study established an instrument Cronbach alpha value of 0.8118 for Market capitalization performance and a Cronbach alpha value of 0.9010 for External ownership risk which was a good indication of a reliable research instrument

### 3.6. Data Processing and Analysis

Data was analyzed using descriptive and inferential statistics with the aid of Statistical Package for Social Sciences (SPSS) Version 22.0. Descriptive statistics included, frequencies, percentages, means and standard deviations. Inferential statistics was in form of simple linear regression. Linear regression enabled assessment of the effect of external ownership risk on market capitalization performance as a whole. The following regression model was used in the analysis.

$$Y = \beta_0 + \beta_1 X_1 + \varepsilon$$

Where:  $\beta_0$  is the constant,

$\beta_1, \beta_2, \beta_3, \beta_4$  are regression coefficients of the independent variables respectively.

Y = Market capitalization performance

$X_1$  = External ownership risk

$\varepsilon$  = error term.

The regression constant ' $\beta_0$ ' is the Y intercept; while  $\beta_1$  is the net change in Y for each change of  $X_1$ . The error term is a random variable with a mean of zero, which captures those variables that cannot be quantified. The research hypothesis was tested using the p-value approach at 95% confidence level based on the linear regression analysis STATA output. The decision rule was that the null hypothesis would be rejected if the calculated p-value is less than the significant level (0.05) and accepted if the calculated p-value is greater than the significance level (0.05).

### 3.7. Model Assumptions

The model obtained from the study was also tested for normality, linearity, collinearity, and homoskedasticity assumptions in OLS (Ordinary Least Squares).

## 4. Research Findings and Discussions

### 4.1. Introduction

The researcher distributed 98 questionnaires to the respondents out of which 81 were received from the field and accepted as correctly filled translating to an 82% response rate.

### 4.2. Market Risk and Market Capitalization Performance

The objective of the study was to analyze the impact of market risk on market capitalization performance of listed commercial banks in Kenya. The status of this variable was measured on the basis of five constructs; Pecking order, Shares tradability, Information access, Market timing and Dividend decisions. The findings are presented in Table 1.

		SA	A	N	D	SD				Std.
Statement	N	(%)	(%)	(%)	(%)	(%)	Min	Max	Mean	Dev
Our firm seeks equity financing as the last of the financing options	81	25	45	10	11	9	1	5	3.65	1.26
Market demand often overrides our pecking order	80	30	44	12	8	7	1	5	3.86	0.957
We carefully price our shares so as to ensure they remain tradable	80	40	43	12	4	1	1	5	4.22	0.719
We often compare our shares with those of other firms so as to gauge their tradability before issuing them	81	13	39	20	23	5	1	5	3.34	1.258
We often scan the market for investor behavior before issuing securities as a measure of mitigating market risks	81	27	38	14	16	5	1	5	3.61	1.006
Market information access helps us in evaluating the risks of financing at given times	81	24	40	14	16	5	1	5	3.59	1.256
Market timing is highly considered by our firm to avoid undervaluation of the stock by the investors	81	25	44	7	21	3	1	5	3.67	0.962
We use dividends as incentives to attract investors such as institutional investors	81	32	46	13	7	2	1	5	3.99	0.922
Our policies on internal financing often cushion us from adverse market conditions	80	37	49	9	5	0	2	5	4.18	0.843

Table 1: Market Risk and Market Capitalization Performance

It is evident from the findings in Table 4.5 that most banks chose equity financing as the last of the financing options (Mean = 3.65; SD = 1.26). However, market demand often overrode the pecking order in most banks (Mean = 3.86; SD = 0.957). As a discretionary measure, the banks were careful to price their shares so as to ensure they remained tradable (Mean = 4.22; SD = 0.719), though not all banks regularly compared their shares with those of other firms so as to gauge their tradability before issuing them (Mean = 3.34; SD = 1.258). The findings also indicate that the banks often scanned the markets for investor behavior before issuing securities as a measure of mitigating market risks (Mean = 3.61; SD = 1.006). Such market information access was instrumental in enabling the banks to evaluate the risks of financing at given times (Mean = 3.59; SD = 1.256). Market timing was highly considered by the banks to avoid undervaluation of the stock by investors (Mean = 3.67; SD = 0.962). Other findings indicate the banks used dividends as incentives to attract investors such as institutional investors (Mean = 3.99; SD = 0.922). Further, the banks claimed that their policies on internal financing often cushion them from adverse market conditions (Mean = 4.18; SD = 0.843).

#### 4.2. Regression Analysis of Market Risk on Market Capitalization Performance of Listed Commercial Banks in Kenya

The results in Table 2 show the regression analysis involving market risk as the independent variable and four constructs of market capitalization.

Variable	Coefficients							
	B	Beta	t-statistic	R	R-Square	Adjusted R-Square	F-Statistic	P-Value
Independent Variable								
Market risk								
Dependent Variables								
Competition	0.199	0.469	4.662	0.469	0.22	0.21	21.738	0
Investor Preferences	0.173	0.472	4.695	0.472	0.223	0.212	22.044	0
Debt Capitalization	0.164	0.365	3.444	0.365	0.133	0.122	11.863	0.001
Equity Capitalization	0.216	0.524	5.402	0.524	0.275	0.265	29.178	0
N=101								

Table 2: Regression Coefficients of Market Risk on Market Capitalization Performance

It is evident from the findings in Table 2 that the regression of market risk on competition was significant at  $\beta = 0.469$ ,  $t = 4.662$ ,  $p < 0.05$  implying that the market risk affected competition. It is also evident that a unit increase in market risk all other factors constant will result into a 0.199 increase of competition and, hence, capitalization. Further, market risk could explain 21% of variations in market capitalization performance in a model with competition as the capitalization regressor. Therefore, the results imply that market risk is one of the main drivers of competition during market capitalization. The results also suggest that market risk was significantly related to investor preferences  $\beta = 0.472$ ,  $t = 4.695$ ,  $p < 0.05$ . In addition, market risk could explain up to 21% of the variations in investor preferences in market capitalization. In the same way, the relationship between market risk and debt capitalization was found to be significant  $\beta = 0.365$ ,  $t = 3.444$ ,  $p < 0.05$ . The model with market risk as the independent variable could, further, explain up to 12.2% in the variations of debt capitalization. Finally, the findings indicate that market risk and equity capitalization are significantly related  $\beta = 0.524$ ,  $t = 5.402$ ,  $p < 0.05$ , and could explain up to 26.5% of the variations in the equity capitalization. Moreover, an increase of one unit in market risk could translate in 0.216-unit increase in equity capitalization all other factors constant.

#### 4.3. Discussions

These findings reveal interesting developments in the capital markets where competition and investor preferences were determinants of market capitalization performance, the latter being expected. Investor preferences were significantly affected by the market prospects of the firm. A firm with higher market risk would definitely signal to investors the type of assets which they should invest in the firm (Blawatt, 2008). These findings support those of Abiero (2012) who found that market risk was a factor of capitalization. Market risks informed firm managers to use a variety of risk mitigation measures such as commodity risk, foreign exchange and interest rate instruments to hedge against risk and make their instruments more competitive during market capitalization.

It also emerged that market risk had a significant relationship with debt capitalization, however, looking at the adjusted R-Square values in Table 2 it is evident that this market risk had the least influence on debt capitalization. This implies that issuing debt was not considered as risky as in the market probably owing to the increased leverage associated with debt finance (Bose, 2010) and debt policies in the event of liquidation of firms. These findings support the second proposition of the Miller and Modigliani (1958) capital structure irrelevancy theory, that leveraging can constitute market risk for the securities. However, they disagree with the findings of Fan (2012), that debt capitalization is irrelevant to the capitalization of the firm.

The significant relationship between market risk and equity capitalization implies that prevailing market conditions were important considerations that needed to be taken into account by the firms before issuing their stocks. The findings agree with those of Eriemo (2014) who found that the value of equity positively and significantly relates to the level of market capitalization. According to Baker and Wurgler (2002), equity market timing has a persistent effect on the capital structure of the firm. This means the market risks necessarily overrode the theoretical pecking order of securities issue.

## 5. Summary, Conclusions and Recommendations

### 5.1. Conclusions

The findings revealed that market risk had a statistically significant effect on market capitalization performance of listed commercial banks in Kenya when measured across the three parameters competition, debt capitalization and equity capitalization. The findings particularly suggested that market risks negatively influenced investor preferences for capitalization. Further, it was evident from the findings that most banks sought equity financing as the last of the financing options owing to the market risks. However, market demand often overrode the pecking order in most banks. As a discretionary measure, the banks were careful to price their shares so as to ensure they remained tradable, though not all banks regularly compared their shares with those of other firms so as to gauge their tradability before issuing them. Most banks often scanned the markets for investor behavior before issuing securities as a measure of mitigating market risks. Market timing was highly considered by the banks to avoid undervaluation of the stock by investors. The study, further, found evidence suggesting that market risk has a statistically significant effect on market capitalization performance of listed commercial banks in Kenya. However, the effect was negative implying an inverse relationship between the variables. As a discretionary measure, the banks were careful to price their shares so as to ensure they remained tradable and did market timing to avoid undervaluation of the stock by investors. Therefore, the study concludes that market risk was an important determinant of market capitalization performance of listed commercial banks in Kenya. Further, the study strengthens the theoretical view of Miller and Modigliani Capital Structure Irrelevance Theory concerning the effects of leveraging on capital structure.

### 5.2. Recommendations

- The study recommends that the banks should make securities issuing more sensitive to the market actors than the market itself so as to address the investor characteristics which are more deterministic of the investment decisions.
- The bank's security offerings should also focus on their traditional markets which are likely to be less risk averse as they had history of trading in the same securities. The pricing of the securities should be done along market risks also to make them more sensitive to the investor preferences.
- Investors should also consult further about securities specifically in terms of their risk profile before making tangible investments. This will enable them undertake risk mitigated investments.
- Policy makers should also stipulate that all firms listing their securities should also publish their prospectus in which a previous summary of capitalization is made.

### 5.3. Recommendations for Further Studies

The study recommends that future studies should use longitudinal methods to assess the effect of market risks on the capitalization trends in the stock market. Further, future studies should consider using a combination of descriptive and panel data studies to investigate the determinants of market capitalization so as to provide deeper insight into the capitalization behavior.

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