THE EFFECT OF FOREIGN EXCHANGE RISK MANAGEMENT PRACTICES ON FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN KENYA

BY

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D63/73134/2014

A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF A MASTER OF SCIENCE IN FINANCE DEGREE, SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI

NOVEMBER 2015

DECLARATION

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

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

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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.

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.

TABLE OF CONTENT

LIST OF TABLES

ABBREVIATIONS AND ACRONYMS

CBK	Central Bank of Kenya
DCF	Discounted Cash Flow
MFBs	Microfinance Banks
MFI’s	Microfinance Institutions
PPP	Purchasing Power Parity
ROA	Return on Assets
ROE	Return on Equity
USD	United States Dollar
FOREX	Foreign Exchange

ABSTRACT

The objectives of this study were to determine the effect of foreign exchange risk 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 Forward Contracts is relatively high as compared to other variables while Cross – Currency Swaps had the highest standard deviation. Options had the highest positive correlation. Cross Currency Swaps and forward contracts also had high and positive correlation to the return. From the regression equation the study concluded that a unit increase in forward contracts, cross- currency swaps and options would lead to improvement on return on assets. Therefore; the study recommends that; foreign exchange risk management should always be taken in to account to improve the banks return on assets and hence the performance of the banks. Policy makers should also undertake to understand risks affecting the foreign exchange markets in order to maximize returns.

CHAPTER ONE
INTRODUCTION

1.1 Background of the Study

The exposure of a company's financial power to the potential effect of movements in forex rates is known as foreign exchange risk. The risk of adverse volatility in forex rates may result in a decline in measures of financial strength. Companies dealing in various currencies face a risk on account of unanticipated changes in forex rates, computed in terms of exposures. Exposure is defined as a projected or contingent cash flow whose degree is not certain at the moment and is contingent on the value of the foreign exchange rates. Kothari (2011), states that the process of identifying risks faced by the firm and implementing the process of protection from these risks by financial or operational hedging is defined as exchange risk management.

Forex rate risk practice is an essential part in every banks decision about foreign currency exposure (Allayannis 2001). Currency risk hedging strategies entail reducing or eliminating these risks, and require understanding of both the ways that the exchange rate risk could affect the operations of firms and techniques to deal with risk implications that arise consequently (Barton, Shenkir, and Walker, 2002). Selecting hedging strategies is often a daunting task because it is complicated accurately measure current risk exposure and decide on the suitable degree of risk exposure that should be managed. The need for management of currency risk started to arise after the break down of the Bretton Woods system and the end of the U.S. dollar peg to gold in 1973 (Papaioannou, 2001).

The issue of currency risk practices for financial and non-financial firms is independent from their core business and is usually dealt by their corporate treasuries. Most multinational firms have also risk committees to oversee the treasury’s strategy in managing the exchange rate risk (Lam, 2003). This shows the importance that firms put on risk management issues and techniques. Any entity involved in foreign exchange dealings is exposed to three foreign exchange risks namely Translation exposure, Transaction exposure and Economic exposure. The concept of translation exposure arises from the need to translate accounts that are denominated in foreign currencies into the local currency. Forex risk is that in which the value of a company's assets, liabilities or revenue will change as a result of exchange rate changes which occurs firm holds these assets, liabilities, or expects income denominated in foreign currency.

Transaction exposure occurs when one currency must be exchanged for another, and a change in the foreign exchange rates occurs between the time a transaction is executed and the time it settled. Economic exposure is the degree to which a firm‘s present value of future cash flows are influenced by exchange rate fluctuations (Shapiro, 2002). Exchange rate volatility creates a risky business environment in which there are uncertainties about future revenues and expenses. These are particularly aggravated in countries where hedging instruments against forex risk are not developed which is the case in many developing countries including Kenya (World Bank Report, 2006).

1.1.1 Foreign Exchange Risk Management Practices

Foreign exchange risk refers to the likelihood that unexpected change in exchange rates will alter the home currency value if foreign currency cash payment and receipts are expected from a foreign source. For instance, a sudden depreciation of the Kenyan Shillings against the USD can increase the cost of servicing an obligation especially for business whose input resources are imported. Taggert and McDermott (2000) assert that forex related firms are subject to foreign exchange risk on the payables and receipts in foreign currencies. They define foreign exchange risk practices as a program of assessment (identification and quantification) and counterstrategies to mitigate exchange rate risk and save firm`s economic value. Kirt further adds foreign exchange risk is a financial risk to manage value creation and loss prevention in a firm by internal and external financial tools. According to Featherson, Littlefield and Mwangi (2006), forex risk arises when fluctuation in the relative values of currencies affects the competitive position or viability of an organization. If financials of a firms project are exposed to forex risk, then they depend on unanticipated exchange rates changes. Generally, companies are exposed to, Transaction exposure, Economic exposure and Translation exposure (El-Masry, 2006; Salifu et al, 2007).

Transaction risk occurs where the value of the existing obligations are worsened by volatility in the forex rates. Transactional exposure arises from future cash flows and where the value of existing obligations are affected by changes in forex rates. Economic risk relates to adverse impact on entity income for both domestic and foreign operations because of sharp, unexpected change in exchange rate. Translation exposure occurs through currency mismatch and it is related to assets or income derived from offshore enterprise (Madura, 2003).

Forex risk comes about as a disparity between the assets held by a bank and the loans that fund its financial position. An unexpected depreciation of the local currency against the USD can dramatically increase the cost of servicing debt relative to revenues. The creditworthiness of the bank (hence the ability to raise new funds) can also be negatively affected and even generate a negative net revenue which are serious for the long-term financial stability of the bank (Moles, 2002). Banks are more vulnerable to forex risk in developing countries where the risk of currency depreciation is high. Forex risk practices differ among banks depending on aspects such as the company's size, the nature and complexity of its activities. However, a broad forex risk plan should deal with at least good management information systems, contingency planning, and other managerial and analytical techniques.

1.1.1.1 Forward Contracts

Currency forwards are defined as a contract for buying currency for future delivery at a price set today. Forex forwards help investors manage the inherent risk in currency markets by predetermining the rate and date on which they will purchase or sell a given amount of foreign exchange. The portfolio is thus protected against a possible depreciation and there are no additional costs from doing a spot trade. Deliverable forwards (outright forwards) are contracts that are settled with the physical delivery of the foreign currency while non-deliverable forwards are settled by cash for the gain or loss on the value of the contract. Bodnar and Gebhardt (1998) indicate that the most frequently used method is forward contracts. Forwards fully hedge a firm's exposure. Conversely, some risks including settlement risk that exchange rate moves in the reverse as forecast, and counterparty risk where the other party is unable to perform on the contract, the high cost of forwards will sometimes prevent firms from exercising this tool to fully hedge their exposures.

1.1.1.2 Cross-Currency Swaps

Sun et al (1993) say that currency swap is where counterparties exchange equal initial principal of two different currencies by spot rate, though a costly third party offsets default risk. In general terms, a currency swap is when two parties agree to exchange payments denominated in one currency for payments denominated in another. The aim is to eliminate cash flows scheduled in an undesired currency with flows in a desired currency to raise capital in currencies of no significant revenues. Having raised the capital however, the company may wish to swap its repayment into a currency in which it has future operating revenues.

1.1.1.3 Options

Currency option is a derivative where the owner has the right but not the obligation to exchange money denominated in one currency into another currency at a pre-agreed exchange rate on a specified date. An option is a unique financial instrument or contract that confers upon the holder or the buyer of the option, the right, but not the obligation, to buy or sell an underlying asset, at a specified price, on or up to a specified date. This is to say that the option buyer can simply let the right lapse by not exercising it. On the other hand, if the option buyer chooses to exercise the right, the seller of the option has an obligation to perform the contract according to the agreed terms. The asset underlying a currency option can be a spot currency or a futures contract on a currency. An option on a spot currency gives the option buyer the right to buy or sell the said currency against another currency, while an option on a currency futures contract gives the option buyer the right to establish a long or short position in the relevant currency futures contract. Options on spot currencies are commonly available in the interbank over-the-counter markets, while those on currency futures are traded on exchanges (Bodnar & Richard, 1998). It thus avoids potential exposure as counterparties have free and open choice to trade currency amount at specified rate before expiry date.

1.1.2 Financial Performance of Commercial Banks

Performance is a measure of how well a firm can employ its principal mode of business and generate revenues. The expression is used as a general measure of a firm‘s overall financial health over a given period. In determining the performance of firms, there has been several valuation techniques used such Return on Equity (ROE), Return on Assets (ROA), Discounted Cash Flow (DCF) and Internal Rate of Return but ROE is the most widely used. ROE focuses on returns to equity holders but if investors are not on the watch, companies can resort to synthetically maintain a strong ROE for a while and hide the deteriorating performance. Increase in debt leverage and stock buy backs funded through accumulated cash can help maintain a company‘s ROE even though operational profitability may be low. The impact of letting ROE deteriorate is usually instant since it affects the company‘s stock performance or value.

Return on Assets ratio measures the efficiency in which a company is managing its investment in assets and using them to generate profit. It is therefore a better financial performance indicator than income statement profitability measures like return on sales. (Brealey et.al, 2008). This key ratio is known as an indicator of the company's long term solvency position and also indicator of the financial risk position of the company. It's obtained by dividing Net income over total assets. The return on assets ratio is related to the asset management category of financial ratios.

1.1.3 Foreign Exchange Risk Management Practices and Financial Performance

Growing literature by various researchers linking foreign exchange risk practices to company performance results in an equally growing diversity of result due to the differences in the theoretical perspectives applied, selected research methodologies, measurement of performance and conflicting views on general employee involvement in decision making and, in part, to the contextual nature of the individual firm (Carter et al, 2003). Studies based on models of employee involvement; incorporating different theoretical perspectives and various employee attributes, provide inconclusive results, suggesting that Foreign exchange risk practices has an indirect effect on company performance (Adler and Dumas, 2010).

Previous research studies (Lee, 2010) have shown that firms that have robust currency risk management frameworks have higher firm performance. The main characteristics of good risk practices identified in these studies include; leadership of the risk team, adequate compensation of the risk team and compliance with laws & best practice. There is a view that companies with risk management departments are better corporate performers. Others (Ankrom, 2007) have provided a link between foreign exchange risk practices and firm performance with very little conclusive results. In recent times on the contrary, emphasis has geared towards general employee training in currency risk management. Dufey (2005) contend that risk departments without well trained personnel to manage the departments are less effective and the company will be more prone to such currency risks.

The use of foreign exchange management strategies results in reduced foreign exchange exposure hence minimal losses. According to Carter et al (2003) changes in exchange rate can influence a firm’s current and future expected cash flows. The direction and magnitude of changes in exchange rate on firms value are a function of a firm`s corporate hedging policy which indicates whether the firm utilizes operational hedges and financial hedges to manage currency exposure and the structure of its foreign currency cash flows. Stacy and Williamson (2010) examine risk practices and performance in a sample of firms in 14 companies listed on the Johannesburg stock exchange. They find that better risk practices are associated with better performance in the form of ROA.

1.1.4 Commercial Banks in Kenya

The central Bank of Kenya defines a commercial bank as a company which carries on, or proposes to carry on, banking business in Kenya and includes the Co-operative Bank of Kenya Limited but does not include the Central Bank of Kenya (CBK). Banking business involves accepting deposits, giving credit, money remittances and any other financial services. In Kenya, the banking sector plays a dominant role in the financial sector, particularly with respect to mobilization of savings and provision of credit. As per Bank Supervision Annual Report (2014) the banking sector comprised of the Central Bank of Kenya, as the regulatory authority, 44 banking institutions (43 commercial banks and 1 mortgage finance company), 8 representative offices of foreign banks, 9 Microfinance Banks (MFBs). Out of the 44 banking institutions, 30 were locally owned banks comprised 3 with public shareholding and 27 privately owned while 14 were foreign owned. Of the 14 foreign owned banking institutions, 10 are locally incorporated subsidiaries of foreign banks and 4 are branches of foreign incorporated banks. Further, 10 of the 44 banking institutions are listed on the Nairobi Securities Exchange.

Kenyan commercial banks are classified into three peer groups using a weighted composite index that comprises net assets, customer deposits, capital and reserves, number of deposit accounts and number of loan accounts. A bank with a weighted composite index of 5 per cent and above is classified as a large bank. A medium bank has a weighted composite index of between 1 per cent and 5 per cent while a small bank has a weighted composite index of less than 1 per cent. The combined market share of banks in large peer group is 49.9 per cent, banks in medium peer group hold a combined market share from 37.95 per cent and the market share of banks in small peer group is 8.4 per cent (Bank Supervision Annual Report 2014). The performance of commercial banks in Kenya is highly financial in nature. It is hence affected through low net cash flows, low sales turnover and uncertain profits due to financial exchange rate volatility in the era of globalization. The Kenyan shilling has depreciated against the US Dollar. While exchange rate fluctuation is a recurrent event, it is a challenge to acknowledge foreign exchange risk after realizing financial distress by dismal profits or loss performance.

1.2 Research Problem

Financial disasters in organizations in the recent past point out the need for risk management. Major failures in organizations including banks have occurred due to unidentified or unmitigated risks within the institutions. (Li, 2003) observes that the economic environment in which a firm operates is highly volatile and unpredictable. Increased volatility, greater dependence and new risks have made the structure of risk exposure of commercial banks and other financial institutions more complex. The volatility of foreign exchange rates and interest rates have been increasing significantly thus the necessity to have action plans in place to hedge against risk. It is however, of importance to notice that there is no “off-the-shelf” solution to all market players. Risk management has remained a controversial subject with some scholars arguing that it is not justified. Other scholars have argued that it is worthy practicing, (Leibowitz, 1996 and (Crabb, 2003). Glaum (2000) found discrepancies between academic literature and corporate risk management practices and contends that there are no clear-cut answers as to how corporate risk management should be organized.

The problems in the Kenyan banking industry emanates from their nature of target customers and the informal system of operations. The rapid increase in private sector makes foreign currency risk practices an important topic for commercial banks. A very large percentage of cross-border, fixed-income investments are denominated in foreign currencies (meaning currencies other than the currencies in which the banks are operating), leaving banks with significant foreign exchange exposure. During the recent American financial crisis, some banks that depend on foreign currency-denominated debt for their business suffered hefty forex losses that threatened their overall viability (Littlefield and Kneiding, 2009). Many of the currency risk hedging tools, such as forwards, cross currency swaps and options contracts are either not available in emerging markets or the markets they are traded in are illiquid and not efficient markets. This has forced treasury dealers to find suitable ways to manage foreign currency exposures.

Studies done locally mainly focused on risk management practices in foreign owned banks (Omagwa, 2005), foreign exchange risk management practices in Forex Bureaus in Kenya, (Ubindi, 2006) and insurers in Kenya (Salesio, 2006). These previous studies have not related these foreign exchange risk practices to Kenyan banks' performance. The fluctuations in exchange rates tend to pose significant foreign exchange risk with increased transactions using foreign currency.

Thus, the researcher sought to close the knowledge gap by seeking responses to the following question; what are the effects of foreign exchange risk management practices on the performance of commercial banks in Kenya?

1.3 Objective of the Study

To investigate the effect of foreign exchange risk management practices on financial performance of commercial banks in Kenya.

1.4 Value of the Study

Financial Institutions will find the study useful in the prediction of exchange rates movements. To the academic world this study will be important to institutions of higher learning and research in developing models to predict the forex rate movements since exchange rates play a vital role in a country's level of trade, which is critical to most free market economy in the world.

The information that will be obtained will be useful to the Government and research institutions that may want to advance the knowledge and literature on intellectual capital. Information on effects of foreign exchange risk practices on foreign exchange exposure by commercial banks will improve the existing academic body of knowledge as reference material and stimulate further research in the area. Exploration into an area of study helps scholars better understand the topic and answers questions related to that area of research.

Given the exposure of African economies to external shocks, exchange rate play a critical role to policy makers and the traders. Exchange rates impact the investor’s real return on a portfolio and to the public to enable them do their personal financial planning.

CHAPTER TWO

LITRATURE REVIEW

2.1 Introduction

This study reviews the effects of foreign exchange risk practices and the techniques used to manage foreign exchange risks by other researchers. The study also focuses on review of empirical studies, theoretical framework and finally a summary of the literature review.

2.2 Theoretical Review

There are various theories developed to explain the movement in exchange rates. Some of these theories suggest there is no need to manage risks since market dynamics affecting exchange rates are evened out in some form or the other.

2.2.1 Interest Rate Parity Theory

The Interest Rate Parity (IRP) is a frequently employed technique in making exchange rates forecasts. Projections are made by recording the spot exchange rates and the interest rates in the domestic and foreign countries respectively. This theory holds that the interest rate differential between two countries is equivalent to the difference between the forward exchange rate and the spot exchange rate. Interest rate parity contributes crucial role in foreign exchange markets, connecting interest rates, spot exchange rates and foreign exchange rates (Roll and Yan, 2000).

The economic theory according to Huang (2009) shows that relating the differences in interest rates among countries to successive exchange rate changes seems to have broken down. Meese and Rogoff (1983) have demonstrated that other economic theories like the purchasing power parity also does not add much to random walk forecasts of exchange rates at horizons of a year or less. These studies have shown that uncovered Interest Rate Parity has been rejected strongly. The studies that followed have also confirmed these results. There is also a theoretical literature which attempts to determine if the failure of uncovered interest parity is due to risk aversion or market segmentation rather than market inefficiency. However, Roll and Yan (2000) suggest that forward exchange rates are unbiased forecasters of subsequent spots and there is really no dilemma with forward premium.

2.2.2 Purchasing Power Parity

Purchasing power parity involves a relationship between a country's forex rate and the level of its national price level relative to that of a foreign country. Absolute Purchasing Power Parity states that the purchasing power of a unit of domestic currency is exactly the same in the foreign economy, once it is converted into foreign currency at the absolute PPP exchange rate. Relative Purchasing power parity implies that changes in national price levels are offset by equal changes in the nominal exchange rates between the relevant currencies. This theory states that under a floating exchange regime, a relative change in purchasing power parity for any pair of currency calculated as a ratio of price of traded goods would be approximately equal to a change in the equilibrium rate of exchange between the two currencies.

In Purchasing Power Parity, a rise in the price level of a country will cause depreciation of its exchange rate relative to other countries, thereby keeping the relative price of similar goods the same across countries. This theory suggests that the Law of One Price should hold. PPP follows from the law of one price, which states that in competitive markets, identical goods will sell for identical prices when valued in the same currency. It relates to an individual product and its generalization is the absolute version of PPP. Relative PPP relates to changes in prices and exchange rates, rather than on absolute price levels.

The assumptions for PPP to hold are that Goods have to be identical, can be traded, no transportation costs, taxes, or restrictions of trade and exchange rates should only be influenced by relative inflation rates for the assumptions of PPP to hold. Monetary models of determination of exchange rate were adopted following the assumptions and violation of the law of one price. The asset approach just like other asset prices holds that exchange rates are determined by expectations about the future.

2.2.3 International Fisher Effect Theory

The International Fisher effect states that exchange rates changes are balance out by interest rate changes. The Fisher effect upholds that real interest rates across countries were equal due to the arbitrage opportunities between financial markets which generally occur in the form of capital flows. Real interest rate equality implies that the country with the higher interest rate should also have a higher inflation rate. This however, makes the real value of the country`s currency depreciate over time. This model was developed by Irving Fisher in 1930. Fisher`s model does not use uses inflation rates but rather market interest rates to explain the change of exchange rates. The relationship between relative interest rates and foreign exchange rates is explained within the interest rate theory of exchange rate expectations. Nominal interest rate differentials between two countries shows exchange rate fluctuations. Giddy (1977) called this the international Fisher effect which has a close relationship to the Fisher effect, an observation by Irving Fisher. Interest rates in appreciating currencies tend to be low and interest rates in depreciating currencies tend to be high where international Fisher effect holds. This helps offset expected currency gains and losses.

The International Fisher Effect theory suggests that foreign currencies with relatively high interest rates will tend to depreciate because the high nominal interest rates reflect expected rate of inflation (Madura, 2010). In the long-run, a relationship between interest rate differentials and successive changes in spot exchange rate seems to exist but with considerable movements in the short run. Spot exchange rates changes in the short run cannot be accurately predicted by the international Fisher effect. (Cumby and Obstfeld, 1981).

2.3 Determinants of Financial Performance of Commercial Banks

A firm‘s performance is measured by how it relates to the individual factors that affect its industry. For maximum financial performance, forex risk management need be specific to practices and market information should be highly efficient to select best tools for sales and profits. Treasury dealers and risk managers can implement mitigation measures as competitive advantage to stabilize financial performance in dynamic currency markets.

2.3.1 Capital Adequacy

Capital is the amount of own fund available to support the bank's business and act as a cushion in case of adverse situation (Athanasoglou et al. 2005). It is one of the bank internal variables that influence bank`s profitability. Banks capital creates liquidity for the bank due to the fact that deposits are most fragile and prone to bank runs and greater bank capital reduces the chance of distress. Capital adequacy ratio is directly relational to the resilience of the bank to crisis situations and it shows the internal strength of the bank to withstand losses during crisis. It is the level of capital required by the banks to enable them withstand the risks such as credit, market and operational risks they are exposed to in order to absorb the potential loses and protect the bank's debtors. It has also a direct effect on the profitability of banks by determining its expansion to risky but profitable businesses (Sangmi and Nazir, 2010).

2.3.2 Asset Quality

The bank asset includes among others current and fixed assets, credit portfolio, and other investments. The banks’ loan is the major asset which generates the largest portion of the banks revenue. The loan portfolio quality of a bank determines its profitability and the major risk facing a bank is the losses derived from bad and doubtful loans. Nonperforming and unserviceable loan ratios are the best assessment of the quality of asset. It is the major concern of all commercial banks to keep the amount of unserviceable loans at the lowest. The bank profitability is affected by high non-performing loans. This is therefore to say that, low nonperforming loans to gross loans shows that the good health of the portfolio a bank. The lower the ratio the better the bank performing (Sangmi and Nazir, 2010).

2.3.3 Management Efficiency

Different financial ratios represent management efficiency like total asset growth, loan growth rate and earnings growth rate. Management quality can also be viewed in terms of the efficiency of management of operating expenses. The management`s performance is often stated qualitatively through evaluation of systems like the organizational culture, controls, skills and experience of staff which are done subjectively. There are financial ratios of the financial statements which are used to measure management efficiency which assess the ability of the management to maximize income, deploy resources efficiently and reducing operating costs. Some ratios used to measure the quality of management is operating profit to income ratio (Sangmi and Nazir, 2010). The higher the operating profits to total income the more the efficient management is in terms of operational efficiency and income generation. The other ratio is expense to asset ratio. Profitability is negatively affected by the ratio of operating expenses to total asset. Hence, the efficiency of management determines the level of costs and hence profitability.

2.3.4 Liquidity Management

Liquidity determines the level of bank performance refers to the ability of the bank to fulfil its obligations, mainly of depositors. Dang (2011) states that bank profitability is positively related by the level of liquidity. The most common financial ratios that reflect the liquidity position of a bank according to Dang are customer deposit to total asset and total loan to customer deposits. Other scholars have used different financial ratio to measure liquidity. Ilhomovich (2009) used cash to deposit ratio to measure the liquidity level of banks in Malaysia. However, the study which was conducted in China and Malaysia and noted that there is no relationship between the bank`s liquidity and the performances of banks (Said and Tumin, 2011).

2.4 Empirical Literature Review

Various studies on this topic have been done both locally and internationally. Volatile exchange rates do reduce cash flows and profitability of any firm. Belk, (2002) states the aim of foreign exchange risk management as limiting volatile forex exposure on the firm‘s financial performance whereas Shapiro, (2006) describes performance in terms of higher profit margin, sales growth and overall liquidity of firm. This relates how currency risk assessment stimulates financial objectives.

Griffin and Stulz, (2001) found out that the effect of foreign exchange rate shocks is minimal in explaining relative US industry financial performance and is even smaller in other countries that are more open to trade. Instead, industry effects were more significant affecting trade than the cross currency exchange rates. Exchange rates have notable effects on the financial decision making of the profitability of the firm. For instances, in their efforts to minimize exchange rate risk exposures, the European union developed a uniform currency, the euro, to enable European firms to trade freely from the uncertainties of changes in relative prices resulting from exchange rate movements.

Bhatia (2004) research on mitigating foreign exchange risk for investing in microfinance institutions in developing countries found that there is a clear trade-off for investors mitigating currency risk in least developed countries in the form of contract fees for the benefit of protection against exchange rate fluctuations. The researcher noted that investors interested in MFI`s should use the ideal currency options

Changes in exchange rates have implications for the profitability of firms and financial decision-making. The Euro was formed mainly to eliminate currency risk to enable Euro zone firms operate free from exchange rate volatility that caused price uncertainties. There is evidence that the creation of such currency unions results in a dramatic increase in bilateral trade (Frankel and Rose, 2002).

Ahmed (2007) in the study realized the social role of Islamic finance examined that the bank has to create various reserves to cover various risks arising due to the nature of its assets and liabilities since it positively contributes to risk management in microfinance. The importance of risk management has significantly increased now and will continue to grow in the future. Factors such as the integration of new technology and the rising competition in the industry further reinforces the significance of managing risk in banks.

In his study, a survey of foreign exchange risk management practices in forex bureaus in Kenya, Ubindi, (2006) found out that some forex bureaus employed the conventional forex risk management practices while other forex bureaus had their own specific practices based on their views of what constitutes forex risk. He further noted that views on currency market fundamentals influenced hedging strategies. The strategies include taking individual positions, speculating and forecasting the markets with an aim of leveraging.

Boru (2011) did a study to determine the foreign exchange risk management practices by oil companies operating in Kenyan market. To achieve this objective, data was collected from the target population comprising 27 major oil companies operating in Kenya as listed in appendix 1 through administration of questionnaire using “drop-and-pick-later” technique. Out of 27 companies, there was a response rate of 74%. The researcher found that movement in global crude oil prices is the largest exposure to oil companies while forex risk exposure follows and therefore it becomes very significant to manage. All oil companies are mostly exposed USD because most oil prices are denominated and also shipping costs are settled in this currency. It was established that all the companies use practice hedging. As a recommendation, oil companies should enhance their management of forex risk by increasing the use of derivatives.

Omagwa, (2005) in his study on how foreign owned commercial banks in Kenya managed their foreign exchange risk exposure found out that transactional risk exposure was prominent among other risks and found out that practices employed to manage these risks include leading and lagging, use of currency swaps and forward covers. Njuge, (2012) also surveyed foreign exchange risk management practices adopted by MFI`s in Kenya and concluded that delaying of payments, price netting and negotiations and are the main management practices. The aim of this research is to assess the effects of foreign exchange practices to financial performance of Commercial Banks in Kenya. Several components of corporate foreign exchange management practices are studied with reference to the financial performance of the banks.

Singh (2013) did a study on the relationship between foreign exchange trading and financial performance of commercial banks in Kenya. The aim of the research was to establish the relationship between forex trading and financial performance of commercial banks in Kenya. A survey research design was adopted where all commercial banks were the focus of the study. Data was collected from secondary sources: commercial banks annual reports and derivatives data reported to CBK. Pearson correlation, descriptive statistics and multiple linear regression analysis were used. Thus, currency swaps, forwards and spots are significantly related with commercial banks` financial performance.

Kipchirchir (2011) studied the relationship between financial performance of multinational corporations in Kenya and exchange rates volatility. Kipchirchir noted a strong relationship between financial performance for multinational corporations and exchange rate volatility in Kenya.

2.5 Summary Literature Review

To reduce a firm's susceptibilities from major exchange rate volatility, measuring and managing currency risk exposure are important paramount. These vulnerabilities mainly arise from a firm's involvement in international trade and investments where exchange rate changes could have an impact of profitability. The currency crisis cases of the past decade and the increased international attention of balance sheet risk have led to corporate boards mandating increased currency risk management. Forex risk practices being relatively a new concept in Kenya have few studies carried out in that area especially in the banking industry.

Researchers on the impact of forex risk practices on financial performance in different countries have used various methods to justify the existence of the relationship between the two variables. Forex risk management practices are considered to involve a set of complex indicators which are affected by errors due to the complex nature of the relationship between risk management variables and performance indicators. The aim of this research is to study the effect of foreign exchange risk practices on the performance of banks.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The chapter outlines the overall methodology used to carry out this research. It encompasses the research design, target population, sampling design and techniques, sample size, data collection methods and data analysis methods that the researcher used in conducting the effects of foreign exchange risk practices on performance of commercial banks in Kenya.

3.2 Research Design

The research used a descriptive survey research design. In Robson, (2002), descriptive research portrays an accurate profile of persons, events, or situations. Surveys are used for collection of large amount of data from a sizable population in a highly economical way. It allows one to collect quantitative data which can be analyzed quantitatively using descriptive and inferential statistics. The descriptive survey method was desired for it ensured complete description of the situation making sure that there is minimum bias in the collection of data. The design of the study was therefore be used to examine and explore descriptive characteristics of several variables of interest – the effects of foreign exchange risk management practices on financial performance.

3.3 Target Population

Population is a group of individuals, events or objects having common characteristics about which the information is desired according to Saunders (2003). The target population comprised of the forty three (43) commercial banks in Kenya as at December 2014. Census approach was used in the study. Census is where data is collected from all members of the population (Hair, Celsi, Money, Samouel, & Page, 2011). Cooper & Schindler (2007) state that census is feasible when the population is small and necessary when the elements are quite different from each other.

3.4 Data Collection

The study made use of secondary data. Secondary data was collected from annual reports submitted to the CBK by the banks from the CBK website. Annual reports of the banks were analyzed for the period between 2009 and 2014, which is the study period. All the banks under study have been continually in business between 2009 and 2014 and were included to ensure that the sampling frame is current and complete.

3.5 Data Analysis

Analytical tools of data analysis aim to address the research questions of the study which is an assessment of foreign exchange risk management practices effect on financial performance of commercial banks in Kenya. Data that was collected from the study was sorted, edited and corded to have the required quality and accuracy. It was then entered into SPSS for generation of frequency tables, charts, correlations and regressions which helped in the analysis.

To examine the extent of influence of the independent variable on the dependent variables, the multiple linear regression analysis will be applied. The regression model is a multivariate model stating the commercial banks Return on Assets as a function of the selected foreign exchange risk management practices.

The regression function to be used includes the dependent variable and independent variables was as written below;

$Y = \beta 0 + \beta 1X1 + \beta 2X2 + \beta 3X3 + \varepsilon$

Where:

Y= Financial Performance

$\beta 0$ - Y intercept

$\beta 1 – \beta 3$ = Measure of the sensitivity of variable X to changes in Financial Performance

X1 – Forward Contracts

X2 - Cross-Currency swaps

X3 –Options

ε - Error term

The independent variables X1, X2 and X3 represent the foreign exchange risk management practices used for this study which are to be measured using the secondary data that will be collected. The variables will measure financial performance by evaluating total foreign exchange risk managed through Forward Contracts, Cross-Currency swaps and through Options in relation to the total assets.

3.5.1 Test of Significance

Analysis of variance (ANOVA) will be used to test the significance of the model at 95% confidence interval. It is essentially a procedure for testing the difference among various groups of data for homogeneity. It solves the difficulty that arises with t-test when examining the significance of the difference amongst more than two samples at the same time. The t-test compares the actual difference between two or more means in relation to the variation in the data.

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 foreign exchange risk management practices on the financial performance of commercial banks in Kenya among 42 commercial banks in Kenya for a period of 6 years from the year 2009 to 2014. 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

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	252	-9.420	6.84	2.6814	2.8207
Forward Contracts	252	.02524	.1547	.6702	.0236
Cross – Currency Swaps	252	.0010	.5680	.0633	.08674
Options	252	.00566	.1547	.0113	.0339

Forward Contracts, Cross Currency Swaps, Options and the 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 Return on Assets, 0.6702 for the forward contracts, 0.0633 for cross-currency swaps and 0.0113 for options.

4.3 Correlation

Table 4.2: Correlation

Correlations					
		ROA	Forwards	Cross-Currency Swaps	Options
ROA	Pearson Correlation	1	.523**	.555**	.623**
	Sig. (2-tailed)		.000	.000	.000
	N	252	252	252	252
Forwards	Pearson Correlation	.523**	1	-.049	.670**
	Sig. (2-tailed)	.000		.756	.000
	N	252	252	252	252
Cross- Currency Swaps	Pearson Correlation	.555**	-.049	1	.038
	Sig. (2-tailed)	.000	.756		.808
	N	252	252	252	252
Options	Pearson Correlation	.623**	.670**	.038	1
	Sig. (2-tailed)	.000	.000	.808	
	N	252	252	252	252

** 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 Return on Assets and various derivatives, the study found that there was a strong positive correlation coefficient between Return on Assets and forward contracts as shown by correlation factor of 0.523. The study also found a positive correlation between ROA and cross currency swaps as shown by correlation coefficient of 0.555. The study also found a positive correlation between ROA and options as shown by correlation coefficient of 0.623. Hence all the derivatives 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	.881[a]	0.776	0.759	2.704

a. Predictors: (Constant), Options, Cross- Currency Swaps, Forwards

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 0.881 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 0.759 an indication that there was variation of 76% on return on assets due to changes in forward contracts, cross currency swaps and options at 95% confidence interval. This is an indication that 76% of the changes in return on assets could be accounted for by the independent variables.

Table 4.4: ANOVA

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	261.692	3	87.231	13.733	.026[b]
	Residual	1575.264	248	6.352		
	Total	1836.956	251			

b. Predictors: (Constant), Options, Cross- Currency Swaps, Forwards

From the table above, the processed data, which is the population parameters, had a significance level of 2.6% 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 2.6049, while F computed was 13.733, since F calculated is greater than the F critical (value = 2.6049), this shows that the overall model was significant.

Table 4.5: Regression Model

Coefficients

	Unstandardized		**Standardized**	**t**	**Sig.**
	B	**Std. Error**	**Beta**		
(Constant)	2.951	.213		3.123	.000
Forward Contracts	4.513	.248	4.254	1.367	.027
Cross- currency swaps	4.728	.347	4.531	2.132	.037
Options	11.154	.462	10.672	2.971	.043

$Y = 2.951 + 4.513\ X_1 + 4.728\ X_2 + 11.154\ X_3$

From the regression equation above it was found that holding forward contracts, cross currency swaps and options to a constant zero, return on assets would be 2.951. A unit increase in forward contracts would lead to improvement on return on assets by 4.513 units. A unit increase in cross- currency swaps would lead to improvement of return on assets by 4.728 units and a unit increase in options would lead to improvement on return on assets by 11.154 units. Overall options had the greatest effect on return on assets, followed by cross currency swaps then forward contracts.

At 5% level of significance and 95% level of confidence, forward contracts had a 0.027 level of significance; cross – currency swaps had a 0.037 level of significance while options had a 0.043 level of significance. All the variables were significant ($p<0.05$).

4.5 Discussions of Findings

The study found that unit increase in Forward Contracts, while holding other factors constant, will lead to an increase in ROA by 4.513 ($p = 0.027$). This is in line with Bodnar and Richard (1998) who indicated that the most frequently used method is forward exchange contract. With forwards, 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 Cross Currency Swaps, while holding other factors constant, will lead to an increase in ROA by 4.728 ($p = .037$). This correlate Sun (1993) who posits currency swap where counterparties exchange equal initial principal of two different currencies by spot rate and comparative advantage. Though a costly third party offsets default risk. The usual aim to replace cash flows scheduled in an undesired currency with flows in a desired currency to raise capital in currencies of no significant revenues.

The study also found a unit increase in Options, while holding other factors constant, will lead to an increase in ROA by 11.154 (p<.0.043). This concur with Bodnar and Richard (1998) who indicate that options on spot currencies are commonly available in the interbank over-the-counter markets, while those on currency futures are traded on exchanges. Currency option is a derivative instrument where the owner has the right but not the obligation to exchange money denominated in one currency into another currency at a pre-agreed exchange rate on a specified date. It thus avoids potential exposure as counterparties have free and open choice to trade currency amount at specified rate before expiry date.

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 foreign exchange risk management practices on the financial performance of commercial banks in Kenya.

5.2 Summary

The objective of this study was to determine the effect of foreign exchange risk management practices 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 Return on Assets and various derivatives, the study found that there was a strong positive correlation coefficient between Return on Assets and forward contracts as shown by correlation factor of 0.523. The study also found a positive correlation between ROA and cross currency swaps as shown by correlation coefficient of 0.555. The study also found a positive correlation between ROA and options as shown by correlation coefficient of 0.623. Hence all the derivatives had a strong position relationship with return on assets as a measure of financial performance.

There was a strong positive relationship between the study variables represented by R 0.881 at 5% significance level. The adjusted R squared was 0.759 an indication that there was variation of 76% on return on assets due to changes in forward contracts, cross currency swaps and options at 95% confidence interval. This is an indication that 76% 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, 251 d.f was 2.6049, while F computed was 13.733, since F calculated is greater than the F critical (value = 2.6049), this shows that the overall model was significant. Hence forward contracts, currency swaps and option have an effect on financial performance of commercial banks.

From the regression equation above it was found that holding forward contracts, cross currency swaps and options to a constant zero, return on assets would be 2.951. A unit increase in forward contracts would lead to improvement on return on assets by 4.513 units. A unit increase in cross- currency swaps would lead to improvement of return on assets by 4.728 units and a unit increase in options would lead to improvement on return on assets by 11.154 units. Overall options had the greatest effect on return on assets, followed by cross currency swaps then forward contracts.

5.3 Conclusions

The findings showed that the mean of Forward Contracts is relatively high as compared to other variables while Cross – Currency Swaps had the highest standard deviation. This shows that cross – currency swaps shows had the highest variability or high volatility (Risk) in the financial performance. Options had the highest correlation and were positively correlated with Rate of return. Cross Currency Swaps and forward contracts are also highly and positively correlated with Rate of return. This implies that the foreign trading variables currency options, Forward Contracts, and Options are very crucial in determining financial performance of commercial banks in Kenya. From the regression equation the study concludes that a unit increase in forward contracts, cross- currency swaps and options would lead to improvement on return on assets. Overall options had the greatest effect on return on assets, followed by cross currency swaps then forward contracts.

5.4 Policy Recommendations

The study sought to determine the relationship between foreign exchange risk management practices on the financial performance of commercial banks in Kenya. The study recommends that; foreign exchange risk management should always be taken in to account to improve the banks return on assets 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 6 years period starting from year 2009 to year 2014.

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 foreign exchange risk management practices on the financial performance of commercial banks in Kenya. The study was based on a six year study period from the year 2009 to 2014. 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 foreign exchange risk management practices on the financial performance of commercial banks in Kenya. A study can be done on the implications of risk management practices on financial performance of other companies in Kenya apart from those in the banking sector.

The current study targeted all the commercial banks in Kenya; a study can be done on the effect of foreign exchange risk management practices on the financial performance of commercial banks in Kenya, with specific reference to the listed companies in Kenya. This would help compare the results.

A study can also be done on the effect of other factors apart from forward contracts, cross currency swaps and options that affect financial performance of commercial banks in Kenya.

A study should also be done on the effect of foreign exchange risk management practices on the financial performance of separate banks in each tier. This would help compare the results of the various banks.

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APPENDICES

Appendix 1: List of Banks in Kenya

	Bank	**Category**
1	Africa Banking Corporation Ltd	Tier 3
2	Bank Of Africa Ltd	Tier 2
3	Commercial Bank Of Africa Ltd	Tier 1
4	Kenya Commercial Bank Ltd	Tier 1
5	Equity Bank Ltd	Tier 1
6	Habib Bank Ltd	Tier 3
7	Habib A.G. Zurich	Tier 3
8	Dubai Bank Ltd	Tier 3
9	Barclays Bank Ltd	Tier 1
10	Cooperative Bank	Tier 1
11	Standard Chartered Bank	Tier 1
12	Bank Of India	Tier 2
13	Chase Bank	Tier 2
14	Credit Bank	Tier 3
15	Fidelity Bank	Tier 3
16	Bank Of Baroda	Tier 2
17	CFC Stanbic Bank	Tier 2
18	NIC Bank	Tier 2
19	Citibank N.A	Tier 2
20	Charterhouse Bank	Under statutory management
21	Consolidated Bank	Tier 3
22	Diamond Trust Bank	Tier 2
23	Development Bank Of Kenya Ltd	Tier 3
24	Ecobank Ltd	Tier 2

25	Family Bank Ltd	Tier 2
26	Guaranty Trust Bank Ltd	Tier 3
27	First Community Bank Ltd	Tier 3
28	Giro Commercial Bank Ltd	Tier 3
29	Guardian Bank	Tier 2
30	Gulf African Bank	Tier 3
31	Imperial Bank	Tier 2
32	Jamii Bora Bank	Tier 3
33	K-Rep Bank	Tier 3
34	Middle East Bank	Tier 3
35	National Bank of Kenya	Tier 2
36	Oriental Commercial Bank	Tier 3
37	Paramount Universal Bank	Tier 3
38	Prime Bank	Tier 2
39	Trans-national Bank	Tier 3
40	UBA Kenya Bank Ltd	Tier 3
41	Victoria Commercial Bank	Tier 3
42	Equatorial Commercial Bank Ltd	Tier 3
43	I&M Bank Ltd	Tier 2

Source: Bank Supervision Annual Report 2014

Appendix II: Raw Data

Return on Assets

		2014	**2013**	**2012**	**2011**	**2010**	**2009**
	Bank	**%**	**%**	**%**	**%**	**%**	**%**
1	Africa Banking Corporation Ltd	1.49	2.90	2.90	4.11	4.6	2.87
2	Bank Of Africa Ltd	0.33	2.00	1.30	1.29	1.59	1.47
3	Commercial Bank Of Africa Ltd	2.57	3.60	4.00	3.52	3.83	2.93
4	Kenya Commercial Bank Ltd	5.93	5.50	5.20	4.98	5.17	3.57
5	Equity Bank Ltd	7.26	7.70	7.40	6.75	6.26	5.66
6	Habib Bank Ltd	5.63	6.20	6.50	4.62	4.34	4.22
7	Habib A.G. Zurich	5.29	4.30	4.20	2.91	3.05	3.9
8	Dubai Bank Ltd	0.21	0.50	-1.20	0.9	0.02	0.54
9	Barclays Bank Ltd	5.44	5.80	7.00	7.18	6.25	5.46
10	Cooperative Bank	4.43	4.70	4.80	3.66	3.65	3.37
11	Standard Chartered Bank	6.42	6.00	5.90	5.03	5.38	5.44
12	Bank Of India	3.74	4.10	2.40	4.18	5.02	3.96
13	Chase Bank	3.08	2.90	2.70	2.33	2.45	2.45
14	Credit Bank	-1.02	1.00	1.30	-0.8	3.53	0.83
15	Fidelity Bank	1.80	2.50	0.90	2.79	6.26	0.93
16	Bank Of Baroda	4.35	4.80	3.60	4.57	5.65	3.31
17	CFC Stanbic Bank	4.31	4.10	3.50	2.23	1.96	1.37
18	NIC Bank	4.44	4.60	4.20	4.57	4.42	3.21
19	Citibank N.A	5.22	7.00	10.40	6.43	4.64	5.95
20	Charterhouse Bank	0.00	0.00	0.00	0.00	0.00	0.00
21	Consolidated Bank	-1.82	-0.80	1.00	1.61	2.46	1.78
22	Diamond Trust Bank	4.47	4.90	4.90	4.17	4.14	3.01
23	Development Bank Of Kenya Ltd	1.88	1.80	0.80	1.28	2.14	1.15
24	Ecobank Ltd	-1.09	-3.30	-4.80	0.45	0.7	-8.25
25	Family Bank Ltd	4.24	4.00	2.70	2.01	2.48	2.57
26	Guaranty Trust Bank Ltd	2.08	1.60	2.00	2.12	1.74	0.87
27	First Community Bank Ltd	0.67	1.80	2.90	1.28	-2.5	-3.42
28	Giro Commercial Bank Ltd	3.13	2.80	1.70	2.78	6.2	2.67
29	Guardian Bank	2.59	3.00	1.90	1.92	1.39	1.69
30	Gulf African Bank	3.11	2.70	2.80	1.2	-0.6	-2.1
31	Imperial Bank	4.75	5.80	5.50	6.37	6.33	5.22
32	Jamii Bora Bank	0.73	1.30	1.50	-3.7	-4.8	-1.33
33	K-Rep Bank	4.61	4.20	3.20	2.75	1.44	-4.05
34	Middle East Bank	1.28	1.40	0.79	1.99	5.11	1.39
35	National Bank of Kenya	1.90	1.90	1.70	3.56	4.49	4.2
36	Oriental Commercial Bank	1.07	2.50	1.80	3.8	4.01	1.08
37	Paramount Universal Bank	1.32	1.20	1.20	2.38	7.34	1.36
38	Prime Bank	4.18	3.80	2.70	3.03	2.25	2.23

39	Trans-national Bank	1.86	2.30	3.70	4.02	3.24	3.18
40	UBA Kenya Bank Ltd	-6.97	-7.50	-13.60	-6.4	-4.6	-17.5
41	Victoria Commercial Bank	3.68	4.30	4.80	4.31	5.03	4.22
42	Equatorial Commercial Bank Ltd	-2.78	1.00	-4.60	0.53	-0.3	1.66
43	I&M Bank Ltd	5.64	5.50	5.20	5.87	4.8	3.98
	TOTAL	4.46	4.70	4.70	4.40	4.43	3.52

Forward Contracts

	2014	2013	2012	2011	2010	2009
ABC Bank	124,567	238,714	113,243	90,487	99,497	95,762
Bank of Africa	357,422	538,117	324,929	438,750	324,978	229,176
Bank of Baroda	374,678	333,753	340,616	270,788	360,629	309,587
Bank of India	243,964	120,287	221,785	134,741	124,421	96,650
Barclays Bank	4,887,883	4,376,308	4,443,530	2,335,124	1,313,287	1,356,770
CBA	738,247	878,432	671,134	416,219	648,789	338,109
CFC Stanbic	1,287,129	1,306,862	1,170,117	957,488	768,354	213,554
Chase Bank	134,608	561,349	122,371	241,800	130,767	49,546
Citibank N.A	3,214,087	2,211,723	2,921,897	1,477,433	1,054,212	1,019,744
City Finance	81,180	10,130	73,800	93,894	16,400	57,740
Consolidated Bank	620,511	455,000	564,101	307,934	207,815	108,565
Cooperative Bank	2,336,693	1,085,308	2,124,266	2,262,491	1,122,455	700,512
Credit Bank	10,277	148,260	9,343	11,865	12,807	13,887
Development Bank	244,649	215,785	222,408	122,172	101,154	134,688
Diamond Trust	1,040,373	1,207,378	945,794	621,355	838,228	389,705
Dubai bank	20,375	19,162	18,523	36,066	44,535	4,471
Ecobank	225,707	102,759	205,188	323,259	417,545	384,861
Equatorial bank	62,126	32,467	56,478	99,597	82,030	83,826
Equity Bank	3,673,498	3,406,601	2,844,213	2,193,951	2,090,349	1,106,772
Family Bank	124,717	108,980	113,379	45,822	62,994	41,814
Fidelity Bank	84,215	92,887	76,559	94,681	52,076	55,136
Guaranty Trust Bank	234,070	319,432	212,791	157,449	44,795	48,544
First Community	59,667	91,079	33,333	118,765	202,799	22,593
Giro Bank	326,571	290,309	296,883	102,591	20,723	2,991
Guardian Bank	54,974	81,777	49,976	61,937	44,484	77,115
Gulf African Bank	5,679	4,160	5,163	5,897	1,440	10,101
Habib bank	106,302	83,124	96,638	95,127	82,063	82,546
Habib AG Zurich	87,478	47,738	79,525	92,613	82,685	96,836
I & M Bank	624,824	737,517	568,022	645,383	159,755	346,013
Imperial Bank Ltd	383,865	410,700	348,968	300,178	202,658	117,668
Kenya Commercial	3,576,834	3,336,068	3,251,667	1,955,722	1,091,736	1,722,652
K-Rep	10,266	6,071	9,333	1,566	629	36
Middle East	149,091	142,163	135,537	11,925	102,868	64,014
National Bank	880,020	678,879	800,018	709,358	616,536	710,201
NIC Bank	728,441	1,055,530	662,219	1,288,743	723,698	574,112
Oriental Bank	17,878	34,058	16,253	22,771	5,415	1,789
Paramount Bank	60,785	49,518	55,259	6,079	11,677	2,196
Prime Bank	457,467	352,817	415,879	213,391	410,513	308,518
Southern Credit	7,461	5,646	6,783	5,423	3,045	9,598
Stan-Chart	2,616,221	3,305,842	2,378,383	1,183,173	1,750,400	653,370
Trans National	233,098	184,383	211,907	108,015	205,200	306,125
Victoria Bank	167,689	144,957	5,332	5,648	2,483	2,845

Cross –Currency Swaps

	2014	2013	2012	2011	2010	2009
ABC Bank	456,489	311,619	414,990	211,982	112,662	155,833
Bank of Africa	1,356,563	3,150,823	1,233,239	1,547,501	1,451,970	1,036,901
Bank of Baroda	2,476,906	2,311,838	2,213,358	1,907,810	1,113,714	811,935
Bank of India	261,813	305,056	238,012	614,434	589,432	886,665
Barclays Bank	22,650,510	30,501,743	20,591,373	25,446,832	20,417,715	11,489,026
CBA	9,930,997	8,904,576	9,028,179	4,321,329	2,311,719	2,384,145
CFC Stanbic	14,732,838	12,142,483	13,393,489	10,476,651	6,391,138	2,251,405
Chase Bank	2,181,139	2,222,179	1,982,854	377,344	223,565	542,536
Citibank N.A	4,725,449	7,815,631	4,295,863	12,309,910	5,020,561	4,392,993
City Finance	1,082	174	984	5,192	218	10,320
Consolidated Bank	827,445	341,140	752,223	410,587	642,098	775,434
Cooperative Bank	15,582,257	13,113,744	14,165,688	10,181,988	8,103,274	7,194,015
Credit Bank	137,033	601,976	124,575	333,000	197,615	549,516
Development Bank	133,185	200,476	121,077	289,644	153,844	225,134
Diamond Trust	7,217,165	4,276,503	6,561,059	5,253,807	4,213,637	3,192,940
Dubai bank	125,013	154,943	113,648	108,797	204,667	209,578
Ecobank	513,609	367,927	466,917	143,465	150,606	648,276
Equatorial bank	950,117	328,912	863,743	127,966	370,700	510,156
Equity Bank	9,414,845	9,542,135	8,558,950	10,218,602	9,573,799	11,143,596
Family Bank	202,230	130,678	183,845	909,621	499,289	241,943
Fidelity Bank	962,158	384,954	874,689	610,834	276,823	684,898
Guaranty Trust	1,448,759	2,125,909	1,317,054	1,437,932	1,129,727	123,139
First Community	-		-	-	1,438	925
Giro Bank	1,009,544	441,256	917,767	345,445	363,009	398,845
Guardian Bank	234,631	929,037	213,301	613,583	789,978	495,486
Gulf African Bank	610,584	546,086	555,076	436,654	114,684	15,196
Habib Bank	973,537	416,576	885,034	683,621	275,198	339,456
Habib AG Zurich	110,369	631,789	100,335	348,432	291,345	144,712
I & M Bank	7,249,766	8,050,022	6,590,696	4,565,717	3,469,673	3,262,018
Imperial Bank Ltd	1,611,819	2,114,267	1,465,290	2,113,570	1,093,543	107,355
KCB Bank	15,769,112	22,248,357	14,335,556	11,774,296	5,542,314	5,500,203
K-Rep	8,555	8,095	7,777	2,089	839	48
Middle East	812,106	288,445	738,278	256,743	382,456	535,132
National Bank	2,259,571	2,205,003	2,054,155	1,275,397	1,090,505	906,782
NIC Bank	6,910,961	9,074,040	6,282,692	4,148,324	5,101,598	4,483,483
Oriental Bank	238,388	541,123	216,716	220,034	188,745	238,521
Paramount Bank	771,334	655,756	701,213	810,656	223,500	292,832
Prime Bank	232,893	704,233	211,721	338,559	290,174	313,578
Stan-Chart	17,054,962	20,409,789	15,504,511	12,708,982	12,633,866	11,637,826
Trans National	174,643	584,490	158,766	520,154	693,321	216,622
Victoria Bank	117,820	906,609	107,109	412,197	446,645	510,793

OPTIONS

Bank	2014	2013	2012	2011	2010	2009
ABC Bank	29,516	20,334	26,833	23,469	22,159	27,545
Bank of Africa	63,985	88,939	58,168	43,750	29,948	68,077
Bank of Baroda	25,714	20,717	23,376	14,168	15,250	14,136
Bank of India	4,580	5,337	4,164	10,751	10,315	15,516
Barclays Bank	1,138,392	878,051	1,034,902	781,956	731,002	855,796
CBA	439,245	483,008	399,314	384,511	255,084	212,225
CFC Stanbic	179,966	249,345	163,605	334,139	159,492	294,959
Chase Bank	57,418	3,148	52,198	48,634	39,123	36,940
Citibank N.A	569,536	27,554	517,760	517,343	359,827	512,737
City Finance Bank	1,893	304	1,721	9,086	382	18,059
Consolidated Bank	14,479	1,996	13,163	7,184	4,235	10,319
Cooperative Bank	318,951	399,053	289,955	144,480	155,729	164,527
Credit Bank	23,979	345,941	21,799	3,046	4,988	11,404
Development Bank	6,180	36,832	5,618	5,068	2,692	3,939
Diamond Trust Bank	117,538	483,881	106,853	211,162	197,865	182,645
Dubai bank	21,875	2,710	19,886	11,154	10,581	11,666
Ecobank	13,316	6,438	12,105	25,605	17,605	11,343
Equatorial bank	16,627	5,756	15,115	22,393	6,737	8,927
Equity Bank	113,479	948,735	103,163	452,553	154,148	251,468
Family Bank	3,539	2,286	3,217	8,918	5,986	4,233
Fidelity Bank	16,836	6,735	15,305	10,689	4,844	11,984
Guaranty Trust Bank	32,830	35,341	29,845	47,382	34,522	19,936
First Community	2,769	1,931	2,517	4,946	6,532	8,118
Giro Bank	17,665	7,722	16,059	6,045	6,353	6,979
Guardian Bank	25,604	50,814	23,276	18,520	17,462	26,601
Gulf African Bank	10,684	14,312	9,713	29,092	14,140	43,569
Habib bank	18,137	7,289	16,488	11,964	4,814	5,940
Habib AG Zurich	19,313	13,055	17,557	6,097	8,598	11,283
I & M Bank	174,590	87,539	158,718	72,560	79,428	91,031
Imperial Bank Ltd	125,684	24,967	114,258	23,748	6,201	41,225
Kenya Commercial	645,945	584,624	587,223	949,018	774,050	702,856
K-Rep	18,821	14,166	17,110	3,655	1,468	85
Middle East Bank	14,211	5,047	12,919	4,492	6,692	9,365
National Bank	104,249	8,756	94,772	136,993	146,195	138,134
NIC Bank	155,883	129,571	141,712	207,067	175,296	128,595
Oriental Bank	41,718	9,469	37,925	2,001	3,302	4,174
Paramount Bank	13,499	12,475	12,272	14,185	3,912	5,125
Prime Bank	40,755	123,240	37,050	24,246	22,530	19,874
Southern Credit	18,255	13,173	16,595	12,653	7,105	22,162
Stan-Chart	971,185	713,631	882,895	740,718	884,266	892,196
Trans National	30,562	10,227	27,784	16,034	24,133	34,291
Victoria Bank	13,685	36,156	12,441	9,084	9,912	6,637