THE EFFECT OF TRADE FINANCE ON THE PERFORMANCE OF COMMERCIAL BANKS IN KENYA

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A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION TO THE SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI

NOVEMBER 2016

DECLARATION

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

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ACKNOWLEDGEMENT

I would like to pass my heartfelt gratitude to all the people who have lent me their continuous support, encouragement and immense guidance throughout the period of doing this thesis. First, I give thanks to the Lord for giving me good health to start and complete this project successfully, without Him, I would not have come this far.

Secondly, I am grateful to my supervisor, Dr. Kennedy Okiro for his support, supervision, patience and valuable guidance in writing my thesis. His advice, guidance and constructive criticism gave me the impetus to move the project to its fruitful conclusion.

Thirdly, am grateful to my family for their continuous support, encouragement and committing their resources towards my education this far. Their sacrifices and opportunities accorded to me have enabled me come this far.

Finally, I appreciate the entire University of Nairobi fraternity for giving me a conducive environment to thrive academically and for providing me with the resources needed to see me through my master's degree. I will always treasure the help of the lecturers, members of staff, and my fellow classmates for enabling me to learn more.

DEDICATION

I dedicate this thesis to my loving parents and siblings for giving me support in my pursuit of knowledge, and for the love they have showed me. God Bless you abundantly.

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LIST OF ABBREVIATIONS

BHC   Bank Holding Companies

CAPM   Capital Asset Pricing Model

CBK   Central Bank of Kenya

GDP   Gross Domestic Product

LCR   Liquidity Coverage Ratio

LOTA   Loan to Total Assets

NSE   Nairobi Securities Exchange

NSF   Non Sufficient Funds

ROA   Return on Assets

ABSTRACT

The objectives of this study were to determine the effect of trade finance management practices on financial performance of commercial banks in Kenya. The research used a descriptive survey research design. The descriptive survey was ideal because it ensured thorough description of the situation ensuring least possible bias in data collection. The study made use of secondary data collected from annual reports submitted to the CBK for the target population comprised of all the commercial banks in Kenya. Summaries of data findings together with their possible interpretations were presented using tables, charts, correlations, standard deviations and regression. The study found out that mean of fees and commissions' transactions were relatively high as compared to other variables while dividend income transactions had the highest standard deviation. Foreign exchange transactions had the highest positive correlation. Fees and commissions also had high and positive correlation to the return. From the regression equation the study concluded that a unit increase in fees commissions, foreign trading, and dividend transactions lead to improvement on return on assets. Therefore; the study recommends that; trade finance should always be taken in to account to improve the banks performance. Policy makers should also undertake to understand risks affecting the banks in order to maximize returns.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Trade is an important driver of economic growth and development. The value of trade in Kenya amounts to approximately two-thirds of its Gross Domestic Product (GDP). The export and import flows have development implications for the country. Exports allow Kenyan firms to access larger markets and innovate through greater competition, leading to higher productivity and growth. Imports of consumption goods are essential for consumers, while imports of machinery and other intermediate goods allow manufacturing firms to generate employment through greater production and exports (World Bank, 2014).

According to Malouche, (2009) trade finance is of paramount importance, when bank financing is not available, firms typically enter into inter-firm credit arrangements such as cash-in-advance and open account transactions. Both mechanisms carry significant risk and firms mostly partake due to lack of alternatives. The cash-in-advance arrangements impose liquidity-constraints and therefore limit profitability and growth. Similarly, open-account transactions are often unavailable as sellers tend to have a high risk aversion to buyers and are not willing to ship goods before full payment. Therefore firms navigate these challenges by seeking trade finance from financial intermediaries, such as commercial or development banks and export promoting agencies. Bank-intermediated trade finance may be provided "off-balance sheet" in the form of documentary, commercial or standby letters of credit, promissory notes, bills of exchange, and guarantees.

Commercial banks in Kenya derive their income from interest, Non interest and other income, but heavily relying on interest income. They have experienced significant new competition and have lost valuable regulatory protection. The implication of this is reduction in profit margins and deposit intermediation. Thygerson (1995), argues that regulations that for instance facilitated banks to earn interest rate on loan at market rate, while on the other hand paying depository at rate below the market rate, while on the other hand paying depositors at a rate below the market rate to some extent guarantee positive net interest margins with introduction of financial sector liberalization coupled with heavy capital equipment by the regulator, banks have been exposed to intense competition, even from non-banking institutions leading to downward pressure on intermediation profit margin.

1.1.1. Trade Finance

Trade finance signifies financing for trade, and it concerns both domestic and international trade transactions. A trade transaction requires a seller of goods and services as well as a buyer. Various intermediaries such as banks and financial institutions can facilitate these transactions by financing the trade. Trade Finance products are specialized bank products designed to reduce the risks and uncertainties associated with commercial transactions, thus, facilitating trade. For banks to compete successfully in the ever-expanding international trade arena, which requires the financial ability to minimize the buyer's cost, maximize the seller's offer, and manage the commercial, political and currency risks on both sides trade finance is necessary. Trade Finance is used to describe various operations, including the financing undertaken to facilitate trade or commerce, which generally involves the movement of goods and services between two points – it can therefore be domestic or international.

The trade finance element may only be part of the overall financial component and may have multiple variations, e.g., a domestic trade finance transaction could support an International movement of goods or on occasion only services may be involved. Such operations comprise a mix of money transmission instruments, default undertakings and provision of finance, which are described in more detail below.

According to Silber and Udell (1996), this source of revenue has become more important in recent times as banks have shifted from traditional interest income to more nontraditional sources of revenue, known as non- interest or fee income. These sources of income have a great growth significant in non –interest income. They are various sources of non-interest income that have been discussed according to Thygerson (1995), suggest that noninterest income is generated as a result of three information function of intermediation namely origination services and portfolio management. Origination sources comprise of loan origination fees security underwriting and loan syndicate fees. According to Young and Roland (1999) suggested that banks have responded to this phenomenon by shifting their product mix toward noninterest income by selling mutual funds and investment in money market / financial market or government securities.

According to Nairobi stock and market report (2007) commercial bank recorded a decrease in interest income by about 49% in the same period previous year. This long-term downward pressure on net interest margins have forced commercial bank to think of alternative sources of revenue that will ensure earning stability and also mitigate risk exposure. It is generally believed that diversification by a firm reduces risk, just as diversification of investments by an individual does. In both cases,

however, whether the desired risk reduction effect is achieved does of course depend on the correlation between the different activities or lines of business and on the correlation between the prices of the different investments, hence there is need for bank to focus on other sources of revenue through value adding activities such as service charges, fees, commissions and foreign exchange dealing. According to Ritter Silber and Udell (1996), this source of revenue has become more important in recent times as banks have shifted from traditional interest income to more nontraditional sources of revenue, known as non- interest or fee income. These sources of income have a great growth significant in non –interest income.

Analyzing of income and expense data of commercial banks shows that the dominant sources of revenue is loan interest and discount, Fieldman and Schmidt (1999) found that over 20years non- interest income has transformed for supportive role into a major contributor of banks revenue. In Kenya, interest income has been steadily declining as the relative importance of non –interest income has grown tremendously. According to the CBK (1999), the total assets in the banking system stood at kshs.418billion in 1999, down by 4% from previous years. Loans and advances accounted for 55% of total assets whereas holding government security accounting for 16%. The proportion of advances to total asset has declined from high of 62% in 1991 to 55% by 1999, and the trend is expected to continue according to central Bank of Kenya prediction, (CBK, 1999).

The Central Bank of Kenya (2002) has also documented that interest rates in Kenya have reduced significantly. As a result of the debate among the political and business

fraternities on the negative effects of high interest rates to the growth of the economy, interest rates have reduced from 20 % in 2001 to 18 % in December 2002.

1.1.2. Financial Performance

Organizational performance is defined as the measure of change of the financial state of an organization, or the financial outcomes that results from management decisions and the execution of those decisions by members of the organization. The measures used to represent performance are selected based upon the circumstances of the organization being observed. The measures selected represent the outcomes achieved, either good or bad (Carton, 2004).

Sound financial health of a bank is guarantee not only to it depositor but equal significant for shareholders, employee and the whole community as well. Hence effort has been made from time to time to measure the financial position of each bank and manage it efficiently and effectively. The financial position and performance is affected by the operation decision when asset are used effectively to increase profit. Operation decision indicates the effectiveness of the company management in making profit from asset. Therefore operational l efficiency can be achieved by dividing sale or revenue with total assets (Sari, 2007). Noninterest income is a part of income that a company can invest in to increase revenue hence increasing the value of equity. The value of equity can be useful to compare profitability between companies in the same industries in this case commercial banks in Kenya.

1.1.3 Relationship between Trade Finance and Financial Performance

The consequences of trade finance on income for the financial performance of commercial banks are not well understood. All else equal, an increase in noninterest income will improve earnings but an increase in noninterest income seldom occurs without concomitant changes in interest income, variable inputs, fixed inputs, and/or financing structure.

As noninterest income trended up during the 1990s, it was generally believed that shifting banks' income away from intermediation-based activities (in which bank income was subject to credit risk and interest rate risk), and toward fee-based financial products and services, would reduce banks' income volatility. Moreover, it was conventionally believed that expansion into new fee-based products and services reduced earnings volatility via diversification effects. But recent empirical studies indicate that neither of these beliefs holds on average. (Jin and Young-Jae 2009)

1.2 Research Problem

Banks exist because they mitigate a host of problems that otherwise prevent liquidity from flowing directly from agents with excess liquidity (depositors) to agents in need of liquidity (borrowers). These problems arise because of informational asymmetries, contracting costs, and scale mismatches between liquidity suppliers and liquidity demanders. Commercial Bank income depends on interest and non-interest income, but interest incomes have declined markedly due lending and deposit taking business declining this is mainly due to CBK publication that directed commercial bank reduce interest lending rate, decrease of treasury bond and bills to as low as 2% leading to revenue declining at a higher rate. According study carried out by Fieldsman and

Schmidt (1996), indicated that deregulation and new technology have eroded bank comparative advantage and made it easier for non-bank competitor to enter these market, hence their need to evaluate other form of portfolio other than depended on the deposit portfolio and loan interest. In case of Kenyan market the introduction of M-pesa Services has seen many bank transfer services as well as deposit services affected

Technological and competitive changes have encouraged banks to expand into nonbanking activities. While this type of income offers banks a degree of diversification, it is seen as less sustainable and of lower quality than interest income (Golin and Delhaise, 2013).While banks' main income source is interest income, noninterest revenue has become increasingly significant in recent years. Noninterest income includes bank fees, service charges, dividend income, securitization and trading profit/loss (Abreu and Mendes, 2000).One of the important internal factors that can be picked from income statement that affects bank profitability is the amount of expenses incurred during the bank operations within a certain period of time (Bush and Kick, 2009).This is what is referred to as efficiency from the efficiency theory. Efficient management of bank resources has implications on its performance.

The sharply drop in interest income have necessitated that bank should increase trade finance and other income to compliment the interest income, these will enable banks to maintain earning stability and as well as increase profit flow. Young and Roland (1999) suggested that banks have responded to this phenomenon by shifting their

product mix toward noninterest income by selling mutual funds and investment in money market / financial market or government securities.

Banks rely mainly on trade finance income sources so that they can achieve risk diversification, Thygerson (1995), argued that trade finance income is less susceptible to economic recession which may lead to loan delinquencies and losses, its then to offset loss brought by interest income. Roland (1997) observes that there are abnormal returns in the short run for fee based activities. Gardner Mill and Cooperman (2002) stated that one measure of depository and institution risk exposure is their earnings volatility as depicted by volatility of their net interest Margin, return on assets and return on equity as measured by their standard deviation over time. In general, studies conducted find that combining banking and non-banking activities has the potential to reduce earnings instability of commercial bank.

This study seeks to investigate the extent to which commercial banks in Kenya have adopted revenue diversification into trade finance sources and has the diversification led to earning stability. Does the diversification to trade finance led to the increased financial performance of commercial banks?

1.3 Objective of the Study

To determine the relationship between trade finance and financial performance of commercial banks in Kenya

1.4 Value of the Study

The research will contribute to body of knowledge by documenting the contribution and relationship between trade finance and financial performance to the whole organization and the profitability in financial institution and enhance further research on the same. Bank manager's income and professional reputations are clearly linked to bank earnings and hence high instability or volatility of earning will fare poorly on their performance on the extreme it will lead to insolvency.

Bank regulators are vested with the responsibility of protecting the payment systems and also protection of the customer from bank failure this necessitate bank to lay down mechanism of measuring banks stability through its earning. This occurs when there is unstable earning. The study will enable individual bank to evaluate interest and noninterest income and the significant to its operation. To identify other forms of non-interest income organization may venture into to enable the organization increase profitability and income stability. The information will also enable shareholder to know that their investment are yielding return and also encourage investor to invest in the commercial banks that are diversifying portfolio. How the diversification will provide banks future profitability

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter present a review of literature related to purpose of the study. The chapter is organized according to specific objectives in order to ensure relevance of research problem. The review has been undertaken in order to eliminate duplication of what has been done and provide a clear understanding of existing knowledge based on the problem area. The section includes: 2.2 theoretical literature reviews, 2.3 determinants of financial performance, 2.4 empirical literature reviews, 2.5 conceptual frameworks and 2.6 summary of literature review.

2.2 Theoretical Literature Review

The theoretical framework helps to make logical sense of the relationship of the variables and factors that have been deemed relevant to the problem. It provides definitions of relationships between all the variables so that the theorized relationship between them can be understood. The theoretical framework will therefore guide the research determining what factors will be measured and what statistical relationship the research will look for.

2.2.1 Portfolio Theory and Risk Diversification

The portfolio theory provides a normative approach to the investor's decision to invest in asset or securities under risk. It is based on assumption that investor s are risk averse. This implies that investor hold well diversified portfolio instead of investing their entire wealth on single asset or security.

Portfolio is a combination of individual assets or securities. If investor holds a well-diversified portfolio then his concern should be the expected return and risk of the portfolio rather than individual asset or securities. The second assumption is that the return of securities is normal distributed meaning the mean and variance analysis is the foundation of the portfolio decision.

2.2.2 The Capital Asset Pricing Model Theory

The capital asset pricing model (CAPM) of Sharpe (1964) and Lintner (1965) marks the birth of asset pricing theory (resulting in a Nobel Prize for Sharpe in 1990). Before their breakthrough, there were no asset pricing models built from first principles about the nature of tastes and investment opportunities and with clear testable predictions about risk and return. Four decades later, the CAPM is still widely used in applications, such as estimating the cost of equity capital for firms and evaluating the performance of managed portfolios.

The attraction of the CAPM is its powerfully simple logic and intuitively pleasing predictions about how to measure risk and about the relation between expected return and risk. Unfortunately, perhaps because of its simplicity, the empirical record of the model is poor - poor enough to invalidate the way it is used in applications. The model's empirical problems may reflect true failings. But they may also be due to shortcomings of the empirical tests, most notably, poor proxies for the market portfolio of invested wealth, which plays a central role in the model's predictions.

2.2.3 Return and Risk Theory

It appears to be the conventional wisdom that non-interest income is more stable than interest income and that fee-based activities reduce bank risk via diversification. The combination of banking, insurance and securities activities may lead to a more stable profit stream, since the revenues stemming from different products in a conglomerate organization are usually imperfectly correlated.

While banks' net interest margins are highly dependent on interest-rate movements and economic cycles, fee income provides diversification and greater stability for bank profits. If that is correct, it then follows that mixing interest and non-interest income will reduce the volatility of earnings. For example, the Chairman of Firstar Corporation, Roger Fitzsimmons, observed that '… there is a stability to [fee] income" and Richard Bone, a banking analyst, observed that 'banks that have strong fee-based business and that do not have major commitment to the loan sector can weather the storm much better than those banks that are building a loan portfolio'.

2.2.4 Modern Portfolio Theory

The Modern Portfolio Theory was founded by Markowitz in 1952. The author proposed that majority of investors are usually cautious with their investments and so they take the smallest possible risk to get a highest possible return, optimizing return on the risk ratio. This theory emphasizes that investors should not base their judgments by only looking at the expected risk and return of an individual stock. It support investment in various stocks for benefits of diversifications and decrease in the volatility of the entire portfolio (Markowitz, 1959). O'Neill (2000) argues that the Modern Portfolio theory presents investors with two aspects. One aspect is that

history might be repeated, implying the employ of past data in investment decision making. The second aspect is that not all assets fluctuate. The investors should, therefore, stop unity-grouping of assets and assumptions that they portray similar characteristics and so expectations.

Among the importance of MPT is that it reduces volatility in the portfolio of particular stocks. Till the inception of MPT, the investors were not able to link stock portfolio to the associated risks. Portfolios were randomly initiated. Hagstrom (2001) asserts that before MPT, suppose the investor expected an increase in the price of a stock, it was added to the portfolio without further thinking. Markowitz (1959) developed the precise procedure that would give different theoretical best portfolios. The theory is essential in this study as it seeks to guide the researcher on optimization of the correlation between various risks and performance by composing portfolios of assets dictated by their individual returns, risks, and covariance or relationships with other assets. MPT develops a framework where, any anticipated return has different expected outcomes. The theory, therefore, guides the investor on ruling on investment portfolios.

2.3 Determinants of Financial Performance of Commercial Banks

According to Husni (2011) the determinants of banks profitability are normally consisting of factors that are within and without the control of commercial banks. They are the factors which affect the revenue and the cost of the banks. Some studies classified them into two categories namely the financial statement variables and non-financial variables. The financial statement variables include factors that are directly related to the bank's balance sheet and income statement. Whiles, the non-financial

statement variables include factors like the number of branches of a particular bank, location and size of the bank Haron and Sudin (2004).

2.3.1 Income

Rasiah (2010) presented that banks generate income mostly on their assets and the assets could be termed as income and non-income generating. With regards to commercial banks income Rasiah (2010) classified it into two, namely interest and non-interest income. The interest income consist of rates charge on loans, overdraft and trade finance which the banks offers to customers. Whereas, the non-interest income is consisting of fees, commissions, brokerage charges and returns on investments in subsidiaries and securities.

According to Vong et al (2009), the major source of banks revenue is interest income. It contributes about 80% of commercial banks earnings. The other source of banks revenue includes dividends and gains from dealing in the securities market. There could be also some minor sources of income for instance earnings from trust activities and service charges on deposit accounts Vong et al (2009).

2.3.2 Loan quality

One of the major roles of banks is to offer loans to borrowers, and loans serve as one of the ultimate source of earnings for commercial banks. In other words loans represent one of the highest yielding assets on banks' balances sheet. It is obvious that the more banks offer loans the more it do generate revenue and more profit Abreu & Mendes (2000). But then banks have to be courteous in offering more loans because

as they offer more loans to customers they expose themselves to liquidity and default risks which impacts negatively on banks' profits and survival; Rasiah (2010).

According to Vong et al (2009) asset quality, as measured by the loan-loss provisions, negatively impacts on the performance of banks. With regards to the loan to total assets (LOTA), Vong et al (2009) findings revealed that instead of positively affecting profitability, it rather decrease profitability and according to these authors, result was in confirmation with the initial finding of Vong (2005). According to them the reason is that it is due to stiff competition in the credit market and interbank placement of idle funds in foreign countries. Their finding was also in line with the citation they made on the observations of Bashir and Hassan (2003) and Staikouras and Wood (2003) which reveals that a higher loan ratio actually impacts negatively on profits because banks that depend more on non-loan earning assets are more profitable than those that rely heavily on loans.

2.3.3 Deposits

Banks are said to be heavily dependent on the funds mainly provided by the public as deposits to finance the loans being offered to the customers. There is a general notion that deposits are the cheapest sources of funds for banks and so to this extent deposits have positive impact on banks profitability if the demand for bank loans is very high.

The more deposits commercial bank is able accumulate the greater is its capacity to offer more loans and make profits (Devinaga, 2010). However, one should be aware that if banks loans are not high in demand, having more deposits could decrease earnings and may result in low profit for the banks. This is because deposits like

fixed, time or term deposits attract high interest from the banks to the depositors. Investigation done by Husni (2011) on the determinants commercial banks performance disclosed that there is significant positive relationship between ROA and total liability to total Assets.

2.3.4 Capital ratio

Capital structure which includes shareholders' funds, reserves and retained profit affect the profitability of commercial banks because of its effect on leverage and risk. Commercial banks assets could be also financed by either capital or debt. But debt financing could be very risky as compared to capital financing with regards to credits and liquidity risks with which commercial banks are expose to.

Sufian et al (2008) argued that banks in developing countries needs a strong capital structure, because it provides them strength to withstand financial crises and offers depositors a better safety net in times of bankruptcy and distress macroeconomic conditions. And according to Molyneux (1992) banks with high level of equity can reduce their cost of capital and that could impact positively on profitability. Both Basel II and III accord admits that most frequent bank insolvencies are mostly coursed by credit losses and for this reason it is prudent for commercial banks to have higher quality of capital in order to be able to absorb more loss hence to better withstand stress periods. Berger (1995) also asserted that lower level of capital put the banks into risky position and impact negatively the bank's profitability.

2.3.5 Liquidity ratio

According to Rasiah (2010) commercial banks are required by regulators to hold a certain level of liquidity assets. And the reason behind this regulation is to make sure that the commercial banks always possess enough liquidity in order to be able to deal with bank runs. He further argue that a bank assume the status of highly liquid only if it has been able to accumulate enough cash and have in possession other liquid assets as well as having the ability to raise funds quickly from other sources to be able to meet its payment obligation and other financial commitments on time. He claims that for instance, in a situation where a commercial bank is faced with the problem of bank run, the bank may encounter liquidity problem. In such a situation the bank might be compelled to raise additional liquid funds by borrowings or selling off some of their liquid assets and it is well known that short-term borrowings are usually costive.

In addition, the situation where by the bank rush to sell off the liquid assets creates an impression in the minds of investors that the bank is trying to dispose of bad assets and for this reason these liquid assets normally attracts lower prices from investors and as a result there could be loss of income from the sale of liquid assets. For this reason the Basel III accord introduced the liquidity coverage ratio (LCR) with which banks are required to have enough high quality liquid assets to be able deal with stress funding situations (Basel Committee's response to the Financial Crises 2010).

2.3.6 Interest rate

Interest rates have been captured in most studies as profitability determinant of commercial banks because net interest income which results from the deference between interest income and interest expenses has enormous impact on banks

profitability (Mendes 2003). According to Sudin (2004) interest rates are external variables and changes in interest rates are mostly caused by government economic policies, supply and demand market conditions. Moreover, the impact of interest rate changes on the commercial banks profitability depend on the extent and speed at which the change have on short and long term period of banks portfolio. And also the speed and flexibility with which the bank can amend its revenue sources and cost of funds to match up to the change. In addition, it is also about the proportionality of the bank's assets and liabilities that are long period rather than short period.

According to Devinaga & Rasiah (2010) commercial banks normally alter the rate of return on their assets to offset any differences caused by interest rates fluctuations resulting from economic policies. This is because most of the commercial banks assets for instance short term loans have short maturity and the rates on short term loans are normally flexible and because of that it easy for banks to change the rate of return to suit the changes with the interest rate. Interest rate fluctuations does affect the long term maturity assets of the commercial banks as well as profitability with a view that whenever the general market interest rates falls the market value of longer assets with fixed contractual terms will increase. In this case the banks can sell some of these assets at a higher price and the short period these sales would increase the bank's profitability.

2.3.7 Non-interest income

Non-interest income represents other sources besides earrings from loans of the commercial banks. This type of sources of income may include fees earned from offering unit trust services, service charge on deposit account, standard fees and charges for other bank services.

Gischer & Juttner (2001) stated that the traditional commercial bank business with regards to financial intermediation has gradually been changed towards the provision of other financial services as result of on-going financial globalization and liberalization and because of that commercial banks are able to increase their income and profit. This seems to be supported by the empirical findings of Karkrah & Ameyaw (2010) which revealed that non-interest income is an important driver of commercial banks profitability. The negative relationship exhibited by their observation is attributed to the fact that the non-income generating services are more prone to intense competition than the traditional income activities of the banks.

2.4 Empirical Literature Review

Several empirical studies have indicated substantial benefits from diversification into non-bank activities, Eisemann (1976), Brewer (1989) and others. More recently, Gallo, Apilado & Kolari (1996) found that a high proportion of mutual fund assets managed relative to total assets of bank holding companies over the period 1987-94 was associated with substantially increased profitability for bank holding companies (Bank holding companies) and also with risk reduction. Canals (1993) concluded that the increased revenues obtained from new business units have significantly contributed to improving bank performance in recent years. There are also studies which find that fee-based income stabilizes profitability.

Saunders and Walters (1994) found that the expansion of banks' activities reduces risk, with the main risk-reduction gains arising from insurance rather than securities activities. Proponents of this view point out that those studies which found risk-reduction benefits from asset diversification generally report their findings in terms of

potential, not actual realizations. Heggestad (1972) examined the riskiness of various industries between 1953 and 1967. He measured riskiness by the coefficient of variation of return on equity for 13 different industries. In addition, Heggestad correlated industry earnings with returns in banking. He discovered that commercial banking was one of the least risky activities but also found that industries such as leasing, insurance, or real estate offer risk-reducing diversification potential given their negative correlation with banking.

Also, interestingly, most of these authors tend to suggest that a modest amount of fee-earning activity captures all the potential for risk reduction. For example, Boyd, Hanweck & Pithyachariyakul (1980) measured the correlation between accounting rates of return of bank and non-bank affiliates of Bank holding companies between 1971 and 1977 and concluded that the potential for risk reduction was exhausted at relatively low levels of non-bank activities. Mester (1992) found that mixing traditional banking activities of originating and monitoring loans with non-traditional activities of loan selling and buying products leads to diseconomies of scope and some economies of scale. This conventional wisdom may however be rooted in the past behavior of non-interest income.

According to Boyd & Graham (1986), expansion by Bank holding companies into non-bank activities tended to increase the risk of failure. Their results indicate, however, that when Bank holding companies are more stringently regulated, the positive association between non-bank activity and risk may disappear. Sinkey & Nash (1993) found that credit card lending specialization (that activity is often securitized in the United States and thus generates fee income) gives higher and more

volatile returns than those achieved by banks with 'conventional' product mixes. Demsetz & Strahan (1995) found that, although Bank holding companies tend to become more diversified as they grow larger, this diversification does not necessarily translate into risk reduction because these firms also tend to shift into riskier activities and hold less equity. In other words, the risk-reducing potential of diversification at large Bank holding companies is offset by their lower capital ratios, larger commercial and industrial loan portfolios, and greater use of derivatives. Indicating that it is easier for 'fee-based customers' to move, Roland (1997) found that high returns from fee-based activities were less persistent than those from lending and deposit-taking. Most recently, De Young & Roland (1999) found that as banks move towards fee-earning activities, revenue volatility increases, as do both total leverage and earnings. Thygerson (1995), also argued that noninterest income is less susceptible to economic recession which may lead to loan delinquencies and losses, its then to offset loss brought by interest income.

Kwan (1997) studied the implications of securities activities on bank safety and soundness. He examined the returns on securities activities conducted by Section 20 subsidiaries – subsidiaries that were authorized by the Federal Reserve Bank to conduct bank-ineligible securities activities and their relationship with the returns on banking activities. He found that securities subsidiaries tend to be riskier but not necessary more profitable than their bank affiliates. For securities subsidiaries that are primary dealers of government securities, their higher riskiness partially comes from their higher leverage, whereas for those that are not primary dealers, despite having lower leverage, they tend to be riskier than their bank affiliates because of their aggressive trading behavior. Nevertheless, in this study, securities subsidiaries appear

to provide diversification benefits to bank holding companies. Kwast (1989) found that both the mean and standard deviation of securities activities' returns are greater than those of non-securities activities. Some potential for diversification gains is found, although this appears to be quite limited.

A related study is that of Eisenbeis, Harris and Lakonishok (1984), which examined the effects of one-bank holding company formations on bank stock returns. They found significant positive abnormal returns to the stock of banking firms announcing the formation of one-Bank holding companies between 1968 and 1970, a brief period during which one-Bank holding companies were permitted to engage in a wide variety of non-banking activities. The authors found no abnormal returns to announcements of one-BHC formations after 1970, when regulation limited the scope of these activities.

A publication by Aggeler & Feldman (1998) show that while net interest income of the US banks rose by 12% over the period 1992-97, the biggest gain in bank earnings came from non-interest income. Non-interest income grew by 34% in that period – nearly three times as fast as interest income. Also, the most important difference in profitability between large banks (banks with $1 billion or more in total assets) and small banks concerns the source of income. Non-interest income made up an average of 27% of total income in the large banks between 1992 and 1997, compared with 12% for smaller banks. Since 1992, non-interest income as a per cent of assets increased by 83% in the largest banks but was essentially flat in smaller banks.

Analysis with Fitch-IBCA data using income statement data for the period from 1992 to 1999 reveals that net interest margins have continued to decline in the majority of EU countries. With the prominent exception of Germany profitability before provisions increased in the period 1996-99 compared with the period 1992-95, as the fall of net interest income was more than offset by lower costs and higher non-interest income. Germany also diverges somewhat from the overall European trend. In the German case there has been little increase in non-interest income as a share of bank assets.

Saunders & Walter (1994), for example, review 18 studies that examine whether nonbank activities reduce bank holding company risk, and conclude that six answer yes, six answer no, and three provide mixed results. This section quickly summarizes the existing literature and contrasts the approach used in the current study. Beginning with the counter actual exercises, Boyd and Graham (1988) and Boyd, Graham, and Hewitt (1993) simulate mergers between bank holding companies and nonbank financial firms and conclude that mergers between bank holding companies and life insurance firms would likely reduce the risk of bankruptcy. Rose (1989) compares financial and nonfinancial firms from 1966 to 1985 and finds that the observed cash-flow correlation between banking and financial service lines was small and positive, implying some diversification benefits. Saunders & Walter (1994) perform a simulation exercise and conclude that there are potential gains in the reduction of risk from bank expansion into new activities. They find that property and casualty insurance is a particularly attractive area for money center bank expansion. More recently, Lown et al. (2000) conclude that life insurance companies are the merger candidates with the biggest potential to reduce risk.

The second approach examines actual return and volatility data related to a wide range of banking activities. Rosen et al. (1989) focus on 319 banks involved in real estate activities from 1980 to 1985 and conclude that shifts toward high levels of real estate investment will likely increase risk. Templeton and Severiens (1992) examine market data for 54 bank holding companies from 1979 to 1986 and conclude that diversification (measured as theshare of market value not attributed to bank assets) is associated with lower variance of shareholder returns. This suggests some diversification benefits, although their measure of diversification is a rough proxy at best. Kwast (1989) finds limited diversification benefits from expanded bank

Similarly, Kwan (1998) reports that bank Section 20 subsidiaries typically posted more volatile accounting returns, although not necessarily higher returns. DeYoung & Roland (2001) examines the link between bank profitability, volatility, and different revenue shares for 472 large commercial banks from 1988 to 1995. They conclude that increased fee-based activities (revenue from all sources except loans, investment, deposit, and trading activities) increase the volatility of bank revenue and bank earnings, and are also positively linked with the degree of total leverage taken together; there is little evidence of large diversification benefits from these papers.

Acharya, Hasan, and Saunders (2002) use bank-level data for Italian banks from 1993 to 1999 and conclude that diversification of bank assets (within the loan portfolio) does not typically improve performance or reduce risk. The final set of papers uses market data to evaluate potential diversification benefits; some examine actual returns and others use simulation methods to estimate the implied volatility of potential bank

expansion. Santomero and Chung (1992) use option-pricing techniques to simulate the volatility of asset returns from combinations of 123 bank holding companies and 62 nonbank financial firms and conclude that bank expansion into nonbanking businesses reduces risk in general. In particular, bank holding company mergers with securities and/or life insurance firms generally reduce the volatility of bank returns, while mergers with property/casualty insurance increase the risk but increase the returns even more, so that the risk of failure is not increased significantly.

Similarly, Saunders and Walter (1994) compare the market returns of banks and other financial firms and build portfolio returns from various combinations. They conclude that life and property insurance combinations offer the biggest potential to reduce systematic risk for money center banks. Houston and Ryngaert (1994) examine the market returns for a set of 153 bank mergers from 1985 to 1991 and find little evidence of excess returns as negative gains to bidders cancel out positive gains to targets. While this is not a test of diversification directly, it does provide some indirect evidence, as the institutions are unlikely to operate in the same product or geographic markets. In fact, they find that in-market mergers are better received by the market, as this offers the highest cost-saving potential.

Finally, DeLong (2001) uses a similar approach to examine the diversification question more directly. Bank mergers are decomposed into those that either diversify or focus along either geographic or activity dimensions, and the results show the largest gains for those mergers that increase focus both in terms of geographic location and activity. In particular, the primary conclusion is that "diversifying mergers do not create value. Again, this is not a direct test of the market's reaction to

increases in non-traditional activities, but it does suggest that diversification gains are not expected for typical bank expansions via mergers.

2.5 Conceptual Framework

Conceptual framework, according to researcher Saunders (2007) are structured from a set of broad ideas and theories that help a researcher to properly identify the problem they are looking at, frame their questions and find suitable literature. According to Young (2009), conceptual framework is a diagrammatical representation that shows the relationship between dependent variable and independent variables. In this study, the conceptual framework will look at the influence of trade finance on the performance of commercial banks in Kenya. The independent variable is trade finance while the dependent variable is the financial performance as measured by ROA.

Figure 2.1: Conceptual framework

Independent variable   **Dependent variable**
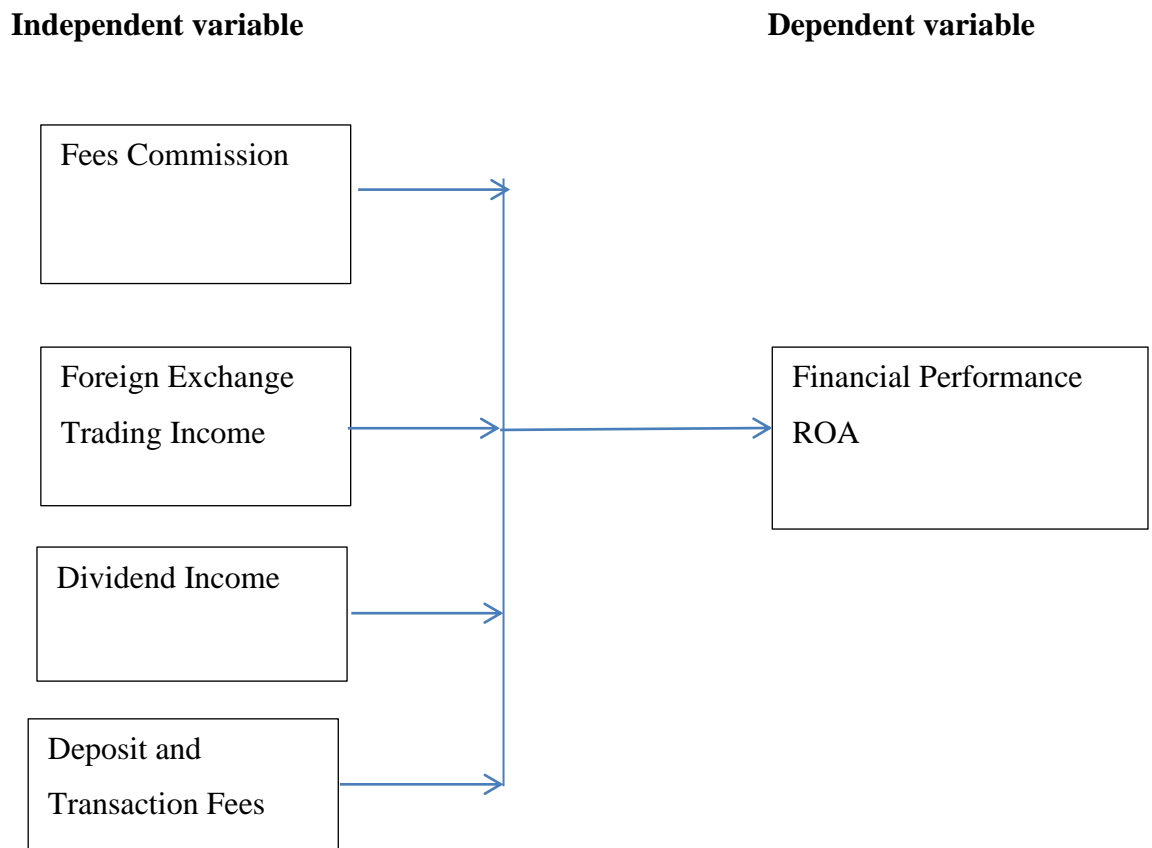
2.6 Summary of literature Review

Despite the various literature review carried they is no clear cut relationship to the impact of trade finance income with the financial performance of commercial bank, the empirical review carried out show conflicting result in such in different country similar research has been carried out. This research will add to the existing literature and try to relate this with other countries.

The review of literature clearly found a research gap in Kenya as most of the studies done in the area had focused on different sectors of the economy such as aviation, commercial banks and private equity firms. This study will narrow the gap by establishing the effect of trade finance on the macroeconomic variables on the financial performance of listed companies in Kenya.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1. Introduction

This chapter covers the research design and methodology that was used in this study. It discusses the population from which the sample studied was obtained and how data was collected and how analysis was carried out.

3.2 Research Design

The study was employed a correlation design. This design enables researchers to assess the degree of relationship that exist between two or more variables by showing a cause and effect relationship and show predictions of a future event or outcome from a variable (Kombo and Tromp (2006). The justification of this design for the current is that coefficient of variation was used to give us a feel of the magnitude of the deviation relative to the means, standard deviation and coefficient of variation across the five years for the industry aggregation experiments of all commercial banks. Coefficient of variation was used to measure relative variability across sample groups of data since it's considered to be the most appropriate statistical indicator and it's not influenced by the problem of scaling data.

3.3. Population

The study sought to establish the relationship between trade finance and financial performance of commercial banks in Kenya; hence the population of interest includes commercial banks, which include 43 commercial bank and one mortgage finance bank. We will also get the industry aggregate from central bank report on bank

supervision. The period of study covered six (6) years from 2010 to 2015 both years inclusive. The choice of six years was taken to be reasonable because of average ratios shift over time (Altman 1968) and also the availability of necessary data. The research employs secondary data from Nairobi Security Exchange and Bank Supervision Reports.

3.4. Data Collection

Secondary data was used in this study. This was obtained from CBK's database on banks' financial reports such as: non-interest income include deposit and transaction fees, non-sufficient funds (NSF) fees, annual fees, monthly account service charges, inactivity fees, check and deposit slip fees, fees and commissions income on loans and advances, foreign exchange trading income, dividend income among others for the six years period (2006 – 2015). The data was supplemented with data from various government publication such as central bank publication (annual bank supervision reports) and central bank bureau of statistic data (Economic Surveys).

3.5 Data Analysis

This study will use multiple linear regression technique in data analysis. Regression is used when a researcher is interested in finding out whether an independent variable predicts a given dependent variable. In this study, the non-interest income was analyzed against financial performance of the commercial banks. This was taken as the fraction of the total earnings proportionate to the ratio of mortgage loans advanced versus total loans.

The regression model used in this study was as follows

ROA = β0 + β1*FC + β2*FX + β3*DIV + έ

ROA= Dependent Variable; Return on Assets (Net Income/Total Assets)

β0 = Constant term

β1, β2, β3 and β4 = Regression constants

FC = Fees and Commissions on Loans & Advances

FX = Foreign Exchange Trading

DIV = Dividend Income Transactions)

έ = Error term (95% confidence level).

3.6 Diagnostic Tests

The study quantifies the contribution of the non-interest income to the overall financial performance of the bank. The analysis of quantitative data was carried out using SPSS Version 20 and presented in tables, linear graphs and charts. T-tests was used to determine whether there is a significant difference in financial performance when the non-interest income is high vis a vis interest income are high and when they are low.

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION OF FINDINGS

4.1 Introduction

This chapter presents analysis and findings of the study as set out in the research objective and research methodology. The general objective of the study was to investigate the effect of trade finance practices on the financial performance of commercial banks in Kenya among 43 commercial banks in Kenya for a period of 5 years from the year 2011 to 2015. The data was gathered exclusively from the secondary source records at Central Bank of Kenya and commercial banks audited financial report.

4.2 Descriptive Statistics

Data was collected from the 42 out of 43 commercial banks in Kenya representing 97.7% of banking sector. Since inflation was the same across all banks, the variable was excluded in yearly regression model and was applied in the consolidated model of 2011-2015.In section 4.2 the study present the research finding on the descriptive statistic in the data collected.

Table 4.1: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
ROA	42	-8.420	5.84	2.6814	2.8207
FC	42	.02524	.1547	.6702	.0236
FX	42	.0010	.5680	.0633	.08674
DIV	42	.00566	.1547	.0113	.0339

Fees and Commission transactions, foreign exchange trading, dividend income transactions and financial performance measure return on Assets (ROA) were used. Their mean, maximum, minimum and standard deviation was taken in to account. From the findings, the study found that there was mean of 2.6814 for non-funded income, 0.6702 for the forward contracts, 0.0633 for cross- currency swaps and 0.0113 for options.

4.3 Correlation

Table 4.2: Correlation

	ROA	FC	FX	DIV
ROA	1			
FC	.624	1		
FX	.453	.245	1	
DIV	.489	.571	.139	1

** Correlation is significant at the 0.01 level (2-tailed).

On the correlation of the study variables, the researcher conducted a Pearson correlation. From the findings on the correlation analysis between financial performance and the other variables , the study found that there was a strong positive correlation coefficient between ROA and fees and commission transactions as shown by correlation factor of 0.624. The study also found a positive correlation between foreign exchange transactions and ROA as shown by correlation coefficient of 0.453. The study also found a positive correlation between dividend income transactions and ROA as shown by correlation coefficient of 0.489. Hence all the trade finance

variables had a position relationship with return on assets as a measure of financial performance.

4.4 Regression Analysis

In this section the study presents the research findings on the relationship between various independent variables on the regression model and financial performance.

Table 4.3: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.788[a]	0.686	0.569	2.603

a. Predictors: (Constant), FC, FX,DIV

From the table above, R is the correlation coefficient which shows the relationship between the study variables, from the findings shown in the table above there was a strong positive relationship between the study variables as shown by R 0.788 at 5% significance level. The Adjusted R squared is coefficient of determination which tells us the variation in the dependent variable due to changes in the independent variable, from the findings in the table above the value of adjusted R squared was 0.686 an indication that there was variation of 68.6% on return on assets due to changes in forward contracts, cross currency swaps and options at 95% confidence interval. This is an indication that 68% of the changes in non funded income could be accounted for by the independent variables while 32% cannot be explained by the independent variables.

Table 4.4: Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	361.69	3	89.23	14.72	.016[b]
	Residual	1457.26	207	7.36		
	Total	1818.95	210			

b. Predictors: (Constant), FC, FX,DIV

From the table above, the processed data, which is the population parameters, had a significance level of 1.6% which shows that the data is ideal for making a conclusion on the population's parameter as the value of significance (p-value) is less than 5%. The F critical at 5% level of significance, 3 d.f, 248 d.f was 14.733, since F calculated is greater than the F critical (value = 0.016), this shows that the overall model was significant.

Table 4.5: Regression Model

	Unstandardized		Standardized	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.952	.214		2.123	.000
Fees Commission(FC)	3.514	.349	4.254	1.367	.021
Foreign Exchange(FX)	5.828	.348	4.531	2.132	.017
Dividend(DIV)	9.235	.562	8.672	2.971	.035

$Y = 1.952 + 3.514 X_1 + 5.828 X_2 + 9.235 X_3$

From the regression equation above it was found that fees commissions transactions, foreign exchange trading and dividend income transactions to a constant zero, return on assets would be 1.952. A unit increase in fees and commissions transactions would lead to improvement on return on assets by 3.514 units. A unit increase in foreign

exchange transactions would lead to improvement of return on assets by 5.828 units and a unit increase in dividend income transactions would lead to improvement on return on assets 9.25 units. Overall dividend income had the greatest effect on return on assets, followed by foreign exchange then fees and commissions.

At 5% level of significance and 95% level of confidence, fee commissions transactions had a 0.021 level of significance; foreign exchange had a 0.017 level of significance dividend had a 0.035 level of significance. All the variables were significant ($p < 0.05$).

4.5 Discussions of Findings

The study found that unit increase in fees and commissions, while holding other factors constant, will lead to an increase in return on assets by 3.514 ($p = 0.021$). This is in line with Bodnar and Richard (1998) who indicated that the most frequently used method is dividend income transactions. With fees and commissions, the firm can be fully hedged. However, some risks including settlement risk that exchange rate moves in the opposite direction as either forecast, and counter party risk which the other party is unable to perform on the contract, the high cost of forward contracts will sometimes prevent firms to exercise this tool to fully hedge their exposures.

A unit increase in foreign exchange transactions, while holding other factors constant, will lead to an increase in ROA by 5.828 ($p = .017$). The study also found a unit increase in dividend, while holding other factors constant, will lead to an increase in ROA by 9.235 ($p < .0.035$).

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

From the analysis and data collected, the following discussions, conclusion and recommendations were made. The responses were based on the objectives of the study. The researcher had intended to determine the effect of trade finance on the performance of commercial banks in Kenya.

5.2 Summary

The objective of this study was to determine the effect of trade finance on the financial performance of commercial banks in Kenya. On the correlation of the study variables, the researcher conducted a Pearson correlation. From the findings on the correlation analysis between trade finance and performance, the study found that there was a strong positive correlation coefficient between trade finance and performance as shown by correlation factor of 0.624. The study also found a positive correlation between foreign exchange and performance as shown by correlation coefficient of 0.453. The study also found a positive correlation between dividend income transactions and performance as shown by correlation coefficient of 0.489. Hence all the derivatives had a strong position relationship with return on assets as a measure of financial performance of commercial banks as measured by return on assets.

There was a strong positive relationship between the study variables represented by R 0.788 at 5% significance level. The adjusted R squared was 0.759 an indication that there was variation of 68.6% on financial perfromance due to changes in fess commissions, foreign exchange and dividend income at 95% confidence interval. This

is an indication that 68% of the changes in return on assets could be accounted for by the independent variables. The F critical at 5% level of significance, 3 d.f, 207 d.f was 14.72, since F calculated is greater than the F critical (value = 0.016), this shows that the overall model was significant.

5.3 Conclusions

The findings showed that the mean of fees and commissions is relatively high as compared to other variables while foreign exchange trading had the highest standard deviation. This shows that currency swaps shows had the highest variability or high volatility (Risk) in the financial performance as measured by ROA. Dividend income had the highest correlation and was positively correlated with performance. Fees commissions and foreign exchange are also highly and positively correlated with performance.

5.4 Policy Recommendations

The study sought to determine the relationship between trade finance and performance commercial banks in Kenya. The study recommends that; trade finance practices should always be taken in to account to improve the bank's net interest income and hence overall performance of the banks.

Policy makers should undertake to understand risk affecting the foreign exchange markets among commercial banks to improve capital investments to maximize returns of the banks hence overall performance.

The study recommends that commercial banks should engage in Forex trading where the returns are highly maximized since investments in capital projects involve

huge investment capital. The banks management should put structures in place so as to enhance returns on capital and assets and in turn maximize returns to the commercial banks.

5.5 Limitations of the Study

This study was not without limitations. In attaining its objective the study was limited to 5 years period starting from year 2011 to year 2015.

The study was limited to secondary data collected from the Banks Financial reports and Central banks of Kenya. While the data was verifiable since it came from the CBK and Banks publications, it nonetheless could still be prone to shortcomings such as earnings management.

The study was limited to the effect of trade finance practices on the ROA of commercial banks in Kenya. The study was based on a five year study period from the year 2011 to 2015. A longer duration of the study will have captured periods of various economic significances such as booms and recessions. This may have probably given a longer time focus hence given a broader dimension to the problem.

5.6 Suggestions for Further Study

This study sought to determine the effect of trade finance on the financial performance of commercial banks in Kenya. A study can be done on the implications of risk management practices on non-funded income of financial institutions.

The current study targeted all the commercial banks in Kenya; a study can be done on the effect of trade finance on the financial performance of other financial institutions in Kenya. This would help compare the results.

REFERENCES

Amankwaa, A., Anku-Tsede, O. & Senyo, B. (2014). Analysis of Non-Interest Income of Commercial Banks in Ghana. *International Journal of Academic Research in Accounting, Finance and Management Sciences Vol.4, No. 4, ISSN: 2225-8329.*

Atellu, A. R., (2014). *Determinants of non-interest income in Kenyans commercial Banks.*

Almajali, Y. A., Alamro, S. H., & Al-Soub, Y. Z. (2012). *Factors Affecting the Financial Performance of Jordanian Insurance Companies Listed at Amman Stock Exchange*. Journal of Management Research

Athanasoglou, P. & Brissimis, S. & Delis, M., (2005). *Bank-specific, industry-specific and macroeconomic determinants of bank profitability.* MPRA Paper 32026.

Bodla, B. S., & Verma, R. (2007). Determinants of profitability of banks in India: A multivariate analysis. *Journal of Services Research, 6(2), 75–89.*

Bourke, P. (1989). Concentration and other determinants of bank profitability in Europe. North America and Australia. *Journal of Banking and Finance.* 13, 65-79.

Brunnermeier, M. K, & Dong, G. & Palia, D., (2015). *Banks' Non-Interest Income and Systemic Risk*. Princeton Publication.

Carton, B. (2004) *Measuring Organizational Performance: An Exploratory Study*. A Dissertation Submitted to the Graduate Faculty of The University of Georgia.

Chen, N.F., R. Roll, & S.A. Ross, (1986). *Economic forces and the stock market*, Journal of Business, 59, 383-403

Chiang, L.C., Shih-Jui, Y., & Chi-Hung, C. (2014). *Non-interest income, profitability, and risk in banking industry:* A cross-country analysis.

DeYoung, R., & Roland, K. P. (2001). *Product Mix and Earnings Volatility at Commercial Banks: Evidence from a Degree of Total Leverage Model*. Journal of Financial Intermediation.

Ebrahim, A., & Hasan, I. (2008). *The value relevance of product diversification in commercial banks.* Review of Accounting and Finance, 7(1), 24–37.

Eken, M. H. & Kale, S. (2010). *Measuring bank branch performance using Data Envelopment Analysis (DEA): The case of Turkish bank branches.* African Journal of Business Management.

Feldman R. and Schmidt J. (1999). *Noninterest Income, A Potential for Profits, Risk Reduction, and Some Exaggerated Claim.* Federal Reserve Bank of Minneapolis, Fedgazette.

Guyo, I. G., (2013). An empirical study of factors influencing financial performance of Islamic versus conventional banks in Kenya. *Unpublished MBA project, University of Nairobi.*

Hagstrom, R.G. Jr. (2001). *The Essential Buffet: Timeless Principles for the New Economy.* John Wiley & Sons, New York.

Hakim, C. (2000). *Research Design: Successful Designs for Social & Economic Research.* (2nd Ed.) London: Routledge.

Higgins, R. C. (2001). *Analysis of financial management.* New York, NY: Irwin/McGraw-Hill

Jensen, M.C., & Meckling, W.H. (1976). Theory of the firms: managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3, 881-880.

Jin G. K. & Young-Jae K. J. (2009), 'Non Interest Income and financial performance at South Korea ', *The Journal of Finance*, Vol. 39(3), July, pages 881-92.

Köhler, M., Düllmann, K., Herrmann, H. & Memmel, C. (2013). *Does non-interest income make banks more risky*? ISBN 97838 65589156.

Kothari, C.R. (2004). *Research methodology methods and techniques* (Revised 2nd edition). New Delhi, India: New Age international publishers.

Locke, S. (1987). Performance Assessment Indexes and Capital Asset Pricing Models. *Journal of Property Finance*, vol (5)3, 230-249.

Malouche, M. 2009. *Trade and Trade Finance Developments in 14 Developing Countries Post* September 2008: A World Bank Survey. World Bank

Markowitz, H.M. (1959). *Portfolio Selection: Efficient Diversification of Investment.* John Wiley & Sons, New York.

Mugenda, O.M. & Mugenda, A.G. (2003). *Research Methods, Quantitative & Qualitative Approaches,* Acts Press, Nairobi.

Ngechu. M. (2008). *Understanding the research process and methods. An introduction to research methods.* Acts Press, Nairobi.

Nguyen, T. C., Vo, D. V., & Nguyen, V. C. (2015). Risk and Income Diversification in the Vietnamese Banking System. *Journal of Applied Finance & Banking*, 5(1), 93–109.

Onuonga, S. M. (2014). The Analysis of Profitability of Kenya's Top Six Commercial Banks: Internal Factor Analysis. *American International Journal of Social Science* Vol. (3)5.

Roland, K (1997), 'Profit persistence in large US bank holding companies: an empirical investigation', *Office of the Comptroller of the Currency, Economics Paper 97-2.*

Roll, R. & S. A. Ross, (1980). An Empirical Investigation of the Arbitrage Pricing Theory. *Journal of Finance.* Vol (35), 1073-1103

Ross, S. A. (1977). The determination of financial structure: the incentive signaling approach. *Bell Journal of Economics and Management Science*, 8, 23-40.

Ross, S.A., (1976). The Arbitrage Theory of Capital Asset Pricing, *Journal of Economic Theory*, Vol (13), 341-360.

Saunders, A., Schmid, M. M. & Walter, I. (2014). *Non-Interest Income and Bank Performance: Is Banks' Increased Reliance on Non-Interest Income Bad?* Social science research network.

Silber R. and Udell R. S. (1996), *Money Banking and Financial Markets*, 11th edition, New York.

Stiroh, K. J. (2004). Do Community Banks Benefit from Diversification? *Journal of Financial Economics*, 25(2/3), 135.

Taylor, J. (2008). *Project scheduling and cost control: Planning, monitoring and controlling the baseline.* Lauderdale.

Thygerson K. J. (1995). *Management of Financial Institutions by Hardcover.* Harpercollins College .

Were, M., &, Wambua, J. (2014). What factors drive interest rate spread of commercial banks? *Empirical evidence from Kenya.* Volume 4, Issue 2.

Williams, B., (2014). The Impact of non-interest Income on Bank Risk in Australia. Social science research network.

World Bank (2014).

Wright, R. E. (2001). *Origins of Commercial Banking in America*, 1750-1800.

Young R. and Roland K. (1999). *Product mix and earnings volatility at commercial banks: evidence from a degree of leverage model.* Federal Reserve Bank of Chicago Research Department, Working Paper, pages 99-106.

Yuqi, L. (2007). *Determinants of Banks' Profitability and Its Implication on Risk Management Practices:* Panel Evidence from the UK. The University of Nottingham.

APPENDICES

APPENDIX 1: LIST OF COMMERCIAL BANKS IN KENYA

1. ABC Bank Kenya

2. Bank of Africa

3. Bank of Baroda

4. Bank of India

5. Barclays Bank Kenya

6. CFC Stanbic Holdings

7. Chase Bank Kenya

8. Citibank

9. Commercial Bank of Africa

10. Consolidated Bank of Kenya

11. Cooperative Bank of Kenya

12. Credit Bank

13. Development Bank of Kenya

14. Diamond Trust Bank

15. Dubai Bank Kenya

16. Eco bank Kenya

17. Equatorial Commercial Bank

18. Equity Bank

19. Family Bank

20. Fidelity Commercial Bank Limited

21. First Community Bank

22. Giro Commercial Bank

23. Guaranty Trust Bank Kenya

24. Guardian Bank

25. Gulf African Bank

26. Habib Bank

27. Habib Bank AG Zurich

28. Housing Finance Company of Kenya

29. I&M Bank

30. Imperial Bank Kenya

31. Jamii Bora Bank

32. Kenya Commercial Bank

33. K-Rep Bank

34. Middle East Bank Kenya

35. National Bank of Kenya

36. NIC Bank

37. Oriental Commercial Bank

38. Paramount Universal Bank

39. Prime Bank Kenya

40. Standard Chartered Kenya

41. Trans National Bank Kenya

42. United Bank for Africa

43. Victoria Commercial Bank

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