THE RELATIONSHIP BETWEEN LIQUIDITY MANAGEMENT
AND STOCK MARKET RETURN: EVIDENCE FROM
COMMERCIAL BANKS

BY

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DECLARATION

This research project is my original work and has not been presented for examination in any other university.

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This research project has been submitted for examination with my approval as university supervisor.

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DEDICATION

To my wife Juliet Ngai and son Fred Allen Mukiri thank you for your words of encouragement and support during the period of this study.

To my late father Fredrick Nyaga and mother Faith Nyaga for your support and making my academic dream a reality.

To my siblings Violet, Eric, Georgina and Wickliffe for your love.

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ABSTRACT
Liquidity management which refers to the management of current assets and current liabilities plays an important role in the successful management of a firm. It is a concept that is receiving serious attention all over the world especially with the current financial situations and the state of the world economy. Research has established that liquidity is an important concept determinant of financial distress. If a firm does not manage its liquidity well its current assets may not meet its current liabilities. Hence the firm may not have external financing easily. The objective of this study was to investigate the relationship between liquidity management and stock market return of listed commercial banks in Kenya.

This study adopted a quantitative research design and the researcher chose to study the commercial banks due to the availability and reliability of the data. This is because liquidity is very crucial for commercial banks and it’s monitored keenly by bank supervision department of CBK. The population of the study was all the 11 listed commercial banks in NSE. Nine banks were used for this study after excluding I & M bank since their data was not complete for five years because they were listed in 2012 and HFCK which is classified by CBK as a mortgage finance institution and its regulation is assumed to be different from other commercial banks. Secondary data was obtained from audited published financial statements, Central bank annual reports, NSE website and NSE data vendors. To estimate stock return information on opening and closing prices and dividends distribution throughout the year for five years between 2009 and 2013 was collected.
Stock return represents percentage gains or loss of value of the stock when compared to some previous period and the capital gains. The same was done for liquidity component for the same period. SPSS version 16.0 was used for data analysis. The average liquidity and stock market return were compared for the period of five years under the study. Stock market return was regressed against liquidity management to acquire the coefficient of determination and assess the strength of the relationship.

The finding of this study shows that there exists a negative relationship between stock market return and liquidity management of commercial banks in Kenya. Based on the correlation coefficients at 95% degrees of confidence, the study coefficients are found to be significant. The results of this study are consistent with the literature because many studied have shown there exist a tradeoff between liquidity and profitability of banks affects the stock returns. This can be attributed to the fact that a stock price which affects the returns fully incorporates publicly available information according to EMT. The study recommends commercial banks should put in place good liquidity management frameworks so as to remain viable to make returns for their investors and CBK should monitor the liquidity of commercial banks continuously and report their findings to the public who are major investors in bank stocks.
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ABBREVIATIONS

BIS.................................................................Bank for International Settlement

CBK...............................................................Central Bank of Kenya

CMA.............................................................Capital Markets Authority

EA.................................................................East Africa

EMT..............................................................Efficiency Market Theory

EPS..............................................................Earnings per Share

LSE..............................................................London Stock Exchange

NASI..............................................................Nairobi All Share Index

NSE..............................................................Nairobi Securities Exchange

PE.................................................................Price Earnings Ratio

RWH.............................................................Random Walk Hypothesis

SPSS...........................................................Statistical Package for Social Science
CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Liquidity management which refers to the management of current assets and current liabilities plays an important role in the successful management of a firm. If a firm does not manage its liquidity well its current assets may not meet its current liabilities. Hence the firm may not have external financing easily, especially as it is in small firm case. In addition although firms are able to find external financing, the cost of borrowing may be expensive, resulting in poor bottom line. Jose, et al. (1996) points out this by saying: firms with growing long term prospects and healthy bottom lines do not remain solvent without good liquidity management.

Eljelly (2004) argues that profitability and liquidity are effective indicators of the corporate health and performance of not only the commercial banks but all profit-oriented ventures. These performance indicators are very important to the shareholders and depositors who are major publics of a bank. As the shareholders are interested in the profitability level, the depositors are concerned with liquidity position which determines a bank's ability to respond to the withdrawal needs which are normally on demand or on a short notice as the case may be. By maintaining an appropriate level of liquidity a business should be able to survive downturns and be able to exploit profitable opportunities as they may arise (Gitman, 1997).
1.1.1 Liquidity Management

Liquidity management is a concept that is receiving serious attention all over the world especially with the current financial situations and the state of the world economy. Research has established that liquidity is an important concept determinant of financial distress (Mervin, 1942). Bank for international settlement (BIS) defines liquidity as a measure of ability and ease with which assets can be converted to cash.

The concern of business owners and managers all over the world is to devise a strategy of managing their day to day operations in order to meet their obligations as they fall due and increase profitability to shareholders. A study of liquidity is of major importance to both the internal and the external analysts because of its close relationship with day-to-day operations of a business (Bhunia, 2010). Dilemma in liquidity management is to achieve desired trade-off between liquidity and profitability (Raheman et. al, 2007). Liquidity requirement of a firm depends on the nature of the firm and there is no specific rule on determining the optimal level of liquidity that a firm can maintain in order to ensure positive impact on its profitability (Owolabi, et al, 2012).

Mainelli (2007) defines liquidity as the probability that an asset can be converted in to an expected amount of value within an expected amount of time. It is the ability to realize value in money; the most liquid of assets. Cash is the most liquid because of the certainty of the value. The level of liquidity can be an indicator of the success or the failure of the firm.
According to Kiragu (1991) most firms in Kenya fail due to poor fund management and unwise debt policies and the implications are that firms must maintain sufficient liquidity to avoid insolvency problems.

According to Gardner et al (1994) the objective of liquidity management is to ensure that a firm will be able to meet in full all its obligations as they fall due. Oplet, et al in 1999 examined the determinants and implications of cash holdings amongst publicly traded US firms in the period of 1971 to 1994 and found out that firms with strong growth opportunities, higher business risks and smaller size hold more cash than other firms. Firms with great access to capital market, credit ratings as well as high leveraged tend to hold less cash. Maaka (2013) found out that the level of customer deposits positively affects the bank’s profitability and banks are encouraged to open more branches.

According to the CBK Act, Liquidity Regulation Supplement (2004), CBK uses one measure of liquidity ratio which is given by the percentage of the net liquid assets as proportion of net deposits liabilities. Net liquid assets comprises of Notes and coins in vaults, balances with CBK cash reserves and clearing accounts, deposits and net balances with local banks, deposits and net balances held with foreign banks, government treasury bills and bonds while Net liabilities include all customer deposits including accrued interest less deposits held for financial institutions.
1.1.2 Stock Market Return

Stock return can be defined as the change in stock prices relative to the initial prices at which the investor bought the stocks. The relationship between security prices and information made available to the market has been explained by the efficient market theory (EMT), which states that publicly available information is always fully reflected in share prices. Any new information of economic value subsequently becoming publicly available is instantaneously impounded in an unbiased manner. This is the semi strong form of the EMT (Gajewski, 1996).

According to Pandey (2008) average return is given by the sum of each of the values being considered dividend by the total number of the values. This can also be seen as the various one period rates of the return divided by the number of the periods. The result is the historical average of the individual values. Expected return on the other hand refers to the return expected on a stock given its current prices and expected future cash flows.

According to Michael and Eugene (2009) it is usually more convenient to summarize information about returns in percentage terms rather than dollar terms, because that way your return does not depend on how much you actually invest but percentages tell how much you get for each dollar invested. The return for holding and investment over some period say, a year is any cash payment received due to ownership plus the change in market prices, divided by the beginning price (Brown et. al, 2002). The returns depends on increase or decrease in the price of the share over the investment period as well as the dividend income the share has provided.
1.1.3 Liquidity Management and Stock Market Return

An assessment of the financial performance is an important task for external users in order to evaluate the solvency and profitability position of a particular organization. All banks are interested in showing to the public a good rate of liquidity because this is an indicator on bank strength and suggests to the clients that there are no reasons to put their money in other places.

Foster (1986) while discussing the evidence on the association between accounting ratios changes and security price changes concluded that accounting ratios were correlated with the information clues the capital markets used in reversing security prices. An increase in Earnings per Share (EPS) gives a general feeling of a healthy company therefore influencing the buying tendencies in the market which creates more demand for the stock. According to Karolyi and Martell (2006) stock and bond prices incorporates the investors views and beliefs about future cash flows and discount rates and liquidity of financial markets provides an efficient conduit for these views to be reflected in asset prices.

According to Njuguna (2007) in the study on bank efficiency and stock market returns, a bank that efficiently mobilizes its deposits, other funds and staff earns high profits, translating to high dividends to investors and the share will be highly priced which implies high stock return. These same findings are in agreement with empirical studies by Joshua and Daehoon (2005) and Sakina (2006).

An adequate financial intermediation requires the bank’s management purposeful attention to profitability and liquidity, which are two conflicting goals of the commercial banks.
These goals are parallel in the sense that an attempt for a bank to achieve higher profitability will certainly erode its liquidity and solvency positions and vice versa. Practically, profitability and liquidity are effective indicators of the corporate health and performance of not only the commercial banks (Eljelly, 2004), but all profit-oriented ventures. These performance indicators are very important to the shareholders and depositors who are major publics of a bank. As the shareholders are interested in the profitability level, the depositors are concerned with liquidity position.

Stock market returns are the indicators of the market performance and gives signal to the investors about their future moves. The movement in the price of a stock and the indexes gives the idea of the near future trend of the stocks, sector or the economy as a whole. As financial domain is the most important one of the overall health of the economy.

Stock prices are the indicator of the performance of the stock and the return. Hence, if it is rising it’s perceived that it has certain positive news or signals. But if it decreases then there must be some news regarding its performance. Stock performance can be affected by many factors such as economic, political, international, and company specific issues. This is evident from empirical study of Joshua and Daehoon (2005) which found out that profit efficiency was significant in determining the stock returns of banks.

Stock performance is determined by the positive increases in prices together with the dividend distributions during the period. Economic view points out that the current price of a stock closely reflects the present value of its future cash flows (Kumar et al, 2006). This is an indication that liquidity ratio may have an impact on stock prices as they are likely to affect the organizations asset values.
The release of news related to a company play a very vital role in price shifts. Where such news is negative, the prospects of the stock are negatively affected leading to more people disposing off the stock. Positive news leads to an increased interest in the stock which culminates to price rising. Significant movement in share prices is associated with announcement of trading figures.

1.1.4 Nairobi Securities Exchange

The Nairobi Securities Exchange (NSE) was constituted as a voluntary association of stock brokers registered under the societies Act in 1954 with the permission of the London Stock Exchange (LSE) and it is the principal stock exchange of Kenya. Trading of shares was restricted only to the residents of European communities. Africans and Asians were not permitted to deal in securities until in 1963. In 1991 the NSE was incorporated under the companies Act of Kenya as a company limited by guarantee and without a share capital.

NSE is an example of emerging stock market that has been characterized by humble beginning yet has grown considerably over time. It stands out as average stock market with great potential for growth, one that is making considerable effort to be a more significant driver of the economy in Kenya and East African (EA) region (Nkonge, 2010).

A regulatory body to oversee NSE activities, The Capital Market Authority act (cap 485A) laws of Kenya has been created to re-emphasize the government commitment to the financial reform process and to boost investor’s confidence. The NSE is a member of Africa stock association and uses two indices; NSE 20 share index and the NASI (Nairobi All Share Index) index.
The NSE 20 share index measures the performance of 20 blue chip companies’ with strong fundamentals and which consistently reports positive financial results. The NASI index incorporates all the traded shares of the day and therefore its attention is on the overall market capitalization (NSE 2010).

The NSE experienced robust growth activity and high returns on investment since 2003. It is therefore reference point in the EA region for other markets in terms of setting standards. As an emerging capital market it has faced challenges to its development and growth such as economic depression and political uncertainty (Kibuthu, 2010).

1.2 Research Problem

Adebayo, et al (2011) in the study of effective liquidity management impacts on profitability in commercial banks and how commercial banks can stimulate their liquidity and profitability situations presented by using quantitative methods of research, the data obtained from primary and secondary sources was statistically tested through Pearson correlation data analysis and the findings indicated that there is significant relationship between liquidity and profitability.

Tran (2013) studied the relationship between interest rate and bank common stock return of 10 US banks and financial sector index. The study found out that interest rates have a strong impact on bank common stock return especially after the financial crisis. Therefore, investors in banking and financial sector index should observe monetary policies closely before making any investment decision. There are many factors that affect the performance of banks stocks.

Wambu (2013) did a study to investigate the relationship between liquidity and profitability of commercial banks in Kenya.
The survey involved 44 commercial banks in operation during the period 2008 to 2012. The study used descriptive statistic and regression analysis and found out that there is a positive relationship between liquidity and the profitability of commercial banks in Kenya.

Ball and Brown (1968) in their study on the share price adjustments and information content of annual reports found that financial performance and dividend payout changes have significant effects on stock prices. Nkukuu (2012) alludes that the performance of the stock market is influenced by more than one factor some of which includes investor’s emotions and confidence levels.

From the above discussions, it is evident that no study I came across during my literature review that has been conducted in Kenya on the liquidity and its relationship with the stock market returns for listed banks. This study therefore sought to fill this research gap by answering research question: Is there any relationship between liquidity management and stock market return of listed banks in Kenya?

1.3 **Objective of the Study**

To determine the relationship between liquidity management and stock market return for commercial banks listed on NSE.

1.4 **Value of the Study**

The findings of this study will be significant to future scholars and academician as it will form a good background for more studies since more recommendation for future research will be highlighted. Also the findings of this study will be important to investors investing in NSE because it will provide vital information to use in their investment decisions.
The results of the study will provide valuable information to government policy makers because it will inform them on policy formulation and implementation that will build investors’ confidence. The study also will be important to the bank management who will understand better on how the levels of liquidity affect stock market performance. Financial analysts will find the study useful in providing insights for advising investors on when to buy, hold or sell their stocks to maximize their returns. Regulators such as Capital Markets Authority (CMA) will find this study useful so as to proactively champion the stability of the capital market.
CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews existing literature in area of study. The chapter will look in to details of theoretical review, conceptual review, empirical review and sum up with the chapter summary highlighting the literature review gaps.

2.2 Theories of Liquidity and Liquidity Management

Banks face two central issues regarding liquidity. They are responsible for managing liquidity creation and liquidity risk. Liquidity creation helps depositors and companies stay liquid while managing liquidity risk is to ensure the banks own liquidity so that the bank can continue to serve its function, Vossen (2010). There are competing liquidity management theories which include: Anticipated income theory, shiftability theory and commercial loan theory.

2.2.1 Anticipated Income Theory

The theory developed by Herbert (1948) holds that a bank’s liquidity can be managed through the proper phasing and structuring of the loan commitments made by a bank to the customers. Here the liquidity can be planned if the scheduled loan payments by a customer are based on the future of the borrower. Banks must be able to anticipate the income from the avenues where it is going to deploy its funds. Must invest in term-lending, working capital securities, but must also be secure about the deployment and repayment of funds. Bank must assess the potential of that person to repay back loans advanced.
According to Nzotta (1997) the theory emphasizes the earning potential and the credit worthiness of a borrower as the ultimate guarantee for ensuring adequate liquidity. Nwankwo (1991) posits that the theory points to the movement towards self-liquidating commitments by banks. This theory has encouraged many commercial banks to adopt a ladder effects in investment portfolio.

2.2.2 Shiftability Theory

This theory which originated from Moulton (1918) posts that a bank’s liquidity is maintained if it holds assets that can be shifted or sold to other lenders or investors for cash without any material loss. This point of view contends that a bank’s liquidity could be enhanced if it always has assets to sell and provided the Central Bank and the discount Market stands ready to purchase the asset offered for discount. Thus this theory recognizes and contends that shiftability, marketability or transferability of a bank's assets is a basis for ensuring liquidity. This theory further contends that highly marketable security held by a bank is an excellent source of liquidity. Dodds (1982) contends that to ensure convertibility without delay and appreciable loss, such assets must meet three requisites. Liquidity management theory according to Dodds (1982) consists of the activities involved in obtaining funds from depositors and other creditors and determining the appropriate mix of funds for a particularly bank.

Liquidity theory has been critically reviewed by various authors. The general consensus is that during the period of distress, a bank may find it difficult to obtain the desired liquidity because the confidence of the market will have been seriously affected and credit worthiness would be lacking. However, for a healthy bank, the liabilities (deposits, market funds and other creditors) constitute an important source of liquidity.
2.2.3 Commercial Loan Theory

This theory has been subjected to various criticisms by Dodds (1982). The major limitation is that the theory is inconsistent with the demands of economic development especially for developing countries since it excludes long term loans which are the engine of growth. The theory emphasizes the maturity structure of bank assets (loan and investments) and not necessarily the marketability or the Shiftability of the assets.

Theory also assumes that repayment from the self-liquidating assets of the bank would be sufficient to provide liquidity. This ignores the fact that seasonal deposit withdrawals and meeting credit request could affect the liquidity position adversely. Moreover, the theory fails to reflect in the normal stability of demand deposits in the liquidity consideration.

This theory was criticized because it failed to take cognizance of the fact that the bank can ensure liquidity of its assets only when they are readily convertible into cash without any loss. Thus the Commercial loan theory was ignored because of the criticisms of the doctrine.

2.3 Determinants of Stock Market Return

Many researches have been done examining factors other than fundamentals of supply and demand that have influence stock price movements. According to Fama (1990) only 50 percent of market stock price variations can be explained as actual returns by real economic activities.

The release of news related to a company play a very vital role in price shifts of stocks. Where such news are negative, the prospects of the stock are negatively affected leading to more people disposing off the stock which in the long run causes the prices to fall. Positive news leads to an increased interest in the stock which culminates to price rising.
Significant movement in share prices is associated with announcement of new board, its composition and even resignation of any of its members.

The market reaction to changes in firm payout policies is of importance in determining the corporate payout dynamics. The dividends information hypothesis postulates that cash dividends carries information regarding the future cash flows of firm that is to be reflected in the market price of the stocks after the announcement of dividends, particularly when the dividend increases. This effect of this kind of news is more significant after the announcement and not before the announcement. These announcements are seen as a sign of strength suggesting that the announcing firm has excess capital. Empirical evidence exists that shows dividends increase lead to more positive abnormal returns that supports EMT. A number of studies done has shown a significant positive relationship between stock prices and dividends pay out.

Similarly price earnings (PE) ratio which is given by market price per equity share divided by earning per share of the firm indicates the price that investors are willing to pay for net profit earned per share. Since this ratio reflects market expectations about future performance of a firm the higher the ratio denotes higher investors’ expectations about future earnings. This means then investors would be willing to pay more for a firm with a higher PE ratio. A positive significant relationship is therefore expected between stock prices and PE ratio.

And also Leverage which indicates the proportion of firm’s assets financed by debt as against equity and measured as debt to equity ratio affects share prices and hence market returns.
This is because capital raised by debt requires periodic interest payment which lowers the earnings available for equity shareholders. Investors generally prefer firms with lower debt and therefore a negative relationship is expected between share prices and leverage.

The stock performance is also explained by profitability of a firm. Profit after tax is the earnings available to equity shareholders which are used to distribute dividends. Thus the higher the profits the higher the dividends payment. Dividend seeking investors wish to earn current income in form of dividends rather than capital gains and will prefer firms that pay higher dividends. This creates greater demand for higher paying dividends stocks in turns triggers market prices of the stock and hence stock returns.

2.4 Empirical Review

Eljelly (2004) evaluated the relationship between profitability and liquidity, as measured by current ratio and cash gap (cash conversion cycle) on a sample of joint stock companies in Saudi Arabia. The study found significant negative relation between the firm's profitability and its liquidity level, as measured by current ratio. Wang (2002) studied the relationship between liquidity management and profitability and value for Japanese and Taiwanese companies in period between 1985 to1996. The results of his research showed that there is a negative and significant relationship between cash conversion cycle and profitability indices i.e equities return ratio and assets return ratio.

The research findings reveal that the most popular theory with bankers is Commercial loan theory followed by Asset liability management theory. The evidence of use of shift ability and anticipated income theory is weak. However, there was one bank that employed a hybrid strategy i.e. anticipated and commercial loan theory.

Maina (2011) researched on relationship between the liquidity and profitability of oil companies in Kenya and found that that liquidity management is not a significant contributor alone of the firm’s profitability and there exist other variable that will influence return on assets (ROA). Kweri (2011) evaluated the relationship between working capital management and profitability of manufacturing firms listed on the NSE. The findings of the study were that working capital management affects profitability of the company and if the firm can effectively manage its working capital, it can lead to increased profitability.

Adebayo et al (2011) evaluated how effective liquidity management impacts on profitability in commercial banks in Nigeria and how commercial banks can enhance their liquidity and profitability positions . In attempt to achieve the objectives of the study, several findings were made through the analysis of both the structured and unstructured questionnaire on the management of banks and the financial reports of the sampled banks. Quantitative methods of research were applied.

The data obtained from primary and secondary sources was statistically tested through Pearson correlation data analysis and the findings indicated that there is significant relationship between liquidity and profitability.
Ajanthan (2013) investigated the relationship between liquidity and profitability of trading companies in Sri Lanka.

The study involved 8 listed trading companies in Sri Lanka over a period of past 5 years between 2008 and 2012. Correlation and regression analysis and descriptive statistics were used in the analysis and findings of the study suggest that there exists a significant relationship between liquidity and profitability among the listed trading companies in Sri Lanka.

Maaka (2013) studied the relationship between liquidity risk and financial performance of commercial banks in Kenya. The study adopted correlation research design where data was retrieved from the balance sheets, income statements and notes of 33 banks in Kenya during 2008 to 2012. Multiple regression analysis was applied to assess the impact of liquidity risk on banks’ profitability. The findings of the study were that profitability of the commercial bank in Kenya is negatively affected due to increase in the liquidity gap and leverage.

Podilchuk (2013) studied impact of liquidity management on profitability of companies in Ukraine. The database covered state, closed and open joint stock companies and limited liabilities companies that operate in agriculture, production, construction, retail and finance industries between 2001 and 2010. The methodology implies a regression of independent liquidity measures on Return on Assets.

The findings of the study indicated that Current Ratio and Quick Ratio have significant positive diminishing effect on profitability.
It is profitable for the companies to increase liquid assets up to the turnover point, after which a further increase will have negative impact on profitability.

Priya (2014) evaluated the relationship between liquidity management and profitability of listed manufacturing companies in Sri Lanka over a period of past 5 years from 2008 to 2012. Correlation and regression analysis were used in the analysis and findings suggest that there is a significant relationship between liquidity and profitability among the listed manufacturing companies in Sri Lanka.

According to Smith (1980) excessive dependence on liquidity indicates the accumulation of idle funds that don’t fetch any profits for the firm. On the other hand, insufficient liquidity might damage the firm’s goodwill, leading to deteriorated firm’s credit standings that might lead to forced liquidation of firm’s assets.

2.5 Summary of Literature Review

From the above literature it is evident that liquidity management has a significant relationship with profitability. However the empirical studies on the relationships between these two variables have given mixed results. A number of studies have been undertaken to help explain the performance of the stock market in relation to profitability. The theoretical review has shown liquidity management in the context of ability to meet obligations as they fall due and has not shown how it affects other micro economic variables. It has also been established that there exist a significant relationship between stock returns and changes of cost and profit efficiency for the listed commercial banks.
Poor profits lead to low future dividends to investors and consequently the share price will be bided down in the market which influence stock returns negatively. Since liquidity affects profitability and the latter has effect on stock returns, then automatically liquidity has effect on stock returns.

Although there has been substantial research on liquidity, there has not been any study focusing on liquidity management and its impact on the stock market return here in Kenya. This study therefore seeks to fill this research gap by examining the relationship between liquidity management and stock market performance of listed banks in Kenya.
CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The purpose of this study was to examine if there exist any relationship between liquidity management and stock market returns of commercial banks listed on NSE. In this chapter the research design, population and sampling, data collection and analysis method used in the study will be covered.

3.2 Research Design

In this study the quantitative research design was used as it allowed the researcher to study the change and development of the phenomenon over time (Saunders et al, 2007). This enabled the researcher to examine the causal relationship between liquidity management and bank’s stock market performance.

3.3 Population

For the purpose of this research the population of study consisted of all commercial banks listed on Nairobi securities exchange (NSE) as at 31st December 2013 (Appendix i). The source of the population was NSE website. Eleven (11) commercial banks were quoted according to the NSE. The choice of the industry was due to the reliability and availability of the data from the financial statements since they are under regulation of Central Bank of Kenya (CBK).
3.4 Data Collection

For the purpose of this research and to achieve the intended objectives, data collected was secondary data. This will was collected from Bank’s annual reports and published audited financial statements and NSE data vendors. The data extracted from NSE data vendors included the opening and closing prices of shares at the end of the year for the five years between 2008 and 2013 and the dividends distribution throughout the same period. The data from financial annual reports and financial statements included the following: total deposits, Cash and coins in vaults, balances available in CBK cash reserve and clearing accounts, Net deposits and balances with local banks, Net deposits and balances with foreign banks, Government Treasury bills and bonds for the five years under the study.

3.5 Data Analysis

In assessing the relationship between liquidity management and stock market return for commercial banks in Kenya this study used simple regression and correlation analysis to examine the nature and extent of the relationship between the two variables and to determine if there exist any cause and effect between them. Statistical Package for Social Sciences (SPSS version 16) was used for data analysis.

3.5.1 Conceptual Model

The study conceptualized that the stock market return was a function of liquidity because it react to liquidity meaning that stock returns are the dependent variables. This is because stock market return is given by change in stock prices which is a function of demand and supply created by the levels of liquidity.
3.5.2 Empirical Models

Regression analysis helps understand how dependent variable changes when any of the independent variables is varied. Since the independent variable was only one for this study, simple regression analysis was used for the five years under the study between 2009 and 2013.

3.5.2.1 Measuring Stocks Return

The stock return represents percentage gains or loss of value of the stock when compared to some previous period and the capital gains for each year. The equation (ii) represents the algebraic equation that will be used to compute the bank stock returns.

\[ R_{it} = F(L_{it}) \] \[ \text{equation (i)} \]

Where,

\( R_{it} \) = Stock return of the \( i \) bank in time \( t \) and \\
\( L_{it} \) = Liquidity of the \( i \) bank in time \( t \).

\[ R_{it} = \frac{P_{it} - P_{it-1} + D}{P_{it-1}} \] \[ \text{equation (ii)} \]

Where,

\( P_{it} \) = The price of the stock of the \( i^{th} \) bank at the close of the year under study and \\
\( R_{it} \) = Stock return of the \( i^{th} \) bank over the same year. \\
\( D \) = dividends distributions during the period.
3.5.2.2 Measuring Liquidity Management

According to the CBK Act, Liquidity Regulation Supplement (2004), CBK uses one measure of liquidity, the liquidity ratio which is given by the percentage of net liquid assets as a proportion of net deposit liabilities. The rationale for using net deposit liabilities is because banks reduce their total deposit with deposits held in their books for CBK, commercial banks, financial institutions, mortgage institutions and building societies. For the purpose of this study liquidity ratio was used as a proxy for liquidity management which is monitored by CBK. Equation (iii) represents the algebraic equation that was used to compute liquidity.

\[
L_{it} = \frac{NC_{it} + CB_{it} + DEF_{it} + GSEC_{it}}{DEP_{it}} \quad \text{(iii)}
\]

Where,

\( L_{it} \) = Liquidity of the \( i^{th} \) bank at the close of the year under study,

\( NC_{it} \) = Notes and coins of the \( i^{th} \) bank at the close of the year under study,

\( CB_{it} \) = Balances in CBK of the \( i^{th} \) bank at the close of the year under study,

\( DEF_{it} \) = Deposits in foreign banks of the \( i^{th} \) bank at the close of the year under study,

\( GSEC_{it} \) = Treasury bills and bonds of the \( i^{th} \) bank at the close of the year under study and

\( DEP_{it} \) = Net deposit liabilities of the \( i^{th} \) bank at the close of the year under study.
To accomplish the objective of this study a linear regression model equation (iv) was used

\[ Y_i = \alpha + \beta X_i + \varepsilon_i \]  

Where,

\( Y_i \) is the Stock market return of the bank,
\( \alpha \) is the constant to be estimated by the model above,
\( \beta \) is the coefficient,
\( X \) is liquidity management to be measured CBK liquidity ratios,
\( \varepsilon_i \) is the error term.
CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSIONS

4.1 Introduction

This chapter brings the results of the finding on the relationship between liquidity management and stock market return of commercial banks listed in Kenya. 11 banks are listed in the NSE but only 9 banks were used in the study. I&M bank was eliminated because it was listed after 2009 and HFCK since it’s not classified as a commercial bank by CBK. The findings of the study are given in tables.

4.2 Descriptive Statistics

The study sought to find out relationship between liquidity management and stock market return of commercial banks listed in Kenya. The average liquidity and stock market return are compared for the period of five years under the study.

*Table 4.1: Descriptive Statistics*

<table>
<thead>
<tr>
<th>LIQUIDITY</th>
<th>MARKET RETURN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>3.660</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>7.694</td>
</tr>
<tr>
<td>Range</td>
<td>21.587</td>
</tr>
<tr>
<td>Minimum</td>
<td>29.638</td>
</tr>
<tr>
<td>Maximum</td>
<td>51.225</td>
</tr>
<tr>
<td>Count</td>
<td>45.0</td>
</tr>
</tbody>
</table>

*Source: Author 2014*
The mean of liquidity of commercial banks studied was 3.66% meaning that commercial banks have relatively average liquidity. With a maximum of 51.225%, range of 21.587% and standard deviation of 7.694%, the implication is that liquidity of commercial banks varies significantly and therefore we conclude that liquidity management affects the stock market returns of commercial banks.

The descriptive statistics for market return indicate a mean of 0.174, a standard deviation of 0.119 and a range of 0.324. This implies that the stock market return varies significantly and is also reflected in the liquidity management. From the analysis above the study variable depicts a similar pattern of large variations of the 9 banks studied. The consistent results depicts that the study variables have a negative relationship implying that there is negative relationship between liquidity management and stock market returns of commercial banks.

4.3 Correlation Analysis and Interpretation

The table below shows the correlation coefficient which measures the strength and direction of a linear relationship between stock market return and liquidity management.

Table 4.2: Correlations

<table>
<thead>
<tr>
<th></th>
<th>LIQUIDITY</th>
<th>MART RETN</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIQUIDITY Pearson Corr</td>
<td>1</td>
<td>-0.587</td>
</tr>
<tr>
<td>Sig.(1-tailed)</td>
<td></td>
<td>0.096</td>
</tr>
<tr>
<td>N</td>
<td>45</td>
<td>9</td>
</tr>
<tr>
<td>MART RETN Pearson Corr</td>
<td>-0.587</td>
<td>1</td>
</tr>
<tr>
<td>Sig.(1-tailed)</td>
<td>0.096</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>45</td>
<td>45</td>
</tr>
</tbody>
</table>
The values of $r$ lies between -1 and 1. From our table above we can conclude that at 95% degrees of confidence that there is an association between the two variables. Since $r$ is -0.587 we conclude that the association is negative implying that there exist a negative linear relationship between stock market returns and liquidity management. This means that for every additional liquidity unit the stock market would decrease proportionately. The correlations also indicate that there is 9.6% chance that this association is due to chance.

### 4.4 Regression Analysis and interpretation

A linear regression model was used to determine the relationship between liquidity management and stock market return of commercial banks listed on NSE. The regression model is:

$$ Y_i = \alpha + \beta X + \varepsilon_i $$

Where

$Y_i$ is the Stock market return of the bank

$\alpha$ is the constant to be estimated by the model above

$\beta$ is the coefficient

$X$ is liquidity management to be measured by CBK liquidity ratios

$\varepsilon_i$ is the error term


Table 4.3: Model summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>No of Observations</th>
<th>R square</th>
<th>Adjusted R square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.587</td>
<td>45</td>
<td>0.345</td>
<td>0.251</td>
<td>0.10326418</td>
</tr>
</tbody>
</table>

Source: Author 2014

Predictors (Constant), Liquidity management

R square is the coefficient of determination and indicates how stock market return varies with the changes in liquidity management. From our model summary R square is 0.345.

This implies that 34.5% of stock market return of commercial banks is a result of variation of liquidity management at 95% confidence levels.

This means that 65.5% of stock market return can be attributed to other factors other than liquidity management. From our results above R is 0.587 indicating a strong relationship between stock market return and liquidity management.

Table 4.4: ANOVA Analysis

<table>
<thead>
<tr>
<th>df</th>
<th>Sum of Squares</th>
<th>Mean of Squares</th>
<th>F</th>
<th>Significance F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>1</td>
<td>0.0392906</td>
<td>0.39291</td>
<td>3.684589</td>
</tr>
<tr>
<td>Residual</td>
<td>7</td>
<td>0.0746444</td>
<td>0.01066</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>8</td>
<td>0.1139350</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Author 2014
P value corresponding to F cal value of 3.684589 is 0.096397 which is less than 0.1 and therefore the variables are statistically high and significant. This means that at 95% confidence levels the change in liquidity management is associated with the stock market return changes. However since p value is greater than 0.05 there is over 5% chance that the relationship emerged randomly. It is generally acceptable to consider variable with p value less than 0.1 as significant.

*Table 4.5: Coefficient Results*

<table>
<thead>
<tr>
<th>Model</th>
<th>Coefficients</th>
<th>Std. Error</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>B</td>
<td>Std. Error</td>
<td>t-value</td>
</tr>
<tr>
<td>Constant</td>
<td>0.50707</td>
<td>0.17708</td>
<td>2.86353</td>
</tr>
<tr>
<td>Liquidity management</td>
<td>-0.00911</td>
<td>0.00475</td>
<td>-1.91953</td>
</tr>
</tbody>
</table>

*Source: Author 2014*

The coefficient for liquidity management is -0.00911 which is negative implying that there exists a negative relationship between stock market return and liquidity management. This in essence means that for every additional unit increase in stock return you should expect liquidity to reduce by an average of 0.00911. The constant coefficient is 0.50707 which implies when liquidity management is zero then the stock market return is 0.50707. This relationship however is only valid for this range of data of commercial banks for the five years under the study. The regression analysis equation that estimates the relationship between stock market return and liquidity management and that was derived from the study was:

\[ Y = 0.50707 - 0.00911X \]
4.5 Summary and Interpretation of Findings

The results from the analysis of the audited financial statements and stock prices and dividends distributions as presented above is from the sampled 11 commercial banks listed on NSE from the period between 2009 and 2013 was to establish the relationship between liquidity management and stock market return. The combined descriptive statistics for all the eleven banks shows a fair liquidity management.

Observing the selected banks individually except for SCNK it can be seen that all the other banks show a negative stock market return in 2009. All the other banks had a positive return for the subsequent years except for 2011 and except for NBK which only showed positive return in 2014.

The analysis shows also that most of selected banks for this analysis reported good levels of liquidity management as given by liquidity ratios. All the banks have their ratios above 20% which is set by CBK as the minimum ratio. NBK has the highest ratios compared to the other banks which are an indication of relatively poor liquidity management which perhaps explains why the stock returns are negative compared to the other stocks of the listed banks.

The combined descriptive statistics for all the eleven banks shows that banks with liquidity ratios between 30% and 40% reports relatively higher returns. This means that there is a causal relationship between them to a certain percentage. This explains why investors will buy stocks where banks have average liquidity management because there is guaranteed returns for their investments. The higher the ratio the poor the liquidity management and the lower the ratio the higher the risks.
CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of the research findings, conclusions from the study, limitations and recommendations for further research. The objective of the study was to establish the relationship between stock market return and liquidity management of commercial banks listed on NSE.

The study used secondary data for commercial banks listed on NSE for the year 2009 to 2013 and measured liquidity management with CBK liquidity ratios while stock market return is estimated by opening and closing stock prices and the dividends distribution throughout the same period.

5.2 Summary of Findings and Discussions

From the data analysis above the results of the study has established that within the period between 2009 and 2013 the listed banks were increasing both liquid assets and liabilities. Most of the same selected banks which paid dividends have also increased dividends paid out. The listed banks had their lowest stock market returns in 2009 and 2011 except for SCB and NBK which shown mixed results.

The results of this study has shown indeed a negative relationship exist between the stock market return and liquidity management. This is because the independent variable assumes a negative coefficient meaning an increase of one leads to a decrease of the other. The results have shown also that banks with better returns are those with average liquidity ratios between 30% and 40%.

This means that market reflects liquidity management decisions through the stock prices. In essence this means that stocks with lower or higher liquidity ratios would have low returns.
This is because the market would assume that liquidity management decisions are not well implemented.

Listed banks with high liquidity means funds are not well invested while those with low liquidity may show over investment. Therefore there is a tradeoff on how much liquidity ratio to maintain.

This study ought to investigate the relationship between liquidity management and stock market return of listed commercial banks. The findings of the study have established that there exist a significant negative relationship between liquidity management and stock market return. This means that since that the higher the stock market returns the lower the liquidity management and vice versa. In a nutshell this means that listed banks must employ good liquidity management policies so that their stocks can be priced fairly in the market.

This study has shown that there is a tradeoff between liquidity management and stock market return to a certain percentage. This is because listed banks with lower liquidity ratios have lower returns and similarly those with higher ratios have lower returns compared to those with average ratios between 30% and 40%.

5.3 Conclusions

From the data analysis in chapter four the results indicates that liquidity management is one of the determinants of stock market returns. The analysis of liquidity management against stock market return is important to investors. The negative relationship between the two variables implies that an increase in liquidity management will lead to a decrease in stock market returns. The results of the study indicate a considerable proportion of stock market return that is determined by liquidity management.
The study findings of this are consisted with the literature by Wambu (2013) who found out that there is a positive relationship between liquidity and the profitability of commercial banks in Kenya.

The same findings are supported by Maaka (2013) who concluded in his study that the profitability of commercial banks in Kenya is negatively affected due to increase in the liquidity gap and leverage.

Priya (2014) who evaluated the relationship between liquidity management and profitability of listed manufacturing companies in Sri Lanka found out that liquidity management and a significant relationship with the profitability. All these studies are consistent with the findings of this study and this can be attributed to Efficient Market Hypothesis which dictates that the prices of stock fully incorporate publicly available information. This means that since it has been proved by the studies above that the higher the profitability the lower the liquidity then the lower the liquidity the higher stock market returns of commercial banks in Kenya.

5.4 Limitations of the study

The study covered only five years and perhaps a longer period would yield more reliable and accurate results. It was also the opinion of the researcher if the data was collected on daily basis for the five years under the study the results would be more accurate and the study would yield different results.

The financial statements interpretation was also a problem. Some banks do not separate deposits held with local banks and those held with banks abroad. There were some inconsistencies also in the financial statements. Most banks reported their earnings in millions, thousands or even absolute figures. This necessitated the researcher to approximate some figures which in the end had some effect on the final results.

Another limitation is that some banks lumps up all investments in securities and it was not easy to separate Kenya government securities and other securities.
Separation of securities is important since corporate bonds which are traded in NSE are not regarded by CBK as liquid assets.

The study concentrated on commercial banks and the results may not be applicable to other segments quoted in NSE.

Different sectors use different methods to calculate their liquidity and what is liquid in commercial banks may not be necessarily in other companies listed. Also this study was done in Kenya and may not apply in other countries due to the peculiar nature of the business environment and policies of different countries.

The model used for this study was simple regression analysis. The independent variable for this study may have not explained fully the dependent variable. Including some more independent variables may give different results.

5.5 Recommendations

The study results conclude that there is a negative significant relationship between stock market return and liquidity and therefore bank should not disclose their liquidity position so as to influence their stock performance. The study also recommends a similar study to be carried out in other sectors of the economy.

The study strongly recommends a similar study to be carried out using a multiple regression analysis where more independent variables would be taken in to account. This would help to establish if the same results would be achieved and whether the same would be consistent with the findings of this study.
5.5.1 Policy Recommendations

The study recommends banks listed on NSE to consider other factors that affect the share prices and dividend distributions which are the key components of stock market return.

This is because the study did not find a positive relationship between liquidity management and stock market return.

The study also recommends NSE adopt policies that restrict the proportion of liquid assets in relation to liquid liabilities of all listed commercial banks since this ratio is affecting the returns in NSE. This will protect the innocent investors who may not know its relationship with the returns they get for their investments.

The study also recommends strongly that NSE and/or CMA adopts a policy of financial reporting to avoid some banks reporting in millions or thousands so as to make it easy for analysts of these figure yield better and accurate results.

5.5.2 Suggestions for Further Research

A similar study should be done for a longer period so as to acquire more reliable results and also it would be interesting if the same study is done but different methods of data analysis are adopted. The same study can be done from other sectors listed on NSE or outside Kenya so as to check if similar results can be received.

The researcher recommends a similar study to be carried out to investigate other factors that influences stock market returns of banks listed on NSE. This is because liquidity only explains about 34.5% at 95% degrees of confidence according to our research findings. This may help explain why banks with similar liquidity positions have different stock returns.
The researcher further recommends a study to be conducted on changes in dividends distribution and stock market prices of all commercial banks listed on NSE. This would help explain the reason why despite some banks increasing the amount paid out as dividends their stock market returns were seen to be negative.

The researcher would further like to recommend a similar study to be carried out to establish the kind of investors who have invested in shares of these commercial banks listed and classify them as either local or foreign. This study should also note down the proportions of their investments. This may help understand investor’s responses to changes in liquidity positions.
REFERENCES


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Salmi, T; Virtanen and I; Kallunki, (1997),”Association between accounting and market based variable; A canonical correlation approach with US data, University of Vaasa, Finland.


APPENDICES

Appendix i: Listed Companies at the NSE: Banking Segment

1. Barclays Bank of Kenya Ltd
2. CFC Stanbic Bank
3. Cooperative Bank of Kenya
4. Diamond Trust Bank of Kenya Ltd
5. Equity Bank Ltd
6. Housing Finance Company of Kenya Ltd.
7. Investments and Mortgages Bank
8. Kenya Commercial Bank Ltd
10. National Industrial Credit Bank Ltd.
11. Standard Chartered Bank Ltd.
Appendix ii: Raw data.

Raw data 2009

<table>
<thead>
<tr>
<th>Bank Name</th>
<th>NC ('000)</th>
<th>CB ('000)</th>
<th>DEL ('000)</th>
<th>DEF ('000)</th>
<th>GSEC ('000)</th>
<th>TLA ('000)</th>
<th>DEP ('000)</th>
<th>ODEP ('000)</th>
<th>LIQTY</th>
<th>RET</th>
<th>DIV</th>
<th>OP</th>
<th>CP</th>
</tr>
</thead>
<tbody>
<tr>
<td>BBKE</td>
<td>4,103,000</td>
<td>5,648,000</td>
<td>201,000</td>
<td>860,000</td>
<td>43,861,000</td>
<td>44,628,000</td>
<td>125,869,000</td>
<td>(10,045,000)</td>
<td>0.3546</td>
<td>(0.06)</td>
<td>2.50</td>
<td>50.50</td>
<td>45.00</td>
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<tr>
<td>CFC</td>
<td>4,606,140</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>26,375,412</td>
<td>25,724,934</td>
<td>82,534,005</td>
<td>(5,256,618)</td>
<td>0.3117</td>
<td>(0.24)</td>
<td>-</td>
<td>59.00</td>
<td>45.00</td>
</tr>
<tr>
<td>COOP</td>
<td>4,202,707</td>
<td>4,348,757</td>
<td>1,347,750</td>
<td>3,635,138</td>
<td>26,498,093</td>
<td>38,813,402</td>
<td>91,518,733</td>
<td>(1,219,043)</td>
<td>0.4241</td>
<td>(0.09)</td>
<td>0.20</td>
<td>10.00</td>
<td>8.95</td>
</tr>
<tr>
<td>DTK</td>
<td>414,605</td>
<td>1,849,442</td>
<td>897,227</td>
<td>5,638,340</td>
<td>5,980,327</td>
<td>11,176,592</td>
<td>36,274,080</td>
<td>(3,603,349)</td>
<td>0.3081</td>
<td>0.00</td>
<td>1.55</td>
<td>71.50</td>
<td>70.00</td>
</tr>
<tr>
<td>EQB</td>
<td>2,773,165</td>
<td>3,739,749</td>
<td>3,263,290</td>
<td>2,249,812</td>
<td>11,843,657</td>
<td>16,541,403</td>
<td>65,824,732</td>
<td>(7,328,270)</td>
<td>0.2513</td>
<td>(0.92)</td>
<td>0.40</td>
<td>189.00</td>
<td>14.35</td>
</tr>
<tr>
<td>KCB</td>
<td>4,760,954</td>
<td>8,751,021</td>
<td>-</td>
<td>5,936,128</td>
<td>25,835,105</td>
<td>40,134,415</td>
<td>138,452,731</td>
<td>(5,148,793)</td>
<td>0.2899</td>
<td>(0.09)</td>
<td>1.00</td>
<td>23.75</td>
<td>20.50</td>
</tr>
<tr>
<td>NBK</td>
<td>1,470,378</td>
<td>6,418,485</td>
<td>807,416</td>
<td>346,855</td>
<td>26,609,661</td>
<td>28,927,505</td>
<td>41,995,446</td>
<td>(6,725,290)</td>
<td>0.6888</td>
<td>(0.11)</td>
<td>-</td>
<td>43.75</td>
<td>39.00</td>
</tr>
<tr>
<td>NCK</td>
<td>546,664</td>
<td>2,881,900</td>
<td>785,218</td>
<td>3,271,083</td>
<td>3,858,103</td>
<td>11,118,878</td>
<td>36,977,360</td>
<td>(224,090)</td>
<td>0.3007</td>
<td>(0.33)</td>
<td>0.25</td>
<td>47.00</td>
<td>31.25</td>
</tr>
<tr>
<td>SCB</td>
<td>2,909,461</td>
<td>4,819,411</td>
<td>11,644,083</td>
<td>7,765,085</td>
<td>43,357,357</td>
<td>48,174,413</td>
<td>86,773,652</td>
<td>(22,320,984)</td>
<td>0.5552</td>
<td>0.08</td>
<td>12.00</td>
<td>160.00</td>
<td>161.00</td>
</tr>
</tbody>
</table>
## Raw data 2010

<table>
<thead>
<tr>
<th>Bank Name</th>
<th>NC ('000)</th>
<th>CB ('000)</th>
<th>DEL ('000)</th>
<th>DEF ('000)</th>
<th>GSEC ('000)</th>
<th>TLA ('000)</th>
<th>DEP ('000)</th>
<th>ODEP ('000)</th>
<th>LIQTY</th>
<th>RET</th>
<th>DIV</th>
<th>OP</th>
<th>CP</th>
</tr>
</thead>
<tbody>
<tr>
<td>BBKE</td>
<td>5,642,799</td>
<td>7,488,558</td>
<td>100,338</td>
<td>3,560,231</td>
<td>55,995,929</td>
<td>67,747,156</td>
<td>123,826,442</td>
<td>(5,040,699)</td>
<td>0.5471</td>
<td>0.40</td>
<td>1.36</td>
<td>45.50</td>
<td>62.50</td>
</tr>
<tr>
<td>CFC</td>
<td>1,315,158</td>
<td>4,129,734</td>
<td>37,774,370</td>
<td>2,969,515</td>
<td>19,058,210</td>
<td>34,008,682</td>
<td>71,425,115</td>
<td>(31,238,305)</td>
<td>0.4761</td>
<td>0.58</td>
<td>0.80</td>
<td>48.25</td>
<td>75.50</td>
</tr>
<tr>
<td>COOP</td>
<td>5,298,211</td>
<td>8,735,266</td>
<td>1,887,890</td>
<td>4,783,367</td>
<td>34,266,086</td>
<td>49,466,551</td>
<td>124,012,039</td>
<td>(5,504,269)</td>
<td>0.3989</td>
<td>1.16</td>
<td>0.40</td>
<td>9.00</td>
<td>19.00</td>
</tr>
<tr>
<td>DTK</td>
<td>836,618</td>
<td>2,508,731</td>
<td>1,118,867</td>
<td>4,202,721</td>
<td>9,487,775</td>
<td>14,149,937</td>
<td>44,903,973</td>
<td>(4,004,775)</td>
<td>0.3151</td>
<td>0.95</td>
<td>1.60</td>
<td>70.00</td>
<td>135.00</td>
</tr>
<tr>
<td>EDB</td>
<td>3,635,336</td>
<td>4,802,374</td>
<td>2,029,967</td>
<td>2,517,607</td>
<td>31,210,678</td>
<td>34,484,064</td>
<td>95,203,689</td>
<td>(9,711,898)</td>
<td>0.3622</td>
<td>0.93</td>
<td>0.80</td>
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