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Effect of Delinquent Loans on Shareholders Wealth of Commercial Banks Listed at the Nairobi Securities Exchange, Kenya

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Abstract:
Banks play a role as intermediaries connecting borrowers and lenders in bringing temporarily available resources from corporations and individual investors or customers as well as advancing loans to those that are cash trapped. Well-functioning commercial banks accelerate economic growth, while those banks who fail to manage these loans bare an impediment to economic growth and aggravate poverty instead. Managing delinquency by banks is an important way of determining the shareholders wealth hence the motivation of the study to determine the effect of delinquent loans on shareholders wealth of commercial banks listed at the Nairobi Securities Exchange. The study was guided and limited to the following four specific objectives; to establish the effect of change in Return on Equity, change in Economic Value added, change in Market Value Added and change in Earnings per Share (EPS) on the shareholders' wealth of listed commercial banks. The study adopted descriptive survey design and was conducted in Nairobi County as most of the bank's headquarters are located in Nairobi. The target population comprised of all the 11 listed commercial banks in Nairobi Securities Exchange for 5 years and therefore census was employed. The study was anchored by two theories and one model, Agency theory, stakeholders' theory and Pablo Fernandez Model (PFM). Secondary data was collected from respective banks' annual financial reports between 2011- 2015. The data was analyzed using Statistical Packages for Social Sciences (SPSS) version 21.0 to give mean and percentages. Multiple Linear Regression analysis was used to establish the relationship between the explanatory variables and shareholders wealth of the commercial banks listed at the Nairobi Securities Exchange. Correlation analysis signified a positive relationship between all the independent variables and the independent variable. The regression results indicated that the independent variables significantly predict the shareholders wealth of commercial banks listed at the Nairobi Securities Exchange. The study recommends that the policy makers of listed commercial banks should ensure that there are proper measures put in place when issuing loans in order to increase their yearly Return on Equity, Economic Value Added, Market Value Added and Earnings per Share hence increased shareholders wealth. The study also recommends the use of other indicators of delinquent loans to assess the effect of delinquent loans on shareholders wealth of other institutions of different sectors of the economy. The findings can be significant to managers and make them appreciate the need to monitor and control delinquent loans. Also, the Government as a regulator will benefit in its quest to streamline operations in the banking. The results of the study can also be useful to academicians as it will highlight areas for further research and it will contribute to advancement and new knowledge.

1. Introduction

1.1. Background to the Study

Banks play a role as intermediaries connecting borrowers and lenders in bringing temporarily available resources from corporations and individual investors/customers as well as advancing loans to those that are cash trapped (Uwuigbe, 2013). Well-functioning commercial banks accelerate economic growth, while those poorly managed banks are an impediment to economic growth and aggravate poverty instead (Richard, 2011).

Loans are the major facility provided by the commercial banks. Globally, banks grant loans to customers as a way of enhancing their financial performance. However, banks problems and financial difficulties or insolvency have really pull banks into depression many

have been forced to close down by the regulatory watchdog, where in recent cases in Kenya we have seen Imperial Bank and Chase banks being put under statutory management. Therefore, ailing banks require quick action by supervisory authority to salvage them before they are put under receivership (Cheserek, 2007).

According to Fernandez, Jorge and Saurina (2000) in their study carried out in Spain, argued that despite bank supervisory authority being aware that most banking show down were directly linked to insufficient management of credit risk by respective financial institutions, it was therefore, difficult for supervisors from central banks to compel or pursue bank managers to adhere to prudent credit policies during economic upturn.

Sultana (2002) in his study of the Japanese banks 'Bad' correlated Japanese Financial distress to delinquent loans. In developed economies, such as Japan, United States and Sweden, they have faced major financial uproar relating to non-performing loans affecting them. In analyzing the Malaysian financial system, Ahmad (2002) found out that there was a significant correlation between credit risk and financial misery and concluded that credit risk had already started to build up before the Asian financial crisis, and became more serious as delinquent loans portfolio increased.

The findings of Caprio and Klingebiel (2002) showed that in Indonesia, delinquent loans represented about 75% of total loan assets which led to the downfall of over 60 commercial banks in the year 1997. Lending has been, and still is, the stronghold of banking business. This is truer more so in developing economies like the case of Tanzania where capital markets are not efficient. The Firms in Tanzania on one hand were complaining about lack of credits and the stringent policies set by banks, while commercial banks on the other hand have faced huge losses on bad loans (Richard, 2008).

In Kenya, Commercial banks are an important part of the country's financial system. Many commercial banks also offer a wide variety of services. They are responsible for ensuring customer deposits are safe and available in liquid form and be in a position to lend to the demanders of cash who includes the households, businesses or government (KBA, 2014).

1.1.1. Delinquent Loans

According to Nannyonga (2000) the term delinquency is defined as a failure to meet the repayment obligations at the date due or stated in the contract terms. Delinquent loans may also be referred to those loans that have not been honored for three months though sometimes may depend on the contract terms (Mikiko, 2003).

Delinquent loans, also known as non-performing loans, generally refer to loans which for a relatively long period of time do not generate income and whose principle or interest attached to them have not been honored for at least 90 days (IMF, 2009: Hennie and Sonja 2009: Caprio and Klingebiel 1999). According to Samuel (2011) delinquent loans have increasingly become unavoidable part of the banking business.

A delinquent loan varies considerably amongst countries (Global Financial System Report IMF, 2007). For instance, Armendariz et al. (2005) findings showed loan contracts of microfinance with less frequent repayment attract higher client default in Bangladesh. While on the contrary, McIntosh (2007) in his study observed that a fortnight loan repayment schedules depicted a lower drop-out in borrowers and reduced default in Uganda.

Field et al. (2008) contradicted McIntosh's and Armendariz's studies where in his findings from Indian banks repayment frequency and default revealed that switching from weekly to monthly installments payments did not affect borrower's/ customer's repayment ability.

Delinquent loans decrease the bank's performance and therefore it becomes a task of the banks to try and mitigate default risks. There is need for proper risk management, stringent loan policies, sharing of clients' credit information through Credit Reference Bureau (CRB) and making provisions for both bad and doubtful debts so as to cushion the commercial banks from the risk of delinquent loans.

1.1.2. Shareholders Wealth

The shareholders' wealth which is also referred to as value creation is the process of growing the shareholder's invested capital in the business. The shareholders' wealth can be defined, at any time, as the market capitalization of the public corporation (Windsor, 2008). Bhasin (2013), states that creating wealth for the shareholders requires that the firm undertake investment decisions that have a positive net present value (NPV). To measure the shareholders' wealth can be done in a way to know how much revenue that shareholders receive in an investment, through the existing stock price Stock Exchange stock. This can be evidenced by the distribution of dividends received by investors or other form of capital appreciation. Capital appreciation can be achieved if there is a change in the dominant value of the stock market (Raiyani & Joshi, 2011).

The shareholders are the owners of the business since it's through their capital contributed that the business was formed, therefore the normative goal of the business should be to grow the value of shareholders (shareholders' wealth maximization). The company's duty is to provide an adequate and respectable return on investment to shareholders by making wise long-term decisions the shareholder wealth maximization (SWM) principle states that the immediate or sole operating goal and the ultimate purpose of a public corporation existence is and should be to maximize return on equity capital. Thus managers, directors and investors should focus narrowly on SWM (Audrey & Jones, 2009).

Profit maximization as a business objective was a 19^{th} century criterion when the characteristic features of the business structure were self-financing, privately owned or operated (Solomon, 2000). Over the years, the objective function of the corporation has changed to maximizing the shareholder value. This concurs with the findings by Copeland et al (2000) where he observed that managers in most of the developed world has focus on creating shareholder value.

Aswath (2001) discussed the following reasons why the shareholder wealth maximization objective should be the main objective of a firm. First, stock prices are the most observable by all procedures which can be used to find out the performance of the firm. Secondly, the rational shareholders reflect the long-term effects of the corporate decisions. Finally, it is the trading of securities through which gains can be achieved.

According to the study by Kakani et al. (2002) they found that Shareholder Value Creation is a good yardstick to measure Corporate Performance. They further observed that the researcher's world over has realized the importance of Wealth Maximization as the normative goal of every firm. Shareholder Value Creation has thus, become the normative goal that all mangers of corporations are focusing on (Pandye, 2010).

In recent years, investors and shareholders have become more concerned with the actual shareholder value creation that is created by a corporation. Some companies, such as Enron, have shown a complete lack of concern for the owners of the corporation by making short-term decisions that do not focus on wealth maximization (Omondi, 2013). A company creates value to its shareholders when returns are greater than capital opportunity cost (Moyer et al., 2008). Borde and Ramesh (2013) developed a model that can be used in determining the shareholder's value created by a firm:

Created Shareholder Value is the excess of Shareholder Return over the Required Rate of Return on the equity, calculated as:

- $SVC = EMV \times (SR — K_e)$

Or

- $SVC = SVA — (EMV \times K_e)$

Where,

- SVC = Shareholder Value Created;
- EMV = Equity Market Value. Equity Market Value is calculated as:
- EMV = MP X OS

Where,

- MP = Market Price of a stock;
- OS = Outstanding Shares
- K_e = Cost of Equity;

1.1.3. Commercial Banks Listed in the Nairobi Securities Exchange

The Nairobi Securities exchange has 65 listed companies with a market capitalization of about Kshs. 2.9 billion, about 33.9 million in traded shares, about 864.7 million in equity turnover and about Kshs. 1,373 in total equity deals. There are 11 commercial banks listed at the NSE. These are, Barclays Bank of Kenya, National Bank of Kenya, Co-operative bank of Kenya, Standard Chartered, NIC Bank Limited, Diamond Trust Bank, Housing Finance Co. Ltd, Kenya Commercial Bank, Equity Bank, CFC Stanbic Holdings and I & M Holdings. The banks were listed between 1970 and 2013 with the earliest bank being CFC Stanbic while the latter is I & M Holdings.

1.2. Statement of the Problem

The most important cells in the economy are banks and this is because they play a significant role by maintaining and encouraging the development of economic sectors (Gutu 2015). The major portion of gross profit of the banking industry is earned from loans and so the industry considers lending a major portion of gross profit, thus loan delinquency affects the profitability of commercial banks (Wei-shong and Kuo-chung 2006). Krueger and Tornell (1999) argued that the delinquent loans are one of the major causes of the economic stagnation problems and its eradication is a necessary condition to improve the economic status of corporations.

According to the study by Kakani et al. (2002), it was found that Shareholder Value Creation is a good yardstick to measure Corporate Performance. They further observed that the researcher's world over has realized the importance of Wealth Maximization as the normative goal of every firm.

Wealth maximization as represented by Shareholder Value Creation has thus, become objective of all mangers and managements (Pandye, 2010).

Commercial banks greatly rely on loans advanced to increase their return and by doing this, default on repayment impair their profitability which consequently affect what is to be declared as dividend to shareholders as well as the market return on capital employed in the business. Many studies in regards to general financial performance of commercial banks have been done and proved to have valuable contributions on the causes, effects and credit risk management tools and techniques both globally and in Kenya. However, none of them gave it a thought to consider the value based approaches of measuring financial performance and the dwindling shareholders' fortune as a result of delinquent loans hence the motivation for this research in order to fill that gap.

1.3. Objectives of the study

1.3.1. General Objective

The General Objective of the study was to determine the effect of delinquent loans on shareholders wealth of commercial banks listed at the Nairobi Securities Exchange in Kenya

1.3.2. Specific Objectives

The specific objectives were as follows:

i. To evaluate the effect of change in Returns on Equity on shareholders' wealth of listed commercial banks in Kenya
ii. To determine the effect of change in Economic Value Added on shareholders' wealth of listed commercial banks in Kenya
iii. To Establish the effect of change in Market Value Added on shareholders' wealth of listed commercial banks in Kenya
iv. To determine the effect of change in Earnings per Share (EPS) on shareholders' wealth of listed commercial banks in Kenya

1.4. Research Questions

The study was guided by the following research questions:

i. What is the effect of change in Returns on Equity affect the shareholders' wealth of listed Commercial banks in Kenya?
ii. What is the effect of the change in Economic Value Added on shareholders' wealth of listed commercial banks in Kenya?
iii. What is the effect of the change in Market Value Added on shareholders of listed commercial banks in Kenya?
iv. What is the effect of the change in Earnings per Share (EPS) on shareholders' wealth of listed commercial banks in Kenya?

1.5. Hypothesis

The study was guided by the following hypothesis:

$H_{o1:}$ There is no statistical significant effect of the change in Returns on Equity on shareholders' wealth of listed commercial banks in Kenya

$H_{o2:}$ There is no statistical significant effect of the change in Economic Value Added on shareholders' wealth of listed commercial banks in Kenya

$H_{o3:}$ There is no statistical significant effect of the change in Market Value Added on shareholders' wealth of listed commercial banks in Kenya

$H_{o4:}$ There is no statistical significant effect of the change in Earnings per Share (EPS) on shareholders' wealth of listed commercial banks in Kenya

1.6. Significance of the Study

The findings of this research report are instrumental for it will make the commercial banks manager appreciate the need to monitor and control delinquent loans as it equally affects the profitability through provision made by the commercial banks and ultimately on shareholders wealth. The results will also encourage bank manager to participate more in policy formulation as far as bad debt and provisions for delinquent loans are concerned. Other financial institutions will also benefit by benchmarking themselves and doing an analysis on whether the effects analyzed on shareholders wealth in this study affect their performance as well.

The results of the study will also be useful to academicians as it will highlight areas for further research and it will contribute to advancement and new knowledge. The results of the study will come in handy to support the Government as a regulator in its quest to streamline operations in the banking sector putting in mind that the economy as a whole depends on how the banking sector in the economy performs. High levels of delinquent loans can hinder growth in the economy.

1.7. Scope of the Study

The study was conducted in Nairobi County, Kenya which aimed at looking into the change in Return on Equity, change in Economic Value Added, change in Return on Capital Employed and change in Earnings per Share and its effect on shareholders wealth of listed commercial banks. The researcher focused on the changes in Return on Equity, change in Economic Value Added, change in Return on Capital Employed and change in Earnings per Share in five years for all the listed commercial banks since they are few and there is no justification for taking a sample. There are eleven listed commercial banks in Kenya, CBK (2015).

1.7.1. Limitation of the Study

The results from the study reflected only listed commercial banks, hence was not the reflection or be generalized to all the financial institutions in Kenya. Another limitation was the fact that the study depended on ratios derived from financial statements on listed commercial banks. To overcome this, the researcher sent official emails to the banks to book appointments

1.8. Assumption of the study

The assumption of the study was that the financial statements give a true and fair view of the financial position of the banks.

1.9. Operational Definition of Terms

- Delinquent Loans: Are sums of money borrowed at an agreed rate of interest for a specified period of time and have not been honored for at least three months (90 days)
- Economic Value Added (EVA): It is excess of Operating Profit after Tax over the Weighted Average Cost of Capital.
- Earnings per Share (EPS): Earnings are the profits that remain after the payment of preference dividend and are attributable to shareholders and is expressed as Net Profit after tax per the number of shares in issue.
- Market Value Added (MVA); **it is** the difference between the current market value of a firm and the capital contributed by investors.
- Nairobi Securities Exchange (NSE): A private company limited by shares. It is registered under the Societies Act in Kenya
- Return on Equity(ROE): This ratio measures the profitability of the firm as a whole in relation to total equity employed.

- Shareholders wealth: This is the present value of expected future returns to the owners of a firm. The returns can take the form of periodic dividends payments and/or proceeds from the sale of stock

2. Literature Review

2.1. Introduction

This chapter highlighted the literature relating to the research topic. This section dealt with the literature review on the objectives, review of theories and relating to delinquent loans and shareholders wealth, review of empirical studies and the conceptual framework.

2.2. Theoretical Review

2.2.1. Stakeholder Theory/Theory of the Firm

Stakeholders' theory, developed originally by Freeman (1984), has since evolved into a theory of the firm. A corporation cannot create value if it overlooks the interest of its stakeholders. The main contender to value maximization as the corporate goal is called "stakeholder theory." Stakeholder theory argues that BOD as well as managers of corporations should make decisions that are geared into the diverse interest of all the stakeholders in a company at large. Stakeholders of a corporation encompass all individual, groups or institutions who can be affected by the wellbeing of the firm. This category includes not only financial claimholders, but employees, customers, communities, and government officials as well (Jensen, 2001). Stakeholder theory focuses therefore lays more emphasis on the equilibrium of stakeholder's interests as the major determinant of corporate policy. Thus, stakeholder theory is very useful as it provides a new insight into possible rationale for risk management in the corporation.

2.2.2. Agency Theory

The first proponents of the theory of agency were Stephen Ross and Barry Mitnick, independently and roughly concurrently. The agency relationship is created where one or more persons the principal (Shareholder(s)) engages the other person the agent (managers) to perform some services on their behalf and which involves delegating some decision making to the agent. Maximization of value has replaced profit-maximization as the operational goal of the firm. The agency problem however may arise if the agents further their own interest at the expense of the owners who are the shareholders.

The principal agency problem can be reduced by better monitoring such as establishing more appropriate incentives for managers though the shareholders have to incur extra cost to align their interest with those of the managers (Agency costs). The theory further gives an insight in to possible mismatch of interest between shareholders, management and debt holders as well due to unalignment in earning distribution, (Smith and Stulz, 1987). Finally, the shareholder value theory strives for reforming the governance of publicly maintained firms for the purpose of decreasing the principal-agent information gap.

This model emphasizes for board of firms to be autonomous from their corporate executives, specifically, the head of the board that should be someone different from the CEO and independently choose the board. An independent board can accurately monitor CEO activities and risk. Shareholder value also discusses in favor of improved financial transparency. By making firms' funds available to examination, shareholders become more mindful of the agent's conduct and can make informed choices concerning with whom to invest.

2.2.3. Pablo Fernandez Model

PFM is a model of measuring Shareholder Value Creation strongly advocated by economist Pablo who was a Latin American. According to Pablo the market price reflects all the information and the information is available to all at the same time (Borde, 2013).

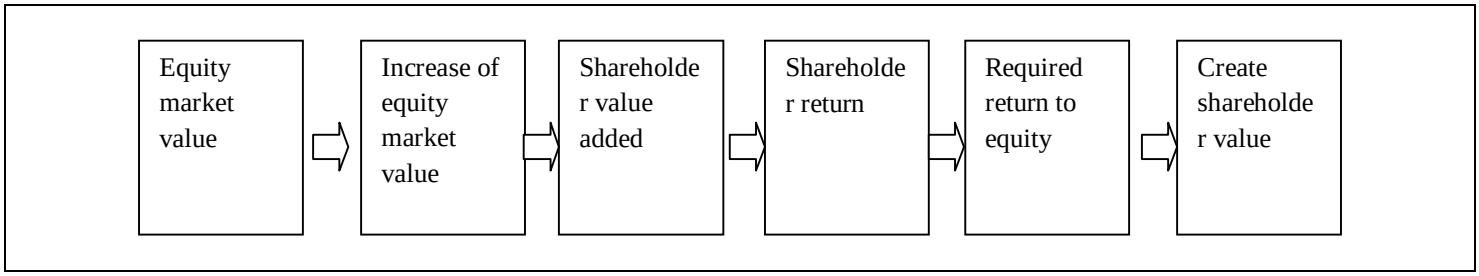

Figure 1: Pablo Fernandez model
Source: Borde (2013)

According to Pablo, Shareholders Value creation also called capitalization is the comparison between the market value and the book value per share. If the total market value is more than the book value, the shareholders' value is created whereas if the book value is more than the total market value, the shareholder value is diminished. The equity market value of a listed company is the company's market value.

The increase of equity market value in one year is the equity market value at the end of that year less the equity market value at the end of the previous year. Consequently, PFM model played a great role in determining shareholders' value (Dependent variable) from

the financial statements of the eleven listed commercial banks, where all the variables stated in the model were computed as attached in appendix iv.

2.2.4. Literature on change in Return on Equity

The return on equity gives the efficiency of a company's usage of its own capital, it is important to shareholders who may determine whether the reward they get commensurate the risk assumed. The corporation's management thrives to achieve appropriate level of return to safeguard their positions as well as focusing on other goals of the firm. ROE is the remuneration shareholders, get as dividends payments, stock options, and conversion rights or by other forms of reward. Thus, ROE gives the degree to which the corporate managers have managed to meet the company's main normative goal or creating value for shareholders

The indicator expresses the degree of employing or allocating the shareholder's funds in the business and the efficiency in which these funds have been utilized. It reflects the return on shareholders' capital as well as the capacity of the company to remunerate them.

ROE relates the earnings left over for the net worth/equity holders after deducting dues to debt holders have been factored in to the equity invested in the asset. Many practitioners and managers of businesses still rely on earnings per share in order to explain value creation (Hall, 1998).

Return on Equity (ROE) measures how the stockholders of a company have been faring on during the year (Ross, et al. (2010). Irala (2005), states that ROE indicates how much the firm has earned on the funds invested by the shareholders. Return on Equity is a ratio that shows the level to which companies are able to manage their own net-worth to effectively evaluate the profitability of the venture made by its own shareholders of the company (Van Horne and Wachowicz, 2011). According to Walsh (2003), ROE is the main feature of a modern market economy and ROE as well as ROCE ratio, in calculation, does not include the cost of capital.

Raballe & Hedensted (2008) and Liu & Hu (2005) found that Return on equity has also a positive impact on shareholders wealth as this shows that the management is making good use of shareholders investment. Ansar, Butt and Shah (2015) found that Return on equity has also a positive impact on shareholders wealth as this shows that the management is making good use of shareholders investment. According to Saleem (2013), the best feasible choice of debt and equity share that will increase the wealth of shareholder is the capital structure of the firm. In the above given statement, the purpose of setting the capital structure is viewed as the lay down of equity and debt amalgamation, which will maximize the wealth of shareholders.

Li & Cui (2003) asserts that to increase the worth of equity for shareholders decision makers is to make decisions of financing their operations according to capital structure theories. The aim of the decision makers is to maximize the value of the company by achieving higher profits. This result is the maximization of shareholders wealth. Therefore, capital structure substantially affects the shareholder's wealth. Chowdhury & Chowdhury (2010) found that in order to increase the shareholder's wealth the proper choice of capital structure of the company between debt and equity amalgamation plays important role.

To define company's value by implementing the process of future cash flows, capital structure such as Return on Equity has to be considered since it has significant positive impact on the company's Financial Performance and Shareholders wealth (Mujahid and Akhtar, 2014). Van Horne and Wachowicz (2011), return on equity, or ROE high acceptance of the company often reflect on the strong investment opportunities and management cost effective. This indicates that the value of a high ROE will promote achievement for the firm, which result in a high stock-price and make the firm to easily attract new funding. According to Hamida (2015) Return on Equity positively affect shareholders' wealth.

2.2.5. Literature on change in Economic Value Added

For years firms had tried to determine economic-based methods of determining value created for shareholders since accounting based methods had many shortcomings. However, it was until 1986 that Stern Stewart made a publication titled, *The quest for value*, and came up with a method of calculating value created for shareholders' value known as "Economic value added (EVA)" (Hall 2010).

Economic Value Added (EVA) has been widely publicized and is used as a yardstick for creating or increasing shareholder's value. In corporate finance, EVA is the value created up and above the required return of the company's shareholders. It has unique advantages in determining value that has been created or destroyed by the corporate management. EVA measure as well helps to determine how much economic value is added for the common shareholders by the corporate management for which they have at all-time been entrusted with (Alam, 2012). Economic Value Added (EVA) measures corporate financial performance; it is an after-tax net operating profit (NOPAT) minus a capital charge. EVA is excess of Operating Profit after Tax over the Weighted Average Cost of Capital.

Economic Value Added (EVA) is calculated by subtracting the cost of equity capital and debt from the operating profits. EVA is a new version of the age-old Residual Income (RI) concept acknowledged by economist Alfred Marshal in the 1770's. EVA affirms that wealth is created when revenues are adequate enough to cover a firm's operating costs and cost of capital (Kumar & Sharma, 2011; and Kaur & Narang, 2009). When EVA turns out to be the focus of the decisions to be made in a firm, it initiates simple and accountable links between strategic thinking, capital investments, operating decisions, and shareholder value (Weaver, 2001)

EVA had a positive effect on shareholders' wealth with regression coefficient of 0.011915 and probability value of t-statistic of 0.6429. Ho was accepted or can be said to exist. EVA influences shareholders 'wealth but not significantly, things that may lead to insignificant EVA test results to shareholders' wealth such as, the risk of the market, the increase rate of SBI which affect the magnitude of the cost of capital are borne by the bank. The same thing was stated by Hidayat (2006), that there are several factors that led to the results of testing of EVA on shareholders' wealth is not significant that the popularity of EVA that has not been recognized by the market, the complexity of the calculation of EVA, plus hard earned some of the data for the calculation of EVA, and there is

still controversy regarding the adjustment component in EVA. According to Fogelberg & Griffith, (2000) the advantage of EVA is that it is dollar based and thus, EVA correlates with wealth maximization.
This was supported by a study by Uyemura, Office, and Petit (1996) which found that EVA and MVA had the strongest correlation. Performance appraisal by means of EVA approach led to the attention of management in line with the interests of shareholders. With EVA, the manager and the shareholders or investors will concentrate on maximizing returns and minimizing costs that are related to capital in order for the value of the company to be maximized. Hidayat (2006), there are several factors that led to the results of testing of EVA on shareholders' wealth is not significant that the popularity of EVA that has not been recognized by the market, the complexity of the calculation of EVA, plus hard earned some of the data for the calculation of EVA, and there is still controversy regarding the adjustment component in EVA. According to Hamida (2015) Economic value Added had a significant positive effect on shareholders' wealth.
Anderson et al. (2004) emphasizes that EVA provides a valuable basis for changing wrong accounting numbers into correct estimates of value. For instance, accounting adjustments are much ado about nothing. Principally, the theory of EVA rests on two principal claims which include; a company is not justly beneficial unless it earns a return on invested capital that exceeds the opportunity cost and managers of a firm need to make positive NPV investment decisions for the shareholders (Grant, 2003).

2.2.6. Literature on Change in Market Value Added

Market Value is the price at which the share is traded on the NSE while Market Value Added is the excess of Market Value over Book Value (the premium). It can also be referred to as the difference between a firm's fair market value as reflected primarily in its share price, and the economic book value of capital employed.
According to (Stewart 1990 and Alam et al. 2012) defined another measure -Market Value Added (MVA) that asses if the business has created value for shareholders, where it focused on the listed companies. If the total market value of a corporation is greater than the amount of capital employed in the business, the corporation has managed to create value for shareholders. On the other hand, if the total market value is less compared to capital invested in the business, the corporation has destroyed value expected to have been otherwise created. Stewart (1990, p.153) calls it as Market Value Added (MVA).
MVA technique describes the variance between the total market value of firms with the total capital of a particular shareholder. Shareholder value can be capitalized on by maximizing the difference between the market value of company stock, with the number of shares of capital provided by shareholders (Bolbol et al. 2005). In the MVA method, shareholder value also can be measured by using the Created Shareholder Value (CSV). CSV is a new way of performance measurement developed by (Baker & Wurgler, 2002). Results got from the computation of MVA, shows the difference between the total market value of firms with total capital of a particular shareholder stock, with the number of shares of capital provided by shareholders (Fernandez, 2001).
In a study, conducted by Eljelly and Alghurair (2001), they examined the relationship between stock returns and wealth creation, as measured by MVA and various performance measures of joint-stock companies in Saudi Arabia. The study found a strong link between various conventional accounting interventions. The study also showed that these measures give similar indication of a firm's general performance. The results also indicated that MVA and stock returns have a relationship with conventional accounting strategies, however, not with EVA. Though, EPS is found to dominate other measures of performance in line to its association with stock returns and MVA.
Boakye (2012) evaluated fifty-three (53) companies, listed on the South-African JSE Securities Exchange to determine whether they created wealth or value from between 2000 to 2010. Boakye study used EVA and MVA as wealth replacement. The results indicate that mining firms have created significant wealth for investors during the study period. In a study performed by Rajesh et al. (2012), attempting to measure the financial performance of selected cement firms in India, and ranked them based on their mean EVA and MVA for the period of ten years (10) (2001–2002 to 2010–2011), they found clearly that, in two contemporary measures that is EVA, MVA, ACC Ltd and Grasim Cements Ltd having a fitting show with reliable returns to the shareholders. The two actions were having relative importance to assess the performance of a company.
Still in India, Pria (2012) endeavored to test whether value based frameworks are applicable in Indian condition. A sample of fifteen (15) top companies was taken from engineering industries during the period between 1996–2010. The study intended to examine the relationship between shareholder's value and financial variables. Regression results revealed that EVA, TSR and FGV have positive impact on MVA.

2.2.7. Literature on Change in Earnings per Share

Earnings per share (EPS) gives the corporation's current and future debt potential as well as providing shareholder with information on the portion of earnings belongs to each share (Kim, 2008). EPS is arrived at by dividing income available to ordinary shareholders by the weighted-average number of ordinary shares outstanding for the period. In the study done by Lynette (2010) he puts a strong argument that in order to grow wealth, managers can increase earnings per share (EPS).
Sarwar, S. M (2011) conducted research on effect of dividend policy on shareholder's wealth in sugar industry in Pakistan. A sample of thirty there (33) listed companies of sugar industry out of thirty-six (36) at Karachi stock exchange from the food and producers sector. The data was collected for the period of 6 years between 2006-2011. From the analysis of the study, it was found that earnings per share have a significant relationship with shareholders wealth. This was in concurrence with Hamida (2015) who found that Earning Per Share positively affect the wealth of shareholders.
Earnings Per Share determines how much net income per share and in its calculations (Sawir, 2001). This will lead to a change in earnings per share (EPS) and also changes in the risk as these two aspects will affect the company's stock price. EPS has a positive

effect on shareholders' wealth with regression coefficient of 0.254511 and has a probability value of t-statistic equaling to 0.0006, which is smaller than the significance level was set at 5%, so that Ho is rejected or it can be said there is a significant positive effect of EPS to shareholders' wealth (Ansar, Butt, Shah, 2015).

Dividend policy has been the subject of considerable debate since the 1960s when Miller and Modigliani illustrated that under certain assumptions, dividends were irrelevant and had no influence on a company's share value.

From then, financial scholars and implementers have differed with Miller and Modigliani's suggestion and have debated that they based their arguments on perfect capital market assumptions, which do not hold in the real world. In South Africa for instance, Ooms, Archer and Smit (1987), Auret and De Villiers (2000), and Clarke (2007) discovered important information pointer on the size of prospect earnings on share statements.

The modern strategy of financial management offers an abstract and analytical framework for decision-making which emphasizes on effective use of opportunities and resources to create wealth of shareholders. Consequently, the market value of the ordinary shares of a financial corporation is portrayed as the major indicator of the health of shareholders. The optimal dividend policy is one that maximizes corporation's stock price. This results to maximization of shareholders' wealth and thereby ensures rapid economic growth (Priya & Azhagaiah, 2008). Auret and De Villiers (2000), using a multiple linear regression technique, found that earnings per share (EPS) had greater explanatory power than the dividend per share (DPS) in the explanation of share prices.

In their studies, Nishat and Irfan (2003) and Rashid and Rahman (2009) also found negative insignificant relationships between earnings per share and stock prices. Priya and Azhagaiah (2008) used multiple regression analysis in analyzing the impact of dividend payments on shareholders' wealth and found that a higher dividend increases the market value of the share, while a lower dividend decreases the market value of the share. Shareholders seemed to prefer the current dividend to a future dividend and dividend payments were considered to be the most important factor in determining shareholders' wealth. In respect of the dividend relevance theory, based on the panel data analysis, using fixed and random effect models, a positive relationship was found between dividend payments and shareholders' wealth. The three variables (dividend per share, earnings per share, and market price per share) were at first non-stationary (Wet and Mpinda, 2013).

Azhagaiah (2008) and Muhammad Akbar (2010) found a positive relationship between Earning per Share and Shareholders wealth. Ansar, Butt, Shah (2015) found a positive relationship between Earning per Share and Shareholders wealth. Azhagaiah & Priya (2008) conducted a study on the impact of dividend policy on shareholder wealth in South India.

They found out that there was a significant impact of dividend policy on shareholder wealth in organic chemical companies while shareholders wealth is not influenced by dividend payout as for inorganic chemical companies.

Khan. A; Khan. K (2011) conducted research on dividend payout policy and its effect on stock prices. The purpose of the study was to determine the factors of dividend payout policy that affect stock prices. The sample in the study was 131 companies listed at Karachi Stock Exchange. Panel data approach was used to measure the relation between dividend policy and stock prices. Retention ratio, stock dividend per share, earning per share, net profit after tax and return on equity were the independent variables. The findings showed that the stock dividend, earnings per share, profit after tax, and return on equity had a positive effect on stock prices and retention ratio had a negative effect on stock process.

Khan (2012) researched on the dividend effects on stock prices. The purpose of the study is to improve the dividend policy decisions adopted by the companies. This study helps to explain the effect of dividend policy impacts on shareholders wealth by taking the data from two important sectors chemical and pharmaceutical industry of Pakistan. The price volatility was taken as dependent variable calculated using Parkinson (1980) method of extreme values while Earnings Per Share, Profit after Tax and Return on Equity were independent variables. The experimental estimation on fixed and random effect model indicated that there is significant positive relation between earnings per share, stock dividends and profit after tax to the prices of stock market, while the return on equity and retention ratio have negative and statistically insignificant relationship to stock market prices.

Gul, et al (2012) investigated relationship between dividend policy and shareholder wealth in Pakistan. Shareholder Wealth was the dependent variable measured by market price per share and dividend policy was the independent variable being measured by dividend per share. Multiple regression and stepwise regression model were used in the research for data analysis. The results of the study showed that there was a significant influence of dividend policy on shareholder wealth as far as dividend paying companies are concerned & also the difference in average market value relative to book value of equity was high between dividend paying companies and non-dividend paying companies.

2.3. Empirical Review

Delinquent loans provisions by commercial banks reduce the total loan portfolio of banks and consequently reduce the interest accruing on such assets and ultimately the return on equity or shareholders wealth maximization. Loan portfolio constitute a greater proportion of the bank's assets as it is the principal source of interest income (Boahene, Dasah and Agyei, 2012) and therefore lending becomes a risky venture given that repayment of loans can rarely be fully guaranteed.

In a study conducted by Almazari (2014) on the internal factors that affect profitability of banks, where he aimed at comparing the profitability of Saudi and Jordanian banks by using the internal factors for estimation, a sample of 23 Saudi and Jordanian banks were considered with 161 observations for the period 2005–2011. The influences of profitability were tested empirically. The study found that there was a significant positive correlation between ROA of Saudi banks with TEA, TIA and LQR.

Reta (2011) did a study on the determinants of loan repayment performance in the Addis Credit and Saving Institution in Ethiopia. The objective of the study was to investigate factors influencing loan repayment performance of the beneficiaries of Micro-Finance Institutions. The researcher outlined customer features as the major variable influencing loan repayment. According to Ceresin (2015)

on his study on factors affecting financial performance of financial institutions in Albania, the findings were that bank size has a negative but statistically insignificant effect on banks. Capital adequacy has a negative effect impact and liquidity as well. It was revealed that age is not a significant factor to take into consideration in analyzing bank performance. A policy on efficient management should be put in place for bank the determination of equity capital and amount of loans by finding ways to obtain the optimal utilization of resources

Tai (2014) carried out a study to examine the efficiency and efficacy of fifty-eight (58) Islamic national banks and publicly listed conventional and in the Gulf Cooperation Council (GCC) countries between 2003 and 2011.

A trans log cost function was used to evaluate the efficiency of the GCC banking sector, Empirical findings revealed that Masraf Al Rayan of Qatar was the most efficient bank while Kuwait Finance House (also an Islamic bank) was the least efficient bank during the study period.

Usually, banks were more profitable, liquid, and solvent than the Islamic banks through the past years of the period of the study while Islamic banks were further profitable, liquid, and solvent than conventional banks during the later years of the study period. The results of regression point out that economic conditions, bank size, financial development, operating costs, and kind of bank were significant variables affecting return on average assets.

Nsambu (2014) studied the factors affecting performance of domestic commercial banks in Uganda. The objective was to establish the impact of key internal factors that affect the performance of domestic commercial banks in Uganda, so that the remedial action can be taken for better performance.

The study was carried out in Uganda. It included all the licensed commercial banks (four) in Uganda as at 31st December 2011. The period for the study was from 2000 – 2011. Linear multiple regression analysis was employed. The study found that, management efficiency, asset quality, interest income, capital adequacy and inflation are variables distressing the performance of indigenous commercial banks in Uganda. Policy inferences emerged for management of commercial banks comprising of efficient management, credit risk management, capital adequacy levels, diversification and commercial bank investment. Besides, financial policy regulations and tools should not enforce high liquidity and capital sufficiency levels. Regulations on non-interest income activities should have in place to harmonize the effect of diversification on all money-making banks performance and avoid exploitation of bank clients.

According to the study done by Brownbridge (1998), it was revealed that single biggest contributor to the bad loans or delinquent loans of many of the failed business banks was insider leading, just like what has been witnessed in Kenya in the recent past where Imperial bank and Chase bank were put under statutory management due to insolvency problems caused by massive insider lending. In at least half of the banks downfall was contributed by insider lending.

He further observed that second major factor that contributed to bank downfall were high interest rates charged that were charged by banks on borrowers operating in the high-risk segment of the credit market.

Ochola (2009) conducted a study of the relationship between credit risk management and non- performing loans. The objective of the study was to establish the degree of effect of employing different credit management techniques on the level of non- performing loans. In assessing this, the study wanted to find out the relationship between credit risk and management and non- performing loans by pursuing a survey in the Kenyan banking sector. The research found that in a Kenyan setup, a combination of intensive credit-risk management by banks combined with close management by Central Bank has greatly enhanced the decline of non- performing loans ratio in the banking sector. Analyzing the asset quality of the financial sector for 2003 to 2008, the ratio of the gross non-performing loans to gross loans declined from high 35% in 2003 to low of 9.2% in 2008. The decline of this ratio confirms a close relationship between non- performing loans and credit risk management.

Kithinji (2011) conducted a research on credit risk management and profitability of commercial banks in Kenya. In this study credit was measured by advances and loans that were being given to the banks' customers divided by total assets. Non-performing loans was measured using non-performing loans or total loans and profits were measured using Return on Total assets. The trend of level of credit, non-performing loans and profits were twenty-six (26) established during the period 2004 to 2008. In this study, a regression model was employed to find out the relationship between amount of credit, non-performing loans and profits during the period of study. R2 and t-test at 95% confidence level were estimated. The results indicated that there was no association between the returns, credit and the level of non-performing loans. The research did not take into account the investment by the shareholders or the return in terms of dividends to the investors.

King'oo (2015) researched on the effect of selected internal factors on the performance of commercial banks listed in the NSE and found out that capital adequacy, liquidity, Operational cost efficiency and Size of the bank do significantly affect the financial progress of financial banks listed at the Nairobi Stock Exchange.

Osoro (2013) looked into the effect of financial restructuring affecting the financial performance of commercial banks. Lucy (2010) studied the relationship between the practices of managing non-performing loans how commercial banks perform financially in Kenya.

Macharia (2012) analyzed the relationship between non- performing loans and the financial performance of commercial banks. Gaitho (2010) conducted a survey of credit risk practices by SACCOs in Nairobi. The findings revealed that majority of the SACCOs use credit risk management procedures to alleviate risks as a basis for unbiased credit risk assessment. Majority of the respondents agreed that credit risk-management procedures had influenced completely to their organization by ensuring effectiveness in implementing its obligations and achieving its objectives.

Muasya (2009)) investigated the impact of NPLs on the performance of banking sector in Kenya. She outlines that majority of such factors include under staffing, under qualified staff among others for years 2004-2008. In the study, a sample of 13 banks is used to show how these factors affect the performance of these banks where the performance is represented by the profit before tax of the 13

sampled banks. The study however assumes that the factors that affect each bank can be assumed to be harmonious to other banks. She concludes that the agility of the employees to collect the loans issued affects the performance of the banks.

Mullei (2003) sites an example of Daima bank that went into bankruptcy due to high levels of NPLs and was placed under statutory management due to poor management of the loan portfolios. Githinji (2010) in a study of the relationship between credit-scoring methods by financial banks and access to credit by small and medium enterprises (SMEs) in Kenya noted that the benefits achieved from the use of credit scoring include precision in decision making process. In addition, the banks needed to frequently review their credit guidelines

In a research by Muthee (2010) on the relationship between credit risk management and profitability on Kenyan commercial banks, the results showed that credit risk management had an influence on the profitability of banks. The study used regression analysis to establish the relationship between NPLR and Return on Equity. The findings concurred with those of Wanjira (2010) who studied the relationship between non-performing loans management practices and financial performance of commercial banks in Kenya.

The study concluded that there was a need for commercial banks to adopt non-performing loans management. She advocated for practices that include making sure collaterals are sufficient, controlling loaning to several types of businesses, ensuring clear assessment framework of lending facilities and use of systematic methods in solving loans with problems amongst others.

The study further concluded that there was a positive association between non-performing loans management approaches and the financial performance of Kenyan commercial banks. This implied that the adoption of non-performing loans management practices leads to better financial performance of commercial banks. Mwirigi (2006) who conducted an assessment of credit risk techniques in commercial banks in Kenya who argued that non-performing loans are affected by interest rates shifts. The study reveals that a significant number i.e. 92% of the respondents used credit management policies as a basis of objective credit risk appraisal. In conclusion, he identifies credit risk as the most important risk with 80% of the respondents ranking it as the most important risk among other risks faced by their institutions. Simiyu (2008) while analyzing techniques of credit risk management observed that micro-finance institutions use 6c's techniques of credit risk management. The study further established that majority of the institutions used credit matrix to measure the credit migration and default risk.

The study by Ngare (2008) was a survey of credit risk and management practices by financial institutions in Kenya and observed that few banks adhere to follow the set best practices by the Central Bank of Kenya The specific areas of research were geared towards identifying the sources of credit risk exposures in banks and strategies that the banks in Kenya have adopted to monitor and mitigate against the credit risk exposures intrinsic in the their business operations. From their study, it was found that banks use qualitative loan assessment methods to make credit granting decisions while liquidity runs on the borrowers' credit concentration and adverse trading by the borrowers were the major causes of credit risk among the Kenyan banks. In addition, it was established that most commercial banks were found to use loan diversification, bank security and bank covenants to mitigate against credit risk.

Mutwiri (2003) studied the use of the 6c'scredit risk appraisal model and its relationship with the level of NPLs in Kenya and concluded that proper credit risk management and constant risk appraisal will reduce significantly the level of NPLs.

Olomola (2002) found that repayment performances by clients are affected by borrower's risk profile, lenders profile as well as loan characteristics. Repayment problems could come about in terms of loan delinquency and default. The researcher further argued that it is important to examine borrowers and lenders if it complies with the loan contract terms as well as the duties and rights of both parties as reflected in the credit programme.

2.4. Summary of Literature Review

From the review of the literature, it is evident that when delinquency rate is higher it undermines banks profitability and lower expected interest income. This may affect banks' sustainability because delinquency erodes the capital of the bank. It is also evident that delinquent loans might expose banks into financial losses hence, low change in Return on Equity, change in Economic Value Added, change in Market Value Added and change in Earnings per Share when the commercial banks fail to maintain a proper way of handling delinquent loans.

The empirical studies by Cekrezi (2015), Reta (2011) and Almazari (2014) have showed various factors that affect the general financial performance of banks in which most of the studies measured financial performance using return on assets (ROA). Factors analyzed included capital adequacy, bank size, asset quality, liquidity, income diversification and operational cost efficiency. Delinquency is a factor that can dictate highly the financial performance of banks and especially to its shareholders. Various Kenyan studies such as Muthee (2010, Wanjira (2010), Ngare (2008) Lucy (2010), King'oo (2015), Macharia (2012) among others seem to concur that there is a relationship between delinquent loans and shareholders wealth and that there was need to find out the credit management techniques in order to curb delinquency.

However, from the literature review, little focus has been laid on the effect of delinquent loans on shareholders wealth of listed commercial banks, creating a knowledge gap. This study is therefore, is geared towards establishing the effect delinquent loans and how it influences shareholders wealth of commercial banks listed at the NSE, Kenya.

2.5. Conceptual Framework

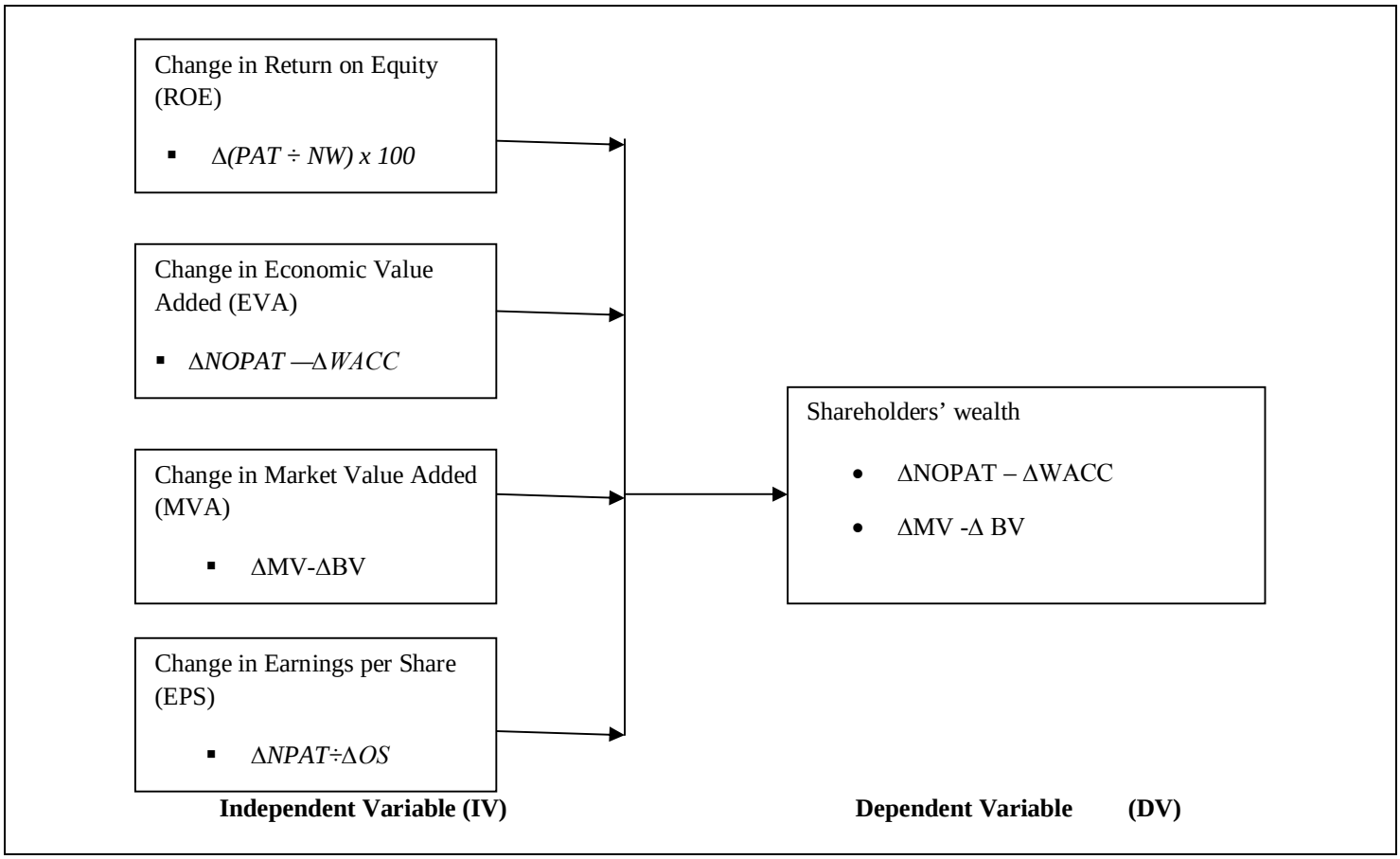

Figure 2: The relationship between delinquent loans and shareholders wealth

The above conceptual framework shows the relationship between components of delinquent loans and the shareholders wealth of listed commercial banks. The figure shows variables such as the change in Return on Equity, change in Economic Value Added, change in Market Value Added and change in Earnings per Share. The study of these variables was important as it helped in explaining the effect of delinquent loans on shareholders wealth of listed commercial banks.

3. Research Methodology

3.1. Introduction
The chapter outlines the research design, target population, data collection and data analysis procedures to be used in the study.

3.2. Research Design
Kothari (2009) argues that a research design is a plan, structure or strategies or investigation conceived so as to obtain answers to research questions and to control variants. The researcher adopted descriptive survey design. The design was appropriate in establishing the effect of loan delinquency on the shareholders wealth of listed commercial banks at the NSE.

3.3. Geographical description of the study area
The study was conducted at the Head office of all the eleven quoted commercial banks which is in Nairobi, the capital city of Kenya with 17 constituencies. The city is 696km^2 with a population of 3.36 million people (Census, 2009).

3.4. Target Population
Ogula (2005) defines population as any group of people, institutions, objects that have at least one characteristic in common. Mugenda and Mugenda (2003) defines target population as a process to which a researcher wants to generate the results of the study. The population for this study was commercial banks listed at the Nairobi Securities Exchange for period 2011 to 2015, where the market has been active. Appendix I shows all the 11 currently listed commercial banks at the NSE in Kenya.

3.5. Sample Size and Sampling Procedure

Sampling procedure refers to part of research plan that indicates how cases are to be selected for observation while sample size refers to the number of items sampled from bigger populations that their findings will be used to generalize about the whole population (Kothari, 2004). Kothari (2009) explains that the size sample should neither be excessively large or small. The researcher employed census as all the 11 listed commercial banks (appendix i) at the NSE were under study.

3.6. Data Collection Procedures

Secondary data improves the clarity of the problem and the situation surrounding the issues. This study used secondary data for the various variables that were put into the model. The data was sourced from the consolidated statements of comprehensive income and statements of the financial position extracted from the firm's statements approved by the board of directors as available in the companies and their websites covering a period of the last five financial years.

3.7. Validity of Research Instruments

According to Mugenda (2003) validity is realistic implication based on the research results. The researcher established the validity of research instruments by presenting them to supervisors from Kisii University. Their advice was used to adjust the instruments.

3.8. Reliability of Research Instruments

Reliability is a measure of the degree to which a research instrument yields consistent results or data after repeated trials. Reliability is influenced by random error. As random error increases, reliability decreases. Random error is the deviation from the true measurement due to factors that have not been addressed effectively by the researcher such as coding, ambiguous instructions to respondents and bias (Mugenda and Mugenda, 2003). To ensure reliability of the instruments, a pilot study was conducted in two companies listed at the Nairobi Securities Exchange that are not part of the study. The secondary data collected was analyzed and the output discussed with three experts in the related field to establish its relevance in answering the objectives of the study.

3.9. Data Analysis and Presentation

Data analysis employed involved quantitative procedures. According to Smeenton and Goda (2003) various analytical procedures provide a way of drawing inductive inferences from data and distinguishing the signal (the phenomenon of interest) from the statistical fluctuations present in the data. The secondary data obtained in this study was reviewed for completeness and consistency in order to carry out statistical analysis. The quantitative data collected was analyzed by the use of both descriptive and inferential statistics.

This was done by the help of Statistical Package for Social Sciences Solution (SPSS, version 21.0). The regression model adopted helped to establish the effect of the explanatory variables on the shareholders wealth on listed commercial banks as indicated below;

$\mathbf{y} = \boldsymbol{\alpha} + \boldsymbol{\beta}_1 X_1 + \boldsymbol{\beta}_2 X_2 + \boldsymbol{\beta}_3 X_3 + \boldsymbol{\beta}_4 X_4 + \boldsymbol{\acute{\varepsilon}}$

Where:

y =shareholders wealth

$\boldsymbol{\alpha}$ = Constant Term

$\boldsymbol{\beta_1, \beta_2, \beta_3, \beta_4}$= Beta Coefficients

x_1 = change in Return on Equity

x_2 = chande in Economic Value added

x_3 =change in Return on capital Employed

x_4 = change in $_{\text{Earnings}}$ per share

$\boldsymbol{\acute{\varepsilon}}$ = Error term

3.10. Ethical Consideration

Ethics are moral principles and rules of conduct dealing with what is right and what is wrong (De Vos *et al*, 2005). There were a number of ethical issues that was adhered to in this study. They include; obtaining permission to undertake the research from National Commission for Science, Technology and innovation, and the undertaking to treat all information received confidentially by protecting the identity of participants.

4. Data Analysis, Results and Discussion

4.1. Introduction

This chapter presents the analysis of study findings of the determination of the effect of delinquent loans on shareholders wealth of listed commercial banks in Kenya for a period of between the years 2011 to 2015. The study's specific objectives were analyzed using data from secondary sources. This chapter began with the descriptive statistical analysis then followed with inferential statistics on the specific objectives.

4.2. Descriptive Statistics

Descriptive statistics shows the variables; Return on Equity, Economic Value Added, Market Value Added and Earning per Share changes from one year to the other within the banks. The results are presented in the Table 1 below:

Bank	Change in Return on Equity	Change in Economic Value Added	Change in Market Value Added	Change in Earnings per Share
Housing Finance	2.87	3.96	4.70	3.40
CFC Stanbic bank	6.18	3.03	4.86	4.94
Corporative bank	7.00	5.39	8.44	6.63
Barclay Bank	8.90	9.60	8.36	12.22
Standard Chartered	12.5	14.02	8.64	2.81
Diamond Trust Bank	0.87	1.96	2.70	0.40
NIC bank	5.18	2.03	3.86	3.94
I&M Holdings	5.00	3.39	6.44	4.63
Kenya Commercial Bank	7.9	10.6	7.36	11.22
Equity Bank	9.50	11.02	5.64	9.81
National bank of Kenya	8.50	10.02	4.64	8.81
Average/Mean	**6.76**	**6.82**	**5.96**	**6.26**

Table 1: Descriptive statistics (Percentage changes in Return on Equity, Economic Value Added, and Market Value Added and Earning per Share)
Source (Researcher, 2016)

From the above results in Table 1, it was found that the values for change in Economic Value Added, had the greatest change in mean (6.82) from 2011 to 2015 followed by change in Return on Equity then change in Market Value Added with change in Earning per Share recording the lowest mean change of 6.76, 6.26 and 5.96 respectively.
These descriptive statistics were then followed by inferential statistics analysis tests to determine effect of change in Return on Equity on shareholders' wealth, determine the effect of change in Economic Value Added on shareholders' wealth, establish the effect of change in Market Value Added on shareholders' wealth and determine the effect of change in Earnings per Share on shareholders' wealth of listed commercial banks in Kenya. This was analyzed under the following sub-section.

4.3. Inferential Statistics

4.3.1 Effect of Change in Return on Equity on Shareholders wealth of Commercial Banks Listed at the Nairobi Security Exchange, Kenya
The researcher used regression coefficient as the appropriate statistical technique for analysis of objective one. This statistic helped to evaluate the effect of change in Returns on Equity on shareholders' wealth of commercial banks listed at the NSE, Kenya. The analysis therefore, presents the inferential statistics.
The linear regression coefficient test at $p \leq 0.05$ significance level illustrating statistically significant effect of change in Return on Equity on shareholders' wealth of commercial banks listed at the NSE, Kenya is as summarized in Table 5. Thus, Table 5 presents the linear regression coefficient test that was conducted to determine whether change in Return on Equity affect shareholders' wealth of commercial banks listed at the NSE, Kenya. To achieve this, the hypothesis below was tested;
Ho_1: There is no statistical significant effect of the change in Return on Equity on shareholders' wealth of listed commercial banks in Kenya
Therefore, the analysis starts with Pearson correlation analysis in Table 2 to test for assumption of linearity, Model summary model in Table 3 and ANOVA in Table 4 to test whether the regression model $\mathbf{y=\alpha+ \beta_1 X_1 +} \infty$was viable.

Correlations			
		Shareholders wealth	Change in Return on Equity
Shareholders wealth	Pearson Correlation	1	
Change in Return on Equity	Pearson Correlation	.935**	1
**. Correlation is significant at the 0.05 level (2-tailed).			

Table 2: Pearson correlation analysis (change in Return on Equity)
Source (Researcher, 2016)

From the results in Table 2, Pearson correlation coefficient (r=.935) between change in Return on Equity and shareholders wealth was positive and above 0.05. Therefore, change in Return on Equity had a strong positive relationship (r=.935) with shareholders wealth. This implies that the linearity assumption was achieved. This was followed by Model summary to show the explained variation. The results are presented in the Table 3 below:

Model Summary[b]					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.935[a]	.874	.860	1.42280	2.427
a. Predictors: (Constant), change in Return on Equity					
b. Dependent Variable: Shareholders wealth					

Table 3: Summary of output (change in Return on Equity)
Source (Author, 2016)

From the above results in Table 3, the correlation coefficient (R) is .935 which means that there is a strong positive correlation between the variables. The coefficient of determination (Adjusted R Squared) indicates the level in which the change in Return on Equity predicts the change in shareholders' wealth. The adjusted R square was 0.86, which shows that the change in ROE predicts 86.0 % of the Shareholders wealth of commercial banks listed at the NSE,Kenya

Besides, regression model results can be said as fit if they are supported by empirical data, where only fit model that can explain results. To determine whether the model was fit or not required, ANOVA was used. The model; $\mathbf{y= \alpha + \beta 1X1 + \infty}$was tested whether fit and the results shown in Table 4. Where;

Y is the Shareholders wealth

α is the constant term

X_1 is the change in Return on Equity

β_1 is the variable coefficient

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	126.640	1	126.640	62.558	.000[b]
	Residual	18.219	9	2.024		
	Total	144.860	10			
a. Dependent Variable: Shareholders wealth						
b. Predictors: (Constant), change in Return on Equity						

Table 4: ANOVA (change in Return on Equity)
Source (Researcher, 2016)

The ANOVA output was examined to check whether the proposed model was viable. Results shown in Table 4 reveal that the F-statistic and p value for the "$\mathbf{y= \alpha+\beta_1X_1 + \infty}$" is 62.558 and .000[b]respectively. Since the p-value (.000[b]) was less than 0.05, indicating that the change in ROE significantly predict the shareholders' wealth at the statistically chosen 5% level of significance. This was followed by regression variable coefficient as shown in Table 5 below.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.296	1.032		-.287	.780
	Change in Return on Equity	1.097	.139	.935	7.909	.000

Table 5: Variable coefficient (change in Return on Equity)
Source (Author, 2016)

The statistical coefficient indicated the prediction of change in ROE considered to the variability in the shareholders wealth.

Table 5 revealed standardized regression coefficient for change in Return on Equity (β=.935) and a p-value (p=.000). This means that an increase of 1 standard deviation in change in Return on Equity is likely to result in a .935 standard deviation increase in shareholders wealth. In addition, the p value (p=0.000) for change in Return on Equity was less than 0.05.

Therefore, the hypothesis, "There is no statistical significant effect of the change in Returns on Equity on shareholders' wealth of listed commercial banks in Kenya", was rejected. This implies that there is statistically significant effect of the change in Returns on Equity on shareholders' wealth of listed commercial banks in Kenya.

4.3.2. Effect of Change in Economic Value Added on Shareholders Wealth of Listed Commercial Banks in the Nairobi Security Exchange, Kenya

The researcher used regression coefficient as the appropriate statistical technique for analysis of objective two. This statistic helped to evaluate the effect of change in Economic Value Added on shareholders' wealth of listed commercial banks in Kenya. The analysis therefore, presents the inferential statistics.

The linear regression coefficient test at $p \leq 0.05$ significance level illustrating statistically significant effect of change in Economic Value Added on shareholders' wealth of listed commercial banks in Kenya is as summarized in Table 9.

Thus, Table 9 presents the linear regression coefficient test that was conducted to determine whether change in Economic Value-Added affect shareholders' wealth of listed commercial banks in Kenya. To achieve this, the hypothesis below was tested;

Ho_2: There is no statistical significant effect of the change in Economic Value Added on shareholders' wealth of listed commercial banks in Kenya

Therefore, the analysis starts with Pearson correlation analysis in Table 6 to test for assumption of linearity, Model summary model in Table 7 and ANOVA in Table 8 to test whether the regression model $\mathbf{y=\alpha+\beta_2X_2+\infty}$was viable.

Correlations			
		Shareholders wealth	Change in Economic Value Added
Shareholders wealth	Pearson Correlation	1	
Change in Economic Value Added	Pearson Correlation	.943**	1
**. Correlation is significant at the 0.05 level (2-tailed).			

Table 6: Pearson correlation analysis (change in Economic Value Added)
Source (Researcher, 2016)

From the results in Table 5, Pearson correlation coefficient (r=.943) between change in Economic Value Added and shareholders wealth was positive and above 0.05. Therefore, change in Economic Value Added had a strong positive relationship (r=.943) with shareholders wealth.

This implies that the linearity assumption was achieved. This was followed by Model summary to show the explained variation. The results are presented in the Table 7 below:

Model Summary[b]					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.943[a]	.890	.878	1.33185	1.356
a. Predictors: (Constant), change in Economic Value Added					
b. Dependent Variable: Shareholders wealth					

Table 7: Summary of output (change in Economic Value Added)
Source (Author, 2016)

From the above results in Table 7, the multiple correlation (R) is .943 which means that there is a strong positive correlation between the variables. The coefficient of determination (Adjusted R Squared) indicates the level in which the change in Economic Value Added predicts the change in shareholders' wealth. The adjusted R square was 0.878, which shows that the change in EVA predicts 87.8 % of the Shareholders wealth of commercial banks listed at the NSE,Kenya

Besides, regression model results can be said as fit if they are supported by empirical data, where only fit model that can explain results. To determine whether a model was fit or not required, ANOVA was used. The model; $\mathbf{y=\alpha+\beta_2X_2+\infty}$was tested whether fit and the results shown in Table 8. Where;

Y is the Shareholders wealth

X_2 is the change in Economic Value Added

β_2 is the variable coefficient

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	128.895	1	128.895	72.665	.000[b]
	Residual	15.964	9	1.774		
	Total	144.860	10			
a. Dependent Variable: Shareholders wealth						
b. Predictors: (Constant), change in Economic Value Added						

Table 8: ANOVA (change in Economic Value Added)
Source (Researcher, 2016)

The ANOVA output was determined to check whether the proposed models were viable. Results shown in Table 7 reveal that the F-statistic and p value for the "$\mathbf{y=\alpha+\beta_2X_2+\infty}$" is 72.665 and .000[b]respectively. Since the p-value (.000[b]) was less than 0.05, indicating that the change in EVA significantly predict the shareholders' wealth at the statistically chosen 5% level of significance. This was followed by regression variable coefficient as shown in Table 9 below.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.427	.780		1.831	.100
	Change in Economic Value Added	.835	.098	.943	8.524	.000

Table 9: Variable coefficient (change in Economic Value Added)
Source (Author, 2016)

Table 9 revealed standardized regression coefficient for change in Economic Value Added (β=.943) and a p-value (p=0.000). This means that an increase of 1 standard deviation in change in Economic Value Added is likely to result in a .943 standard deviation increase in shareholders wealth. In addition, the p value (p=0.000) for change in Economic Value Added was less than 0.05.
Therefore, the hypothesis, "There is no statistical significant effect of the change in Economic Value Added on shareholders' wealth of listed commercial banks in Kenya", was rejected. This implies that there is statistically significant effect of the change in Economic Value Added on shareholders' wealth of listed commercial banks in Kenya.

4.3.3. Effect of Change in Market Value Added on Shareholders Wealth of Listed Commercial Banks in the Nairobi Security Exchange, Kenya

The researcher used regression coefficient as the appropriate statistical technique for analysis of objective three. This statistic helped to evaluate the effect of change in Market Value Added on shareholders' wealth of listed commercial banks in Kenya. The analysis therefore, presents the inferential statistics.
The linear regression coefficient test at $p \leq 0.05$ significance level illustrating statistically significant effect of change in Market Value Added on shareholders' wealth of listed commercial banks in Kenya is as summarized in Table 13. Thus, Table 13 presents the linear regression coefficient test that was conducted to determine whether change in Economic Value-Added affect shareholders' wealth of listed commercial banks in Kenya. To achieve this, the hypothesis below was tested;
Ho_3: There is no statistical significant effect of the change in Market Value Added on shareholders' wealth of listed commercial banks in Kenya
Therefore, the analysis starts with Pearson correlation analysis in Table 10 to test for assumption of linearity, Model summary model in Table 11 and ANOVA in Table 12 to test whether the regression model $\mathbf{y= \beta_3 X_3 + \infty}$was viable.

Correlations			
		Shareholders wealth	Change in Market Value Added
Shareholders wealth	Pearson Correlation	1	
Change in Market Value Added	Pearson Correlation	.801**	1
**. Correlation is significant at the 0.05 level (2-tailed).			

Table 10: Pearson correlation analysis (change in Market Value Added)
Source (Researcher, 2016)

From the results in Table 10, Pearson correlation coefficient (r=.801) between change in Market Value Added and shareholders wealth was positive and above 0.05. Therefore, change in Market Value Added had a strong positive relationship (r=.801) with shareholders wealth. This implies that the linearity assumption was achieved. This was followed by Model summary to show the explained variation. The results are presented in the Table 11 below:

Model Summary[b]					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.801[a]	.641	.601	2.40390	.962
a. Predictors: (Constant), change in Market Value Added					
b. Dependent Variable: Shareholders wealth					

Table 11: Summary of output (change in Market Value Added)
Source (Author, 2016)

From the above results in Table 11, the multiple correlation (R) is .801 which means that there is a strong positive correlation between the variables. The coefficient of determination (Adjusted R Squared) indicates the level in which the change in Market Value Added predicts the change in shareholders' wealth. The adjusted R square was 0.601, which shows that the change in MVA predicts 60.1 % of the Shareholders wealth of commercial banks listed at the NSE,Kenya

Besides, regression model results can be said as fit if they are supported by empirical data, where only fit model that can explain results. To determine whether a model was fit or not required, ANOVA was used. The model; $\mathbf{y=\alpha+\beta_3X_3+\infty}$was tested whether fit and the results shown in Table 12. Where;
Y is the Shareholders wealth
α is the constant term
X_3 is the change in Market Value Added
β_3 is the variable coefficient

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	92.851	1	92.851	16.068	.003[b]
	Residual	52.008	9	5.779		
	Total	144.860	10			
a. Dependent Variable: Shareholders wealth						
b. Predictors: (Constant), change in Market Value Added						

Table 12: ANOVA (change in Market Value Added)
Source (Researcher, 2016)

The ANOVA output was determined to check whether the proposed model was viable. Results shown in Table 12 reveal that the F-statistic and p value for the "$\mathbf{y=\alpha+\beta_3X_3+\infty}$" is 16.068 and .003[b]respectively. Since the p-value (.003[b]) was less than 0.05 indicating that the change in MVA significantly predicts the shareholders' wealth at the statistically chosen 5% level of significance. This was followed by regression variable coefficient as shown in Table 13below;

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1.859	2.356		-.789	.450
	Change in Market Value Added	1.506	.376	.801	4.008	.003

Table 13: Variables coefficient (change in Market Value Added)
Source (Author, 2016)

Table 13 revealed standardized regression coefficient for change in Market Value Added (β=.801) and a p-value (p=0.003). This means that an increase of 1 standard deviation in change in Market Value Added is likely to result in a .801 standard deviation increase in shareholders wealth. In addition, the p value (p=0.003) for change in Market Value Added was less than 0.05.
Therefore, the hypothesis, "There is no statistical significant effect of the change in Market Value Added on shareholders' wealth of listed commercial banks in Kenya", was rejected.
This implies that there is statistically significant effect of the change in Market Value Added on shareholders' wealth of listed commercial banks in Kenya.

4.3.4. Effect of Change in Earnings Per Share on Shareholders Wealth of Listed Commercial Banks in the Nairobi Security Exchange, Kenya
The researcher used regression coefficient as the appropriate statistical technique for analysis of objective four. This statistic helped to evaluate the effect of change in Earnings per Share on shareholders' wealth of listed commercial banks in Kenya. The analysis therefore, presents the inferential statistics.
The linear regression coefficient test at $p \leq 0.05$ significance level illustrating statistically significant effect of change in Earnings per Share on shareholders' wealth of listed commercial banks in Kenya is as summarized in Table 17. Thus, Table 17 presents the linear regression coefficient test that was conducted to establish whether change in Earnings per Share affect shareholders' wealth of listed commercial banks in Kenya. To achieve this, the hypothesis below was tested;
Ho_4: There is no statistical significant effect of the change in Earnings per Share on shareholders' wealth of listed commercial banks in Kenya.

Therefore, the analysis starts with Pearson correlation analysis in Table 14 to test for assumption of linearity, Model summary model in Table 15 and ANOVA in Table 16 to test whether the regression model $\mathbf{y=\alpha+\beta_4X_4+\infty}$was viable.

Correlations			
		Shareholders wealth	Change in Earnings per Share
Shareholders wealth	Pearson Correlation	1	
Change in Earnings per Share	Pearson Correlation	.668*	1
*. Correlation is significant at the 0.05 level (2-tailed).			

Table 14: Pearson correlation analysis (change in Earnings per Share)
Source (Researcher, 2016)

From the results in Table 14, Pearson correlation coefficient (r=.668) between change in Earnings per share and shareholders wealth was positive and above 0.05. Therefore, change in Earnings per share had a strong positive relationship (r=.668) with shareholders wealth. This implies that the linearity assumption was achieved. This was followed by Model summary to show the explained variation. The results are presented in the Table 15 below:

Model Summary[b]					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.668[a]	.447	.385	2.98453	2.067
a. Predictors: (Constant), change in Earnings per Share					
b. Dependent Variable: Shareholders wealth					

Table 15: Summary of output (change in Earnings per Share)
Source (Author, 2016)

From the above results in Table 15, the multiple correlation (R) is .668 which means that there is a strong positive correlation between the variables. The coefficient of determination (Adjusted R Squared) indicates the level in which the change in Earnings Per Share predicts the change in shareholders' wealth. The adjusted R square was 0.385, which shows that the change in EPS predicts 38.5 % of the Shareholders wealth of commercial banks listed at the NSE, Kenya.

Besides, regression model results can be said as fit if they are supported by empirical data, where only fit model that can explain results. To determine whether a model was fit or not required, ANOVA was used. The model; $\mathbf{y=\alpha+ \beta_4 X_4+ \infty}$was tested whether fit and the results shown in Table 16. Where;

Y is the Shareholders wealth
α is the constant term
X_4 is the Earnings per Share
β_4 is the variable coefficient

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	64.693	1	64.693	7.263	.025[b]
	Residual	80.167	9	8.907		
	Total	144.860	10			
a. Dependent Variable: Shareholders wealth						
b. Predictors: (Constant), change in Earnings per Share						

Table 16: ANOVA (change in Earnings per Share)
Source (Researcher, 2016)

The ANOVA output was determined to check whether the proposed models were viable. Results shown in Table 16 reveal that the F-statistic and p value for the "$\mathbf{y=\alpha+ \beta_4 X_4 + \infty}$" is 7.263 and .025[b]respectively. Since the p-value (.025[b]) was less than 0.05, indicating that the change in EPS significantly predict the shareholders' wealth at the statistically chosen 5% level of significance. This was followed by regression variable coefficient as shown in Table 17 below

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.926	1.799		1.626	.138
	Change in Earnings per Share	.671	.249	.668	2.695	.025

Table 17: Variable coefficient (change in Earnings per Share)
Source (Author, 2016)

Table 17 revealed standardized regression coefficient for change in Earnings per Share (β=.668) and a p-value (p=0.025). This means that an increase of 1 standard deviation increase in change in Earnings per Share is likely to result in a .668 standard deviation increase in shareholders wealth. In addition, the p value (p=0.025) for Earnings per Share was less than 0.05.
Therefore, the hypothesis, "There is no statistical significant effect of the change in Earnings per Share on shareholders' wealth of listed commercial banks in Kenya", was rejected. This implies that there is statistically significant effect of the change in Earnings per Share on shareholders' wealth of listed commercial banks in Kenya.

4.4. Summary of Inferential Statistics

For multiple regression analysis, linearity test should be achieved. Hence the Pearson correlation analysis in Table 18 to test for assumption of linearity, Model summary for explained variation in Table 19 and ANOVA in Table 20 to test whether the regression model $\mathbf{y= \alpha+ \beta_1X_1 +\beta_2X_2+\beta_3X_3 +\beta_4X_4+ \infty}$ was viable and adopted.
Therefore, the analysis starts with Pearson correlation analysis in Table 18 to test for assumption of linearity.

Correlations						
		Shareholders wealth	Change in Return on Equity	Change in Economic Value Added	Change in Market Value Added	Change in Earnings per Share
Shareholders wealth	Pearson Correlation	1				
Change in Return on Equity	Pearson Correlation	.935**	1			
Change in Economic Value Added	Pearson Correlation	.943**	.889**	1		
Change in Market Value Added	Pearson Correlation	.801**	.712*	.623*	1	
Change in Earnings per Share	Pearson Correlation	.668*	.535	.561	.478	1
**. Correlation is significant at the 0.01 level (2-tailed).						
*. Correlation is significant at the 0.05 level (2-tailed).						

Table 18: Pearson correlation coefficient (Change in Return on Equity, Economic Value Added, Market Value Added and Earnings per Share)
Source (Author, 2016)

From the results in Table 18, Pearson correlation coefficient (r=.935) between Change in Return in Equity and Shareholders Wealth was positive and above 0.05. Therefore, Change in Return on Equity has a strong positive relationship (r=.935) with shareholders wealth. In addition, Pearson correlation coefficient (r=.943) between Change in Economic Value Added and Shareholders Wealth was positive and above 0.05. Therefore, Change in Economic Value Added has a strong positive relationship (r=.943) with shareholders wealth. Similarly, Pearson correlation coefficient (r=.801) between Change in Market Value Added and Shareholders Wealth was positive and above 0.05. Therefore, Change in Market Value Added has a strong positive relationship (r=.801) with shareholders wealth.
Lastly, Pearson correlation coefficient (r=.668) between Change in Earning per Share and Shareholders Wealth was positive and above 0.5. Therefore, Change in Earnings per Share has a strong positive relationship (r=.668) with shareholders wealth. This implies that the linearity assumption was achieved.
In addition, regression analysis was used to confirm the hypothesis of this study which had predicted a positive relationship between delinquent loans and shareholders wealth in Kenya. The results are presented in the Table 19 below:

Model Summary[b]					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.994[a]	.987	.979	.55373	.832
a. Predictors: (Constant), change in Earnings per Share, Market Value Added, Economic Value Added, Return on Equity					
b. Dependent Variable: Shareholders wealth					

Table 19: Summary of output (Change in Return on Equity, Economic Value Added, Market Value Added and Earnings per Share)
Source (Author, 2016)

From the above results in Table 19, the multiple correlation (R) is .994 which means that there is a perfect correlation between the variables. The coefficient of determination Adjusted R Squared is 97.9%; it explains the variability in the dependent variable (shareholders wealth) that is explained by the independent variables (change in Return on Equity, Economic Value Added, Market Value Added and Earnings per Share). This was then followed by ANOVA to test the viability of the model. The model; $\mathbf{y=\alpha+ \beta_1X_1 +\beta_2X_2+\beta_3X_3 +\beta_4X_4+ \infty}$ was tested whether fit and the results shown in Table 20. Where;

Y is the Shareholders Wealth
α is the constant term
X_1 is the Change in Return on Equity
X_2 is the Change in Economic Value Added
X_3 is the Change in Economic Value Added
X_4 is the Change in Earnings per Share
$\beta_1, \beta_2, \beta_3$ and β_4 are the variables coefficients

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	143.020	4	35.755	116.613	.000[b]
	Residual	1.840	6	.307		
	Total	144.860	10			
a. Dependent Variable: Shareholders wealth						
b. Predictors: (Constant), change in Earnings per Share, Market Value Added, Economic Value Added, Return on Equity						

Table 20: Analysis of Variance (Change in Return on Equity, Economic Value Added, Market Value Added and Earnings per Share) Source (Researcher, 2016)

The ANOVA output was examined to check whether the proposed models were viable. The statistical analysis of the model based on the analysis of variance gave (F = 116.613, p =000[b]) indicating that the variables considered significantly predict the dependent variable at the statistically chosen 5% level of significance.
The results therefore show that, change in ROE, EVA, MVA and EPS statistically affect shareholders wealth of commercial banks listed at the NSE, Kenya. This signifies collinearity and since the p-value (.000[b]) was less than 0.05, it means that the model was valid. This was followed by regression variable coefficient as shown in Table 21 below.

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	(Constant)	-1.511	.555		-2.722	.035
	Change in Return on Equity	.284	.131	.242	2.162	.074
	Change in Economic Value Added	.433	.091	.489	4.741	.003
	Change in Market Value Added	.481	.125	.256	3.838	.009
	Change Earnings per Share	.142	.057	.142	2.500	.047
a. Dependent Variable: Shareholders wealth						

Table 21: Variables coefficient (Change in Return on Equity, Economic Value Added, Market Value Added and Earning per Share) Source (Author, 2016)

Results of the regression coefficients presented in Table 21 shows that the estimates of β values and give an individual contribution of each predictor to the model. The β value tells us about the relationship between shareholders wealth with each predictor. The positive β values indicate the positive relationship between the predictors and the outcome. The β value for Change in Return on Equity (.242), β value for Change in Economic Value Added (.489), Change in Market Value Added (.256) and Change in Earnings per Share (.142) were positive.
The positive β values indicate the direction of relationship between predictors and outcome. From the results (Table 21) the model was then specified as: -

$$\mathbf{y= \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \infty}$$

$$y= -1.511+ 0.242X_1 +0.489X_2+0.256X_3 +0.142X_4+ 0.555$$

Shareholders Wealth =.242Change in Return on Equity + .489 Change in Economic Value Added +.256 Change in Market Value Added +.142Change in Earnings per Share.
The coefficients for each of the variables indicates the amount of change one could expect in Shareholders Wealth given a one-unit change in the value of that variable, given that all the variables in the model are standardized basing on the standardized coefficients. Results revealed standardized regression coefficient for Change in Returns on Equity (β=242), implies that an increase of 1 standard deviation in Change in Return on Equity is likely to result in a 0.242 standard deviation increase in shareholders wealth. Standardized regression coefficient for Change in Economic Value Added (β=.489), implies that an increase of 1 standard deviation in Change in

Economic Value Added is likely to result in a 0.489 standard deviation increase in in shareholders wealth. Standardized regression coefficient for Change in Market Value Added (β=.256), implies that an increase of 1 standard deviation in Change in Market Value Added is likely to result in a 0.256 standard deviation increase in in shareholders wealth. Standardized regression coefficient for Change in Earnings per Share (β=.142), implies that an increase of 1 standard deviation in Change in Earnings per Share is likely to result in a 0.142 standard deviation increase in shareholders wealth.

T-test was used to identify whether the predictors were making a significant contribution to the model. When the t-test associated with β value is significant then the predictor is making a significant contribution to the model. The smaller the value of significance (the larger the value of t) meaning greater is the contributor of that predictor.

The results show that when Multiple Regression was used, Change in Return on Equity (t =2.162, p=.074), Change in Economic Value Added (t =4.741, p=.003), Change in Market Value Added (t =3.838, p=.009) and Change Earning per share (t =2.500, p =.047). Change in Economic Value Added had the highest t value (t =4.741), therefore indicating that it was the most important predictor for shareholders wealth in listed commercial Banks in NSE, Kenya.

4.5. Discussion of the Results

In objective one, the effect of change in Returns on Equity on shareholders' wealth of listed commercial banks in Kenya was evaluated. The study findings revealed standardized regression coefficient for change in Return on Equity (β=.935) and a p-value (p=.000). This means that an increase of 1 standard deviation in change in Return on Equity is likely to result in a .935 standard deviation increase in Shareholders wealth. In addition, the p value (p=0.000) for Change in Return on Equity was less than 0.05. Therefore, the hypothesis, "There is no statistical significant effect of the change in Returns on Equity on shareholders' wealth of listed commercial banks in Kenya", was rejected. This supports the findings of Boahene, Dasah and Agyei (2012), Lucy (2010), Wanjira (2010), Mwirigi (2006) and King'oo (2015) that capital adequacy, liquidity, Operational cost efficiency and Size of the bank do significantly affect the financial performance of commercial banks listed at the Nairobi Stock Exchange (NSE). This implies that an increase an increase in change in Return on Equity leads to an increase in shareholders wealth. This is because, delinquent loans provisions by commercial banks reduce the total loan portfolio of banks and consequently reduce the interest accruing on such assets and ultimately the return on equity or shareholders wealth maximization.

In addition, objective two determined the effect of change in Economic Value Added on shareholders' wealth of listed commercial banks in Kenya. The study findings revealed standardized regression coefficient for change in Economic Value Added (β=.943) and a p-value (p=.000). This means that an increase of 1 standard deviation in change in Economic Value Added is likely to result in a .943 standard deviation increase in Shareholders wealth. In addition, the p value (p=0.000) for change in Economic Value Added was less than 0.05.

Therefore, the hypothesis, "There is no statistical significant effect of the change in Economic Value Added on shareholders wealth", was rejected. This supports the findings of Hall (2010) Mullei (2003), Mwangi (2010) and Alam (2012) that Economic Value Added (EVA) has been widely publicized and is used as a yardstick for creating or increasing shareholder's value.

This implies that an increase in change in Economic Value-Added leads to an increase in shareholders wealth. This is because, Economic Value Added helps to determine how much economic value is added for the common shareholders by the corporate management for which they have at all-time been entrusted.

Similarly, objective three established the effect of change in Market Value Added on shareholders' wealth of listed commercial banks in Kenya. The study findings revealed standardized regression coefficient for change in Market Value Added (β=.801) and a p-value (p=.003). This means that an increase of 1 standard deviation in change in Market Value Added is likely to result in a .801 standard deviation increase in shareholders' wealth. In addition, the p value (p=0.003) for change in Market Value Added was less than 0.05. Therefore, the hypothesis, "There is no statistical significant effect of the change in Market Value Added on shareholders' wealth of listed commercial banks in Kenya", was rejected. This is in line with the findings of Richard (2008), Muasya (2009) and Alam et al. (2012) that, if the total market value of a corporation is greater than the amount of capital employed in the business, the shareholders wealth is increased. This implies that an increase in change in Market Value Added leads to increase in shareholders' wealth as an increased total market value enhances the shareholders' value.

Finally, objective four determined the effect of change in Earnings per Share (EPS) on shareholders' wealth of listed commercial banks in Kenya. The study findings revealed standardized regression coefficient for change in Earnings per Share (EPS) (β=.668) and a p-value (p=.025). This means that an increase of 1 standard deviation in change in Earnings per Share (EPS) is likely to result in a .668 standard deviation increase in shareholders' wealth. In addition, the p value (p=0.025) for change in Earnings per Share (EPS) was less than 0.05.

Therefore, the hypothesis, "There is no statistical significant effect of the change in Earnings per Share on shareholders' wealth of listed commercial banks in Kenya", was rejected. This is in line with the findings of Lynette (2010), Macharia (2012) and Kim (2008) who put a strong argument that in order to grow wealth, managers can increase earnings per share (EPS). This implies that an increase in change in Earnings per Share leads to increase in shareholders' wealth.

5. Summary of the Findings, Conclusion and Recommendation

5.1. Summary of the findings

5.1.1. Effect of Change in Return on Equity on Shareholders Wealth of Listed Commercial Banks

The effect of change in Return on Equity on shareholders' wealth of listed commercial banks in Kenya was evaluated. Pearson correlation coefficient (r=.935) between change in Return on Equity and shareholders wealth was positive and above 0.05. Therefore, this indicated that change in Return on Equity had a strong positive relationship (r=.935) with shareholders wealth.

The study findings also revealed standardized regression coefficient for change in Return on Equity (β=.935) and a p-value (p=.000)., meaning that an increase of 1 standard deviation in change in Return on Equity is likely to result in a .935 standard deviation increase in Shareholders wealth. In addition, the p value (p=0.000) for change in Return on Equity was less than 0.05. Therefore, the hypothesis, "There is no statistical significant effect of the change in Returns on Equity on shareholders' wealth of listed commercial banks in Kenya", was rejected.

5.1.2. Effect of Change In Economic Value Added on Shareholders Wealth of Listed Commercial Banks

Objective two determined the effect of change in Economic Value Added on shareholders' wealth of listed commercial banks in Kenya. Pearson correlation coefficient (r=.943) between change in Economic Value Added and shareholders wealth was positive and above 0.05. This indicated that change in Economic Value Added had a strong positive relationship (r=.943) with shareholders wealth.

Also, the study findings revealed standardized regression coefficient for change in Economic Value Added (β=.943) and a p-value (p=.000). This means that an increase of 1 standard deviation in change in Economic Value Added is likely to result in a .943 standard deviation increase in Shareholders wealth.

In addition, the p value (p=0.000) for change in Economic Value Added was less than 0.05. Therefore, the hypothesis, "There is no statistical significant effect of the change in Economic Value Added on shareholders wealth", was rejected.

5.1.3. Effect of Change in Market Value Added on Shareholders Wealth of Listed Commercial Banks

Objective three established the effect of change in Market Value Added on shareholders' wealth of listed commercial banks in Kenya. Pearson correlation coefficient (r=.801) between change in Market Value Added and shareholders wealth was positive and above 0.05. Therefore, this indicated that change in Market Value Added had a strong positive relationship (r=.801) with shareholders wealth.

Revealed from the study findings was standardized regression coefficient for change in Market Value Added (β=.801) and a p-value (p=.003). This means that an increase of 1 standard deviation in change in Market Value Added is likely to result in a .801 standard deviation increase in shareholders' wealth. In addition, the p value (p=0.003) for change in Market Value Added was less than 0.05. Therefore, the hypothesis, "There is no statistical significant effect of the change in Market Value Added on shareholders' wealth of listed commercial banks in Kenya", was rejected.

5.1.4. Effect of Change in Earnings Per Share on Shareholders Wealth of Listed Commercial Banks

Finally, objective four determined the effect of change in Earnings per Share (EPS) on shareholders' wealth of listed commercial banks in Kenya. Pearson correlation coefficient (r=.668) between change in Earnings per share and shareholders wealth was positive and above 0.05. This indicated that change in Earnings per share had a strong positive relationship (r=.668) with shareholders wealth.

The study findings revealed standardized regression coefficient for change in Earnings per Share (EPS) (β=.668) and a p-value (p=.025). This means that an increase of 1 standard deviation in change in Earnings per Share (EPS) is likely to result in a .668 standard deviation increase in shareholders' wealth. In addition, the p value (p=0.025) for Earnings per Share (EPS)was less than 0.05. Therefore, the hypothesis, "There is no statistical significant effect of the change in Earnings per Share on shareholders' wealth of listed commercial banks in Kenya", was rejected.

5.2. Conclusion

From the findings, the study concluded that; delinquent loans affect shareholders wealth of listed commercial banks in Kenya. This is because; correlation results showed that change in Returns on Equity had a strong positive relationship on shareholders wealth of listed commercial banks in Kenya. The regression results indicated that change in Returns on Equity significantly predicts shareholders wealth of listed commercial banks. This is due to the fact that, delinquent loans provisions by commercial banks reduce the total loan portfolio of banks and consequently reduce the interest accruing on such assets and ultimately the return on equity or shareholders wealth maximization.

The regression results indicated that change in Economic Value Added significantly predicts shareholders wealth of listed commercial banks. Change in Economic Value Added, as a measure of delinquent loans had a positive relationship on shareholders wealth. That is an increase in change in Economic Value Added is likely to result into increase in shareholders wealth as it helps to determine how much economic value is added for the common shareholders by the corporate management for which they have at all-time been entrusted.

Furthermore, change in Market Value Added had a positive relationship on shareholders wealth. The regression results indicated that change in Market Value Added significantly predicts shareholders wealth of listed commercial banks, this is because, if the total market value of a corporation is greater than the amount of capital employed in the business, then, the value for shareholders is created

Finally, the correlation results indicated a significant relationship between change in Earnings per Share and shareholders wealth. The study established that change in Earnings per Share significantly predict shareholders wealth of listed commercial banks.

5.3. Recommendation

In reference to the findings, conclusions and the guidance from the literature review, it was clear that delinquent loans affects shareholders wealth of listed commercial banks in Kenya. Therefore, commercial banks stakeholders should consider the elements of delinquent loans such as' Change in Return on Equity, change in Economic Value Added, change in Market Value Added and change in Earning per Share to avoid downfall of commercial banks. The policy makers should set credit and stringent policies to reduce huge losses on bad loans, hence increased shareholders wealth.

5.4. Suggestion for Further Studies

The study suggests that a comparative study should be conducted to determine the extent to which delinquent loans affect shareholders wealth of other financial institutions in another sector other than Commercial banks.

The study was limited to four variables; Change in Return on Equity, change in Economic Value Added, change in Market Value Added and change in Earnings per Share. A further study should be carried out to find out other indicators of delinquent loans which can have a significant influence on shareholders wealth.

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7. Abbreviations and Acronyms

- CRB : Credit Reference Bureau
- CSV : Created Shareholders' Value
- EMV : Equity Market Value
- EVA : Economic Value Added
- EPS : Earnings per share
- IMF : International Monetary Fund
- MVA : Market Value Added
- NSE : Nairobi securities Exchange
- NOPAT : Net Operating Profit after Tax
- NPAT : Net profit After Tax
- NPLs : Non performing loans
- NW : Net worth
- OS : Outstanding Shares
- PAT : Profit After tax
- ROE : Return on Equity
- SWM : Shareholders' wealth maximization
- SVA : Shareholder Value added

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Appendix I: Commercial Banks Listed at the Nse

1) Barclays Bank of Kenya
2) CFC Stanbic Bank
3) Co-operative Bank of Kenya
4) Diamond Trust Bank (Kenya) Limited
5) Equity Bank Limited
6) I & M Holdings Limited
7) Housing Finance Company Limited
8) Kenya Commercial Bank Limited
9) National Bank of Kenya Limited
10) NIC Bank Limited
11) Standard Chartered Bank Kenya Limited

Source: www.nse.co.ke -Nairobi Securities Exchange (NSE) (2016)

Appendix II: Secondary Data Collection Guide

Bank	Change in Return on Equity	Change in Economic Value Added	Change in Market Value Added	Change in Earnings per Share
Housing Finance				
CFC Stanbic bank				
Corporative Bank				
Barclay Bank				
Standard Chartered bank				
Diamond Trust Bank				
NIC bank				
I&M Holdings				
Kenya Commercial Bank				
Equity Bank				
National bank of kenya				

Appendix III: Audited Financial Data of Listed Commercial Banks

Bank	Change in Return on Equity	Change in Economic Value Added	Change in Market Value Added	Change in Earnings per Share
Housing Finance	2.87	3.96	4.70	3.40
CFC Stanbic bank	6.18	3.03	4.86	4.94
Corporative Bank	7.00	5.39	8.44	6.63
Barclay Bank	8.90	9.60	8.36	12.22
Standard Chartered bank	12.5	14.02	8.64	2.81
Diamond Trust Bank	0.87	1.96	2.70	0.40
NIC bank	5.18	2.03	3.86	3.94
I&M Holdings	5.00	3.39	6.44	4.63
Kenya Commercial Bank	7.9	10.6	7.36	11.22
Equity Bank	9.50	11.02	5.64	9.81
National bank of kenya	8.50	10.02	4.64	8.81

Appendix IV: Measurement

Variable	Formulae	Interpretation
Change in Return on Equity	(ΔPAT ÷Δ NW) x 100: (Profit After Tax divide by Net Worth)	This ratio indicates the change in return of profitability on one shilling of equity capital contributed by shareholders.
Change in Economic Value Added	Δ*NOPAT* —Δ*WACC: (*Net Operating Profit after Tax Minus Weighted cost of capital)	It is excess of change in Operating Profit after Tax over the change in Weighted Average Cost of Capital.
Change in Market Value Added	= ΔMarket Capitalization − ΔTotal Common Shareholders' Equity = Total Shares Outstanding × Current Market Price − Total Common Equity	It is the difference between the change in current market value of a firm and the change in capital contributed by investors.
Change in Earnings per Share	Δ*NPAT*÷Δ*OS:* (Net profit After Tax divide by Outstanding shares)	It shows how much money the company is making for its shareholders after all the effects if issue of new shares

Appendix V: Shareholder Value Creation Computation

i. Equity Market Value: Equity Market Value is a price of the company stock at the NSE

ii. Increase in Market Value (Imv): Increase in Market Value is calculated as:

Imv = (Pt — Pt-i) Pt-i

Where;

- **Imv** = Increased Market Value
- Pt = Price of the stock today
- Pt-i = Price of the stock one year before

iii. Shareholder Value Added(SVA): Shareholder Value is calculated as

SVA =IIMV + DIV + Bonus + OP — Outlays — Cony t-i

Where,

- **SVA** = Shareholder Value Added
- **IMV** = Increased Market Value
- **DIV** = Dividend paid by the company in the year
- **Bonus** = Bonus shares issued
- **OP** = Other payments to Shareholders such as Sharebuybacks, discount on issue of share
- **Outlays** = Outlays by Shareholders like increase in capital, exercise of options, warrants, etc.
- **Cony**. = Conversion of convertible debentures, etc

iv. Shareholder Return (SR) = Shareholder Return is calculated as under:

SR = SVA/ P t-1

Where,

- **SR** = Shareholder Return
- **SVA** = Shareholder Value Added
- **Pt_l**= Market Price at the beginning of the year

v. Required return on Equity = Required Return on Equity is calculated using Capital Asset Pricing Model (CAPM)

$K_e = rf + \beta(r_{rn} — r_f)$

Where,

- **Ke**= Cost of Equity
- $\mathbf{r_f}$=Risk free rate of return
- **β** = Beta of the stock
- $\mathbf{r_{rn}}$, = Market Return i.e. return that is given by the Index;

Market Return is calculated as:

MR = $(I_t — I_{t\_}i) \div (I_{t\_}i)$

Where $\mathbf{I_t}$= Index today; $\boldsymbol{I_{t\_}i}$ = Index one year back

vi. Created Shareholder Value is the excess of Shareholder Return over the Required Rate of Return on the equity, calculated as:

SVC = EMV X (SR — K_e)

Or

SVC = SVA— (EMV X K_e)

Where,

- **SVC** = Shareholder Value Created;
- **EMV** = Equity Market Value. Equity Market Value is calculated as:

EMV = MP X OS

Where,

- **MP** = Market Price of a stock;

OS = Outstanding Shares

K_e = Cost of Equity;