

**CORPORATE DIVERSIFICATION AND FINANCIAL PERFORMANCE OF QUOTED  
COMMERCIAL BANKS IN KENYA**

**BY**

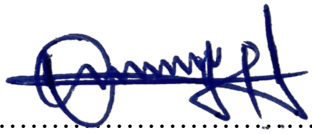
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**A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT THE  
REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTERS OF SCIENCE  
IN FINANCE, SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI**

**@2021**

**DECLARATION**

I declare that this research project is my original work and has not been presented in any learning institutions for the award of any degree or for other considerations

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This research project has been presented for examination under my authority as a university supervisor

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## **DEDICATION**

I dedicate this research project to my loving wife JANNEL AKUMU APEE for her immense support all through this programme. May God bless you mum, you are simply wonderful.

## **ACKNOWLEDGEMENT**

Thank you God for taking me through this project. I would not have made it this far were it not for your grace. To my children Phelan Daniels Apee, Pharian Daniels Apee and Phill Daniels Apee, thank you for being there for; offering support throughout the research work.

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## ABSTRACT

Organizations across different sectors globally have lately embraced the concept of corporate diversification. Commercial banks in the last ten years have entered into new markets, engaged in product lines or operate in a new geographical area to enhance their revenue streams, increase sales and boost their profitability. Despite all these, most commercial banks enlisted at NSE reported huge losses in their financial reports and hence the study would like to investigate whether there is any relationship between corporate diversification and financial performance of quoted commercial banks at NSE, in Kenya. The study applied panel survey research design approach and gathered secondary data study from 11 commercial banks enlisted at NSE. The study period ranging between 2014 and 2019. The corporate diversification indicated highly concentrated market. From the random effects model, corporate diversification had a negative and significant linkage with the performance of listed commercial banks at NSE in Kenya. As indicated by the empirical evidence, there is a negative and significant linkage between corporate diversification and performance of commercial banks listed at NSE, and a corresponding large value of HHI indicated excess diversification. The study therefore recommends for dynamic ways of being competitive in the market with an ultimate goal of increasing their performance. Top management teams need to define clearly the corporate purpose by outlining the direction in which they want to move.

## CHAPTER ONE: INTRODUCTION

### 1.1 Background of the study

Extreme competition coupled with extreme risks that are inherent in banking industry have exposed the banking industry to perennial losses, thus leading to financial crises world over. To counter this development, to reduce risk exposure, commercial banks and other financial institutions have been obliged to embrace company diversification, enhance their revenue streams, guard against financial crises and increase the overall well being of the financial system. ‘A number of tactics and policies to effectively handle risk management in the business sector have been espoused (Shad, et al, 2019).

Innumerable commercial banks and other persons in the business sector have sanctioned portfolio diversification as a means of augmenting their overall economic success.’ However, ‘not all the offerings in their portfolios are very lucrative, as the risk intrinsic in each of the offering comprising of the portfolio fluctuate’. The aim of having a highly diversified range is to guarantee that the probable portfolio yield is maximized for a prearranged level of risk. Diversification has global phenomenon that may be beneficial and costly at the same time. Sweeting, (2017) argues that business should embrace corporate diversification until a point where the value of diversification matches the costs of executing the activity. Corporate diversification should not be an option for consideration in the event where outlays exceed paybacks as the market will reduce the share price of differentiated firms.

‘The research will be based on modern portfolio theory, with agency theory and resource-based theory supporting it. In Modern portfolio theory, Markowitz (1952) argues that corporations can

achieve a maximum yield on their investments at a minimal risk by embracing corporate diversification. Jensen and Meckling (1976), in their agency theory argued that because of the opportunistic nature inherent in managers, they might embrace corporate diversification to satisfy their own selfish interest at the expense of stakeholders'. Pecking order theory describes the financing structure of the business organizations and argues that firms should choose the financing source that is cheapest. Corporate diversification is believed to be associated with high firm performance that yields huge profits that act as internal source of financing for supporting firm investments. Resource based theory opines that corporate diversification provides critical resources that are required for well-functioning of any firm.

In Kenya, commercial banks quoted at Nairobi trading bourse have continued to exhibit poor performance as evident with many profit warnings despite government's concerted efforts in ensuring there is favorable environment for doing business in the country (Ayako, Kungu and Githui, 2015). For instance, in the year 2019, national bank of Kenya and HF group issued profit warnings to its existing and potential shareholders as results of its declining performance (Guguyu, 2019).

Moreover, significant numbers of firms quoted at NSE have missed the financial reporting deadlines while others have gone into administration for an assortment of internal and external reasons. In quest to find out the real cause behind this poor performance of quoted commercial banks at NSE, innumerable scholars and practitioners have strived to investigate the issues and turnaround the performance cases of listed commercial banks with no success as evidenced by many profit warnings up to date (Muhatia, 2018)'. This phenomenon besides lack of an empirical

study examine on the effect that corporate diversification do have on performance of commercial banks at NSE has triggered the demand for this inquiry.

### **1.1.1 Corporate Diversification**

Corporate diversification is a business growth practice whereby a company enters a new market, engage in product lines or operate in a new geographical area to enhance its revenue streams, increase sales and boost firm's profitability. The three main variants of corporate diversification include; product diversification, market diversification and geographical area diversification. Product diversification occurs whereby the company develops a new product to be offered in the same market it operates. Market diversification occurs whereby the company enters a completely new market with the same product it offers. 'Over time in history, firms have attempted to increase their diversification efforts in terms of their product offerings and their geographic markets.' 'Diversification of a product is considered a diversification plan espoused by firms by intensifying towards emerging economy or beginning to develop a new product (David, 2011).'

Diversification of geography occurs where the firm operates in more than one location for instance where a company can invest in more than one country to reduce business and operational risk or even moving from one country to another where the terms of operating a similar business are fair in terms of cost of production and demand for the product (Rutterford & Sotiropoulos, 2016). Product diversification could be started in correlated trades and /or an unrelated industry as long as the basis for diversification is product offering provided by the firm. Empirical works done on this area have shown the implication of diversification strategies on valuation of firm. 'They have recognized the paybacks and outlays of firm offerings and geographic diversification in association with complete company success, contingency factors that may have an effect on profits and

expenses of product, and geographic diversification. Corporate diversification is beneficial to businesses when it is done within the confines of the company's current resources and strengths (Mackey ,Barney & Dotson, 2017).

Corporate diversification is ‘associated with many benefits as compared to a single-business mainly because of the benefit that results from economics of scale. ‘Multinationals or extremely diversified firms have an outstanding chance to get internally spawned finances at lesser outlays as compared to outside financing (Mendoza, Espinosa & Araya-Castillo, 2019).’ Corporations that embrace diversification have more capital formation flexibility than single-business companies since they can quickly access both internally generated and external resources (Fosfuri, Giarratana, & Roca, 2016). Additionally, differentiated firms can transfer wealth between business unites and entice capital funding for intensifying their ventures (Cobb, Wry & Zhao, 2016).. Nevertheless, over-ambitious and unscrupulous executives may practice diversification for their private advances (Ekimova, et al, 2016). Corporate diversification will be measured using Herfindahl-Hirschman Index.

### **1.1.2 Financial Performance**

Performance can be understood as the ‘ability of business establishment to achieve their goals effectively and efficiently while utilizing resources that are within their disposal (Muthuveloo, Shanmugam, & Teoh, 2017). According to Ayora, (2020). Performance connotes the level at which corporate activities actualizes specific objectives and meets customer needs. Objectives and to a larger extent customer satisfaction cannot however be accurately measured. Performance is a subjective indicator of a firm’s ability to achieve firm’s objectives. Consequently, the concept indicates a subjective measure of what is done by an entity and its definition varies from one

context to another depending on the type of business objective. According to Eneizan, et al, (2016) holistic measurement of performance involves application of both “financial and non-financial measures.” Financial indicator of firm’s production includes profits and other accounting based variables that can be derived from the financial reports. On the other hand, non-financial indicators include metrics such as customer satisfaction, employee satisfaction and internal business processes.

Financial performance is an indicator of profitability and a great measure of firm’s success. Profitability is a gauge of company success in a certain time. Susanti et al, (2020). views entity profitability as a valid indicator of managerial effectiveness in utilization of firm resources as laid out in firm’s financial statement of financial position. ‘Profitability of a company is therefore measured with service of the fiscal ratios such as the return on capital employed(ROCE), return on assets (ROA), return on equity (ROE), Tobin Q, market share among other things. Return on assets (ROA) is determined by dividing net income and total average assets. Thus, ROA shows how well the management is making use of its assets to generate profits for the company (Sari & Endri, 2019).

Ascertaining company’s efficiency and operational performance through the returns accruing from assets employed by the firm is also important. The return on equity (ROE), is calculated by dividing firms’ net income by shareholders equity. Managerial efficiency can be determined by ROA and ROE where high value would mean high managerial efficiency and vice versa. The most regularly applied index of firm’s performance is return on assets (Mwaniki and Omagwa, 2017)’’.

### **1.1.3 Commercial Banks Quoted at Nairobi Security Exchange**

Nairobi security exchange is a public exchange for trading of financial securities in Kenya. The security exchange was brought to existence in 1954 under the society act as a “voluntary association of brokers”. Its main task was to foster development of an efficient market and regulation for security trading in Kenya. The exchange also provides an avenue for companies to raise cheap finance for their business operations by providing a platform for trading debt and equity securities.

Since inception, NSE has undergone numerous changes since its commencement which includes enactment of trading and settlement rules, Central depository system, automation of the market, demutualization from mutual company to company ltd by shares (NSE, 2019).. Nairobi security exchange ranks fourth in terms of volumes of shares traded and fifth in terms of market capitalization in Africa (Iraya & Musyoki, 2013). The capital market authority is primarily tasked with responsibility of effecting good corporate governance practices among listed companies and efficient development of security market (NSE, 2019).

‘Commercial banks quoted at the Nairobi trading bourse have continued to exhibit poor performance as evident with many profit warnings despite government’s concerted efforts in ensuring there is favorable environment for doing business in the country (Ayako, Kungu and Githui, 2015). Profit warning is undisputable indication of declining performance within respective industry. For example national bank of Kenya, HF Group and chase bank nearly collapsed as a result of deteriorating performance and corporate governance issues (Waweru, 2017). Moreover, the failure of the three Kenyan commercial banks like chase banks in the year 2016 has sparked much reaction with respect to the health of the banking sector in general. These developments



motivated the need for a study investigating on performance issues and specifically enquire on the influence of audit diversification and performance of listed commercial banks’.

## **1.2 Research Problem**

Financial risk management has become a critical function in execution of business processes as more and more firms worldwide try to minimize huge losses to the banking industry. ‘Diversification has been seen as vital in the reduction of risk. Daud and Salamudin (2009) opine that well diversified company’s excel in performance than firms in the same industry that focus on a single product. Mansi and Reeb (2002) posit that companies that embrace diversification have higher chances of managing and mitigating their uncertainty, increase their sales revenue, upscale their profitability margins. Commercial banks and other financial intermediation firms have in the recent formed the hub of the recent financial crises and poor performance (Sanusi, 2010). This has been occasioned by the drop in firm’s value coupled with fictitious financial reporting which resulted from fraudulent acts of management, over-reliance on one source of income, non-adherence to corporate governance practices and distorted credit management policies. This has resulted to creative accounting which has in most cases led to huge loss and collapse of some commercial banks such as chase banks. Corporate diversification has been regarded as one of the fundamental strategy to turn around the fortunes of these financial institutions’.

Majority of Listed commercial banks in have embraced corporate diversification in bid to boost their revenue streams by providing one-stop-shopping facility to their clients. For instance equity bank has incorporated bancassurance services, real estate financing, merchandize financing, mobile banking among others as part of their product offering. Unfortunately, many commercial banks quoted at NSE continue to report huge financial losses in their financial reports over time

while others continue to issue profit warnings due to declining profit levels (Muchira, 2018). For instance, in the year 2019, national bank of Kenya and HF group issued profit warnings to its existing and potential shareholders (Guguyu, 2019). Moreover, significant numbers of firms quoted at NSE have missed the financial reporting deadlines while others have gone into administration for an assortment of internal and external reasons. In quest to find out the real cause behind this poor performance of quoted firms at NSE, innumerable scholars and practitioners have strived to investigate the issues and turnaround the performance cases of listed commercial banks with no success as evidenced by many profit warnings up to date (Muhatia, 2018). Consequently, enlisted bank firms have resorted to retrenchment and employee layoffs as strategies to cut down operation costs and boost the bottom line and this phenomenon has triggered the demand for this inquiry.

The concept of corporate diversification has attracted a never ending debate globally and in local scene. Globally, Osifo and Osagie (2020); Jouida, Bouzgarrou and Hellara (2017) avers that there is a negative impact on valuation indicators of entities caused by corporate diversification whereas Capar and Kotabe (2013); Hymer, 1976; Caves, 2007; Doaei and Shavazipour (2013); Yildirim and Efthyvoulou (2018) and Porter (1980) stressed on the importance of corporate diversification in achieving success and competitive edge in market place. 'They debated that when businesses are challenged with unbending competition, divergence is a central policy and the corporate have avenue to construct market power, hence yielding it admittance to combine authorities'. Further argue that Firms are able to incorporate foreign diversification to advance their competitive power in the market.

Locally, an experimental enquiry of portfolio diversification among banks in Kenya was done by Maithulia, 1995; Mwindi, 2003; Njoroge, 2003; Mwau, 2005; Njoroge, 2006) Maithulia (1995). Exploration of the application of unrelated diversification strategy by the chief oil establishments in Kenya was done by Mwindi in the year 2003. In reference to the studies cited above, there exists a gap in research that this study seeks to address by addressing the following question: What is the the influence of corporate diversification on financial performance of listed commercial banks at NSE?

### **1.3 Research Objective**

The general objective is to ascertain the influence of corporate diversification on financial performance of listed commercial banks at NSE.

### **1.4 Value Of The Study**

The study will be helpful to policy makers since the findings of the study will help in the formulation of sound policies that will enhance performance and growth of the commercial banks under study. The articulated policies will successively empower the firm to progress its operational events to heighten its production and match the investor's goal of "wealth creation"

The study will benefit Executive by supplying them with appropriate information on the influence of corporate diversification on financial performance of listed commercial banks in Kenya which can help them in designing appropriate policies and administration policies to get the best out of the business. The research will also help the executive to acknowledge on the impact of corporate diversification to firm value and the best way to design

‘it to capitalize on shareholders funds’. The study will also benefit Intellectuals and Impending Researchers. The study will provide basis for conducting future studies.

The research outcome will be of great significance to manufacturing companies in making and evaluating ‘key investments choices which will enable them to diversify their operations so as to mitigate their overall risk exposure.’ It will also provide ample literature that will serve as a guide to future scholars in this field of inquiry.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Introduction**

The comprehensive theoretical and the empirical studies on the “association between corporate diversification and performance of enlisted commercial banks at NSE” are discussed in this chapter as well as conceptual framework and document summary of writings review.

### **2.2 Theoretical Review**

Theoretical models that try to shed light on the alternative elucidation of the influence of corporate diversification and performance of enlisted commercial banks at NSE. The theories that are reviewed in this section are; modern portfolio, agency model and resource based model.

#### **2.2.1 Agency Theory**

This model was “advanced” by Jensen and Meckling in (1976). Jensen and Meckling (1976) put forward that managers are driven by selfish goals and they act in their “private concern” with petite or no honor to the “concern and wishes” of their employers who are the shareholders unless they are supervised strictly. According to the argument advanced in this theory, over-ambitious and self-driven agents may use diversification for their private gains instead of applying diversification strategy to allocate resources between businesses and appeal capital funding for growing their businesses and creating more business value (Meyer *et al.*, 1992). As a result, this necessitates alignment of shareholders interest with managerial interest by instituting a system for managerial control by board of directors who are the appointee of the shareholders. Managers are employed to run business on behalf of shareholders who give them full control of resources and

decision making capability. However, due to selfish interest of shareholders, the theory assert that managers may use the diversification strategy as an avenue to advance their interest at the expense of their bosses unless the activity is closely controlled and monitored (Jensen and Meckling 1976).

### **2.2.2 Modern portfolio theory**

Portfolio concept was first discovered by Harry Markowitz in the 1950's. For its use, it assumes that assets returns are normally dispersed over the time under enquiry. Modern portfolio theory argues that companies can achieve maximum return at a minimum risk through diversification. Diversification helps the firm to spread the risks that are often associated with a particular revenue stream and help the firm to maximize its return. Portfolio efficiency is determined by choosing asset mix that minimizes the risk exposure at a given payoff. The additional supposition of undesirable exponential value tips to assortment optimization issues that are lined in return and variance. Firms that manage to diversify their operations beyond their normal business line have the potential and capability to maximize their average returns with petite exposure to risks. When companies diversify, they are able to receive good returns even when the economic conditions are not favorable for the main business line (Markowitz, 1950).

### **2.2.3 Resource Based Theory**

Resource based theory was proposed by Wernerfelt (1984). According to this theory, organizations are viewed as a bundle of resources that have an important impact on firm's value. Further, theory opines contemplate that corporate diversification enables the entity concerned to get critical resources from the external environment, managerial capability, access to markets, value creation, competitive advantage and ultimately firm's performance. Diversified firms are big in size which

enables them to access market easily and enjoy economics of scale from their operations. Accordingly, large sized firms are presumed to have enormous resources, wider strategic networks with other business partners, wider access to markets and exhibit low production costs for their products and services due to economics of scale. This theory focuses on firm's internal characteristics and their relationship with firm's value. It attempts to explain profit variation that exists between large and small firms. Large firms are assumed to have wider access and control of critical resources such as financial resources, skills and capabilities, technology, human resources, physical resources among other resources which collectively create competencies and competitive edge for the firm (Pearce and Robinson, 2011).

The theory observe the firm as a package of resources that are garnered together from the organizational environment to build organizational capabilities and competence which enable the firm to have extraordinary performance in the market place than other market players. Large organizations are presumed to have enormous resources to support their day to day (Grant, 1991).

## **2.3 Determinants of Financial Performance**

### **2.3.1 Corporate Diversification**

Corporate diversification can advance revenue streams, debt capacity, mitigate likelihood of collapse as a result of bankruptcy by venturing into new offering/ markets and expand asset disposition and profitability (Lewellen, 1971). 'Skills established in one business shifted to new corporates likely upsurge labor and capital efficiency'. Market based risk measures facilitates tradeoff between decrease in operating danger caused by diversification with augmented financial leverage, and as a result systematic risk remains the same (Raphael and Livnat, 1988). Firms reduce their operating risk by diversification and surge financial leverage to ride on the coat-tails

of tax benefits. A diversified firm can shift money from unit with excess to those starved of cash without taxes or transaction outlays (Bhide, 1993). 'As a result of the coinsurance effect, resource view and transaction cost effect, diversification becomes attractive to investors and debt capacity is thus significantly enhanced. Low and Chen (2004) in their inquiry, accentuated that product diversification has a positive impact on FL, implying that such diversification allows corporations to decrease their perils facilitating them to carry higher debt levels'.

### **2.3.3 Firm size**

Firm size refers to how large or small an entity is and is often operationalized using total asset value, total number of employees or total sales revenue indicators. The size-profit hypothesis has been a concern in finance literature with different scholars expressing divergent views on the impact of firm size on firm's value (Adebayo and John, 2013). In today's competitive world, the concept of economies of scale has ignited debate on whether or not firm size matter. For instance, large manufacturing firms are able to manufacture products at relatively low costs as compared to their counterpart small firms due to economics of scale cost advantages. Firm size allows the organization to gain competitive advantage over other competitors in the market place, achieve low production costs for products, capture significant market share and boosts the firm's performance level. According to Shaheen and Malik (2012), large firms have a wider access to critical resources like best human resources, best technology, huge financial resources and physical resources than their counterparts' small firms. This capability enables the firm to innovate new ways of production and new organizational offerings which in turn improve their financial performance. On the other hand, Becker *et al.*, (2010), asserted that firm size is negatively correlated with firm's value. According to Becker *et al.*, (2010), large firms are normally



characterized by many operational procedures which creates bureaucratic ring curtailing the organization creativity, reduce firm's flexibility and reduce its ability to respond to the fast changing technological needs.

Moreover, financial freedom enjoyed by large firms enables them to seize investment opportunities on timely basis ahead of their counterpart smaller competitors who struggle to raise funds for investment projects. Firm size has been identified as one of the reason for inter-firm variability in the reported profits and many empirical studies have been conducted to document the nature of the size-performance relationship with no conclusion. Empirical results from prior studies yielded mixed results with some like Gregory *et al.*, (2005) and Romano *et al.*, (2000) stipulating that size is positively associated with firm's value while other scholars like Mazur (2007) alleged that firm size has a negative consequence on the value of the firm.

## **2.4 Empirical Review**

### **2.4.1 Global Studies**

Ilaboya and Okoye, (2015) made inquiry on the nature of the association among audit firm size, non-audit services and audit quality from 2013-2015. The study population comprised of commercial banks enlisted at NISE. A sample of 18 commercial banks participated in the inquiry. The study applied primary research which was collected via use of structured questionnaires which were administered to respondents selected through purposive sampling approach. Survey design was applied and least square method was used to estimate the relationships. There was a positive relation of audit firm size and non-audit services to audit quality and the positive relationship was statistically significant. The study revealed that large sized audit firm enables the auditor to carry

pout a thorough audit work and acquire comprehensive knowledge of business thus enhancing the quality of audit conducted.

Speckbacher *et al.*, (2003) examined the implication of organization growth and size on firm's performance. In this study, Speckbacher *et al.*, (2003) argued that expansion of the firm size is more likely to lead to more dispersed and complicated management processes. He further postulated that big firms are highly decentralized and scattered over different operating locations which give rise to information overloads to management. Consequently, large firms require a systematic, specialized, formal and sophisticated management control system which give rise to more operational overhead costs and lower the value of the firm. A similar study supporting this negative association between firm size and performance includes studies done by Kartikasari and Merianti (2016).

Muritala (2012) evaluated the profitability in regard to capital structure of entities enlisted at Nigeria security exchange for the period ranging from 2006 to 2010. The measure of capital structure variable was debt ratio while the performance of enlisted firms was measured by return on asset indicator. Asset turnover, firm's age; asset tangibility and firm size were applied as study control variables. The empirical study employed descriptive research design and collected data from financial statement reports of 5 companies quoted at Nigeria security exchange. Regression modelling was applied to the panel data and the findings documented negative implication of financing structure on the performance of quoted businesses at NISE. In addition, the study also indicated a favorable influence on the performance of business in regard to asset size, firms age, asset turnover and asset tangibility.

A study on the relationship between size of audit firm and earning management in quoted companies in Tehran Stock Exchange from 2005 to 2009 was researched by Moradi, Salehi and Shirdel (2011). The study adopted survey research design and made use of secondary data. The findings revealed that no significant difference companies audited by audit firms and those audited by other members of SCA in Iran. Similarly, Naslmosavi, Sofian & Mohamed Saat (2013) indicated that audit firm size doesn't have any impact on audit opinion though some specific factors such as competence, experience, education and skills do have.

#### **2.4.2 Local Studies**

A study on the implication of capital structure composition on the profitability of quoted entity at NSE was conducted by Muturi and Githire (2015). The study involved all the 67 quoted firms and garnered data for five-year tenure starting from 2008 to 2013 from published financial reports. Explanatory research design was applied. Profitability was operationalized using return on asset accounting ratio while capital structure was captured by debt ratios. Multiple regression model was used in the analysis of the data and the findings showed that long term loan and equity had a positive implication on the business value. They further averse that long term debt provides ample financial resources which enable the firm to make the most of the investment chances in the market place and enhance its value.

Another study on the role of capital structure on the profitability of small and medium businesses situated at Thika town, Kiambu County was carried out by Mwangi and Birundu (2015). Descriptive research design was applied. Data from 40 SMES at Thika town for the period commencing from 2009 to 2013 was used in this study. The primary data collected was analyzed using multiple regression models. The independent variable

was capital structure while asset structure and turnover were applied as control variables. The findings showed that capital structure, asset tangibility and sales turnover have no influence on the way in which small and medium businesses perform.

Mwaniki and Omagwa (2017) empirical study in Kenya assessed the influence of asset structure on the profitability of enlisted firms in commercial and services category of Nairobi security exchange for the period 2010- 2014. The investigation applied descriptive research design. Profitability was operationalized by the return on asset, profit margins, return on equity indicators and EPS. Asset structure was represented by PPE, intangible assets, current assets and long term investments and funds. The investigation extracted secondary data from 7 companies. Results indicated that asset structure has a positive and statistically significant association with the profitability of the companies. This implied that higher the firm invests in long term assets, the better it performs in the industry. According to them, investment in fixed assets and other long term investments give an entity easy access to financial markets whenever they require funds for investment purposes. This in return enables the entity to finance expansion projects and take advantage of the emerging profitable opportunities hence leading to superb performance.

Mwangi (2018) conducted a study on the influence of business size on value of the commercial banks in Kenya for the period 2007-2016. Size was measured using the natural logarithm of the total firm assets while firm value was operationalized using return on firm assets. The study utilized descriptive research design and used secondary data from the published financial statements of 43 commercial banks in Kenya. The results showed that there was a positive implication of firm's size on the value of the firm. According to Mwangi (2018),

large firm size results to lower transaction costs due to benefits associated with economics of scale which boost the financial results.

## 2.5 Conceptual Framework

The conceptual framework was developed from the theoretical model above to explain the nature of association among the study concepts. Financial performance is the dependent variable and corporate diversification is the independent variables. Firm size is the controlling variable.

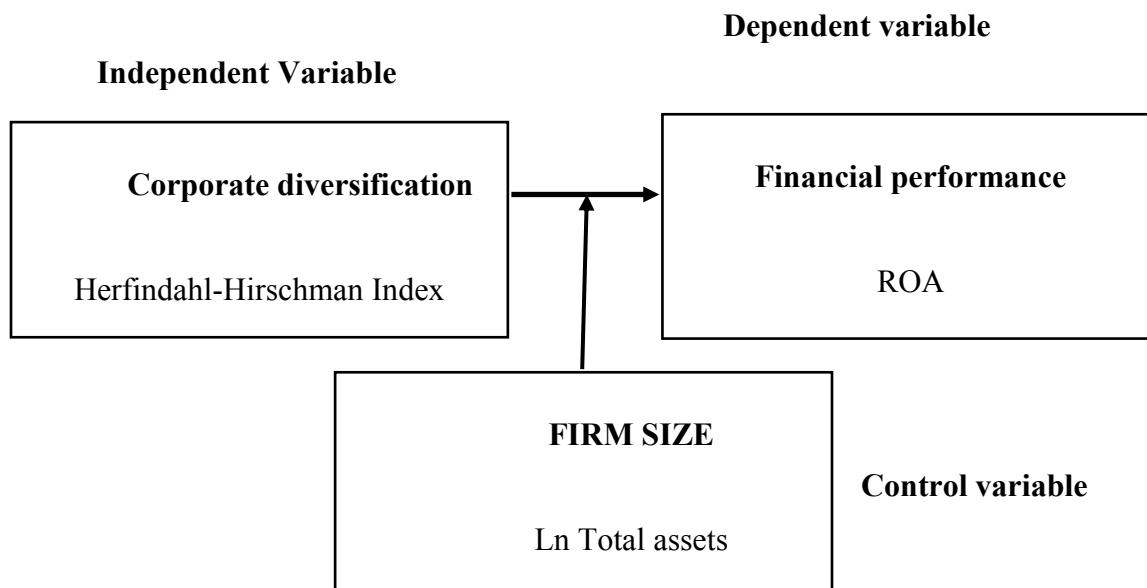


Figure 2.1; Conceptual Framework

## 2.6 Summary of Literature Review

Empirical scholarships carried out locally and globally on the focus matter reviews motley and incompatible results which oblige the necessity for more studies. Corporate diversification has a negative implication on the value of the firm unless managers are

closely monitored and controlled according to Jensen and Meckling (1976), in their agency theory, Conversely, resource based theory argues that corporate diversification enables the firm to acquire critical resources that necessary for wellbeing of the firm.

Similarly, the same empirical controversy has been witnessed with no any conclusion on the matter. For instance, Naslmosavi, Sofian & Mohamed Saat (2013) indicated that audit firm size doesn't have any impact on audit opinion though some specific factors such as competence, experience, education and skills do have. Moreover, Mwangi and Birundu (2015) tested the role on capital structure on the profitability of small and medium businesses situated at Thika town and asserted that capital structure has no bearing on firm value.

However, these studies does not focus on the influence corporate diversification have on firms value which creates a void in empirical literature that this study seeks to fill. This study is researching on the relationship between corporate diversification and performance of commercial banks quoted at NSE.

## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 Introduction**

This chapter discusses the practical approach used in collecting data as well as explaining the relationship between corporate diversification and financial performance of commercial banks quoted at NSE. This chapter discusses the following sub-topics; research design; population; data collection and data analysis.

### **3.2 Research Design**

Research design is the approach that was adopted in the study to help in getting solutions to question at hand (Groenewald, 2004). This study was adopt panel survey research design since it provides an objective methodology of testing the expressed ‘supposition based on assumption that reality is best understood via application of the quantitative, scientific and statistical procedures. This research design allows for collection of data repeatedly, from a pre-recruited set of people, objects or institutions.

### **3.3 Population**

Population can be understood as the assemblage of people and firms of prime concern to the researcher (Creswell, 2002). The population that was used in this research was 11 commercial banks enlisted at NSE. The target population used in this study provided appropriate data that was used in indicating the influence of corporate diversification in terms of financial performance of enlisted commercial banks at NSE trading bourse.

### 3.4 Data Collection

These are the approaches that were used in the study gathering critical information for project completion' (Craddick *et al.*, 2003). The study used secondary data which was extracted from 'financial records for the period 2014-2019. The study period was chosen because most commercial banks enlisted at NSE reported huge losses in their financial reports and hence the study would like to investigate whether there is any relationship between corporate diversification and financial performance of quoted commercial banks at NSE. The data for the study was a combination of cross-sectional and time series data from the identified firms listed on the NSE. To enhance data collection, operationalization of variables was as follows:

**Table 3.1: Operationalization of the study variables**

<b>Variable Type</b>	<b>Variable Name</b>	<b>Indicators</b>	<b>Measure</b>
Dependent Variable	Financial Performance	Profitability	Return on assets
Independent Variable	Corporate diversification	Portfolio diversification	Herfindahl-Hirschman Index (HHI)
Control variable	Firm Size	Total firm assets	Natural logarithm of total assets



The HHI was put in place to measure the level and trend of corporate diversification among Kenya's commercial banks. It was looking for the level of diversification of commercial banks; some commercial are more diversified than others are. The HHI is calculated by squaring the market share of each competing bank and then adding the resulting figures together. HHI of below 1,500, indicates the existence of a competitive market, HHI of between 1,500 and 2,500 signals a moderately competitive marketspace while HHI of more than 2,500 signal a high concentration.

### **3.5 Data Analysis**

Secondary data from Nairobi Securities Exchange reports and the library was reviewed for completeness and consistency to apply the statistical analysis. In accordance to Mugenda (2003), data must be cleaned, coded and properly analyzed to obtain a meaningful report. The NSE data was analyzed using descriptive and inferential statistical approach. The Excel software was used to alter the variables into a format appropriate for analysis after which the STATA 14.0 software was employed for further analysis.

To assess the quantitative data concerning mean, various statistics were used including the standard deviation and the range. Tables and charts were also utilized to summarize replies in order to facilitate further analysis and enable comparison. The commercial bank level, which is listed on the Nairobi Securities Exchange, was used as the unit of analysis. In detail, Panel data regression analysis was used in the study to determine the association between board characteristics and financial performance, including the direction of the relationship.

### 3.5.1 Analytical Model

The study allows consideration of all explanatory variables in the model due to their key focus in the long run association with the dependent variable. Following Ehikioya (2009); Ujunwa (2012) and Illaboya and Obaratein (2015), as well as Orayo and Mose (2016) the empirical model and thus econometric model is outlined as follows;

$$FP_{it} = \beta_0 + \beta_1 HHI_{it} + \beta_2 FS_{it} + \varepsilon_{it} \dots\dots\dots 3.1$$

Where:

$FP_{it}$  is financial performance of the bank (ROA);

$HHI_{it}$  is the corporate diversification index;

$FS_{it}$  is the firm size or bank size;

$\beta_0$  is the constant coefficient and  $\beta_1$  to  $\beta_2$  are the coefficients for respective variables while  $\varepsilon_{it}$  is the error term. Decision rule was based on the p values. The study used a confidence interval of 95%, implying that if  $p < 0.05$ , was a statistical significance hence null hypothesis was rejected.

### 3.5.2 Diagnostic Tests

The study used a panel data estimation technique because of its several advantages that is it has a greater degree of freedom and less multicollinearity leading to more efficient estimates, (Hsiao, 2003) and gives greater flexibility in modelling differences in behaviour across the firms under study which enables us to control for unobserved heterogeneity.

The panel data analysis method has two main approaches, namely; the Fixed Effects Model (FEM) which assumes omitted effects unique to cross-sectional units are constant over time and the Random Effects Model (REM) which assumes the overlooked effects are random over time. Hausman model specification test was conducted so as to choose between the fixed and random effects. It examines correlation of the different errors with the explanatory variables (Greene, 2008).

The study items were studied by regular testing, and the stated model was computed using a statistical program (STATA). Unit root test, homoscedasticity, normality, and independence of the error term were among the other key assumptions tested before the regression analysis. The presence of multicollinearity and outliers was explored prior to assumptions testing. The study employed the Levin Lin Chu unit root test for the unit root test.

### **3.6 Tests of Significance**

Parametric tests were conducted to determine the importance of the correlation instead of the two variables under the study: corporate diversification and financial performance of commercial banking sector firms registered at NSE. To identify the degree and direction of a linear relationship among variables, the study used the coefficient of determination ( $R^2$ - examines the goodness of fit in regression analysis) and the coefficient of multiple correlations. To test for overall significance, use an ANOVA with the F-Test, it determines if variances of two variables are identical and the two-tailed test was used to rule out the alternative that the variances are not equal

## CHAPTER FOUR: DATA ANALYSIS

### 4.1 Introduction

This chapter contains the outcomes of the analysis on the influence of corporate diversification based on the performance of enlisted commercial banks. The findings are based on analyzed data ranging between 2014 and 2019.

### 4.2 Descriptive Statistics

The following Table 4.1 below contains the summary statistics with regard to key variables, namely: corporate diversification, firm size and banks performance enlisted at quoted Kenya's commercial banks. The data set described in the below table will be a representation of the whole population.

**Table 4.1: Summary Statistics**

<b>Variable</b>	<b>Observations</b>	<b>Mean</b>	<b>Std. Dev.</b>	<b>Min</b>	<b>Max</b>
<b>ROA</b>	66	0.0486	0.0474	0.008	0.223
<b>Market share</b>	66	27.68818	15.2247	4.788293	60.74192
<b>Ln of Firm size</b>	66	9.8168	5.6485	8.4780	10.9673

*Ln=Natural logarithm*

As shown in Table 4.1, the measurement of average performance by ROE was .0486 the standard deviation being .0474 with a maximum of .223 and a minimum of .008. This implied that most commercial banks made profits over the study period. On market share, most banks had average

share of 27.7 percent where a bank with the least share being 4.7 percent while the dominant bank had a market share of 60.7 percent. Figure 4.1 shows trends on average market share per bank. It can be depicted that BK group PLC followed by KCB group had the highest average market share of 54.9% and 50.5% respectively. National Bank of Kenya and HF group Ltd had the least market share of 10.2% and 5.8% respectively.

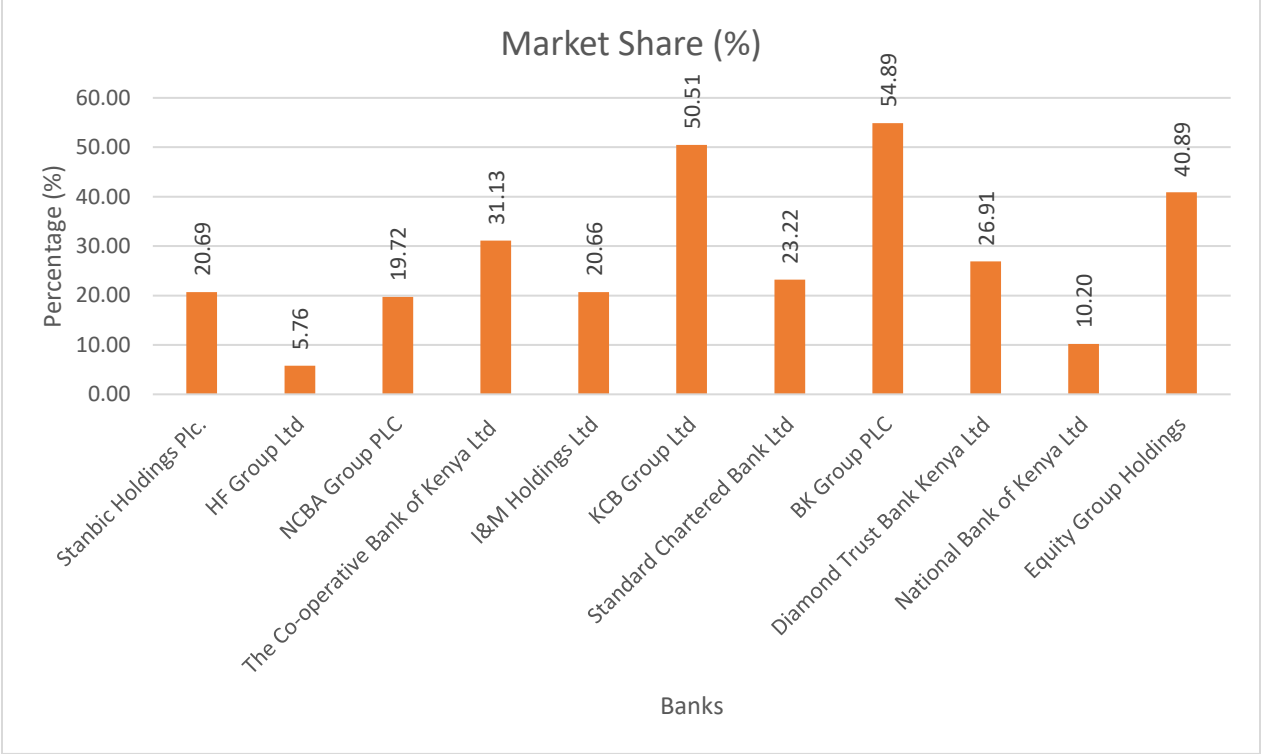
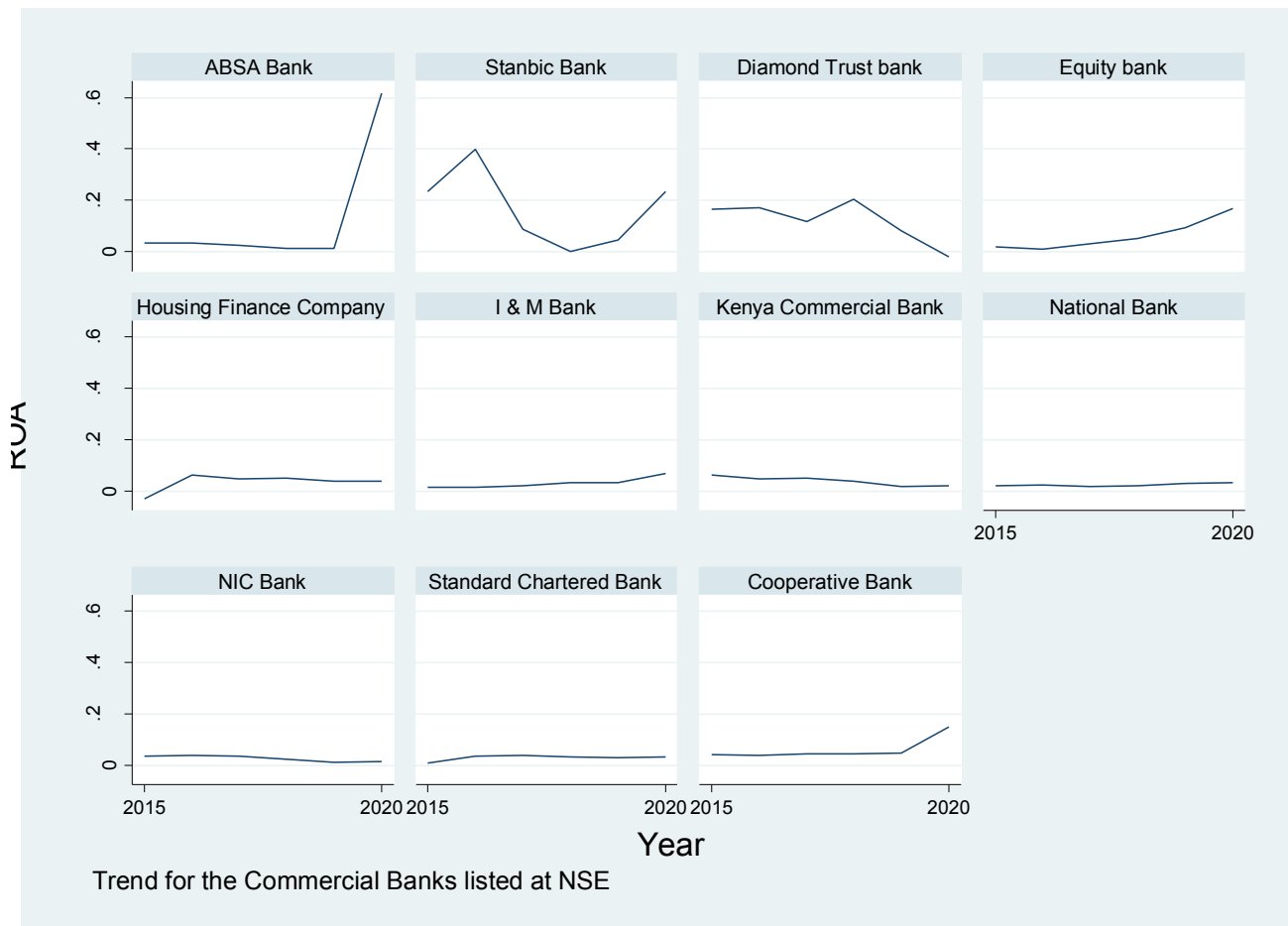


Figure 4.1: Trends on market share (%)

Corporate diversification as measured by HHI computed by squaring each of the bank average market share which summed up to 10,849.2. The average HHI obtained signaled a high concentration market. From table 4.1, the average firm size, as assessed by the natural logarithm of total assets, was 9.8168.and the average ranged between 8.478 and 10.9673.

Further technical analysis of the return on assets is being carried out to look into the pattern of banks listed on the NSE, as previously indicated. According to the graphical analysis (figure 4.1), House Finance Company, I&M Bank, KCB, National banks, NIC and standard chartered bank possess similar characteristics such that their ROA is constant over time. ABSA, Equity bank and Cooperative bank present an increasing pace over time. On the contrary, Stanbic bank and Diamond trust bank shows a decreasing pace over time. For more details, figure 4.1 shows the financial performance trends of a few selected commercial banks at the NSE as of December 2019.



*Figure 4.2: Graphical scrutiny of financial performance of NSE Listed Commercial Banks*

### **4.3 The influence of corporate diversification on financial performance of listed commercial banks at NSE**

The research examines the impact of business diversity on the financial performance of NSE-listed commercial banks. Variations across panels and within parameters highlight this inclination, as shown by descriptive statistics. The study primarily focuses on investigating how the stated variables, due to their stochastic nature, connect to financial performance in either firm under investigation. After pre-estimating multicollinearity and unit roots tests, the hypothesized model was estimated. A Hausman model specification test was also carried out.

#### **4.3.1 Correlation Analysis**

Correlation analysis is used to establish the extent of the correlation of different pairs of variables under study. It measures/calculates the correlation coefficient between 1 and -1. This further predicts the presence or absence of multicollinearity which is considered to exist when there is perfect linear relationship between the variables under the study. The correlation matrix was used to determine if any pair of independent variables was highly collinear through the magnitude of the correlation coefficient of the pairs of variables established. This bias arises when one or more pairs of independent variables are perfectly correlated to each other.

**Table 4:2: Correlation Matrix**

Variables	ROA	HHI	Firm Size
ROA	1		
HHI	-0.1688	1	
Firm Size	-0.1053	0.3923	1

If the correlation coefficient was equal to or greater than 0.5, multicollinearity was present, which could lead to spurious regression. As showed in Table 4.2, the study established that none of the pairs had a correlation exceeding 0.5 (starred correlations) which is the criterion for allowing such variables to be kept.

#### **4.3.2 Unit root test**

To avoid change of the estimates over time due to non-stationarity, unit root tests were applied to investigate or detect non stationarity in all the study variables which in turn leads to spurious estimates. In this case, corporate diversification and firm size indicators under study were subjected to Levin-Lin-Chu unit-root test. In this test if variables are found to be non- stationary, first differencing or successful lagging is applied until the bias is eliminated. Presence of unit root leads to spurious regressions.

The null hypothesis in this case was that the variable under consideration were non-stationary or has unit root and in this study, it was stated as; null and alternative hypothesis state that Panels contain unit roots and Panels are stationary respectively.



Table 4.3, the Levin-Lin-Chu unit-root test revealed that all variables had p values less than significance level of 0.05 which led to rejection of the null hypothesis (that the variables had unit root).

**Table 4:3: Levin-Lin-Chu Unit-Root Test**

<b>Variables</b>	<b>Unadjusted t- statistic</b>	<b>P value at lag(0)</b>	<b>Order of Integration</b>
<b>ROA</b>	-28.2947	0.0000	I(0)
<b>HHI</b>	-9.5e+02	0.0000	I(0)
<b>Firm size</b>	-36.7598	0.0000	I(0)

*Source: Author's computation. Significance pegged at 5% level.*

#### **4.3.3 Hausman Specification Model**

In order to determine the best fitting model of firm performance, this study adopted Hausman specification test where the fixed effects model specification was compared to the random effects model. According to Woodridge (2004) under fixed effects, there is an assumption that all the dispersion in observed effect is due to sampling error whereas under random effects, there is allowance that some of the dispersion observed may illustrate real differences in effect of size across firms (Baltagi, 2005), in this case listed firms under NSE. The null hypothesis was that the differences in estimates are not systematic. Consequently, on conducting the test, it was shown that P-value of 0.8481, at 0.05 level of significance, implied that the individual level effects are best

modelled using the random effects method.

Table 4:4: Test for Model Selection: REM versus FEM

	Coefficients		(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
	(b) fixed	(B) random		
HHI	-.026645	-.0264261	-.0002189	.0096331
Firm_Size	1.50e-06	1.03e-06	4.75e-07	8.61e-07

b = consistent under Ho and Ha; obtained from xtreg  
 B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

$$\begin{aligned} \text{chi2(2)} &= (b-B)' [(V_b-V_B)^{-1}] (b-B) \\ &= 0.33 \\ \text{Prob>chi2} &= 0.8481 \end{aligned}$$

The Hausman test preferred the random effects model to the fixed effects model in this study because the latter does not limit estimation effects of the mean of the distribution effects to one true effect (Hausman, 1978). Despite the fact that each commercial bank included in the study had different information regarding distinct effect sizes, it was vital to verify that all of these effect sizes were reflected in the summary estimate.

#### 4.4 Regression Results for Random Effects Model

The random effects invariant is regarded valid for interpretation after completing the appropriate pre-estimation diagnostic and model selection procedures. Note that, unlike Anderson and Hsiao, this model does not imply strict exogeneity, (1982). Explicitly estimating random effects can be beneficial in some cases since the effects can provide information on parameters of interest. Table 4.5 indicates the results of the estimated model.

Table 4:5: Results for Random Regression Model

Random-effects GLS regression		Number of obs	=	66		
Group variable: <b>compcode</b>		Number of groups	=	11		
R-sq:		Obs per group:				
within	= 0.0936		min	=	6	
between	= 0.8768		avg	=	6.0	
overall	= 0.2721		max	=	6	
corr(u_i, X) = 0 (assumed)		Wald chi2(2)	=	23.55		
		Prob > chi2	=	0.0000		
ROA	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
HHI	-.0264261	.0058602	-4.51	0.000	-.0379119	-.0149402
Firm_Size	1.03e-06	9.84e-07	1.04	0.296	-9.01e-07	2.96e-06
_cons	.2726131	.04485	6.08	0.000	.1847088	.3605174
sigma_u	0					
sigma_e	.09023263					
rho	0	(fraction of variance due to u_i)				

The results in Table 4.5 shows the total variations of 27.2% explaining financial performance of firms while the other proportion may have been factored in by other factors not considered by this study. Also, 87.7% of the variations explain bank financial performance in between the panels and approximately 9.36% of the variations explain firm financial performance within the panels. Despite low variations (Overall variation) in respective panels which is expected due to cross sectional component, the study revealed overall significance of 0.0000 which means that corporate diversification as well as natural logarithm of firm size employed in the model which were statistically significant at the selected significance level (0.05) in explaining the financial performance of listed commercial banks firms at NSE.

The final estimated model is as indicated below;

$$FP_{it} = 0.273 - 0.0264HHI + 1.03e^{-06}FS_{it} \dots\dots\dots$$

#### 4.1

Further, the results specifically indicated that the coefficients of the HHI as being statistically significant and had a negative influence performance of listed bank at NSE since their p values were 0.000 and none of the confidence intervals included zero. However, firm size was found to be positive and statistically insignificant in influencing financial performance of commercial banks listed at NSE. This was after its p value exceeded the selected significance levels. However, there was absence of correlation between the stochastic term and the regressors.

Due to time series component, the random effects model makes assumptions on normal distribution of the stochastic random error term, linearity, constant variance of error terms across observations and no serial autocorrelation of the error terms. However, regarding heteroscedasticity and autocorrelation, Waldinger (2011) suggests that standard regression packages (such as STATA) normally does the adjustment of standard errors automatically if one specifies a random effects model. This implies that panel data approach takes care of the presence of varying variance of the stochastic terms across all the observations in the panels and any suspected or proved correlation between random error terms of the subsequent time periods. Therefore, the following post estimation diagnostic tests were undertaken so as to validate the yielded estimates.

#### 4.4.1 Multicollinearity test

Following the correlation analysis, the study suspected presence of multicollinearity which made the researcher to conduct the confirmatory VIF test. All those pairs of variables which exhibited high correlation coefficient of more than 0.5 in absolute terms were differenced once. Upon conducting VIF test, actually all of them exhibited VIF of less than 10 as recommended by Mukras (1993). This implies that multicollinearity was absent. Table 4.6 indicates more other details.

**Table 4:6: VIF Test**

Variable	VIF	1/VIF
Firm_Size	1.46	0.685389
HHI	1.46	0.685389
Mean VIF	1.46	

#### 4.4.2 Normality Test

This study used the Shapiro Wilk test for normal data or the distribution of stochastic random error terms to proceed with estimate. Table 4.7 below showed that at 10% significance level, overall residuals of the variables were normally distributed.

**Table 4:7: Test for Normality**

Variable	Observations	W	V	Z	Prob>z
Residuals	36	0.98873	0.411	-1.860	0.96853

Table 4.7 indicates that the residuals p-value of 96.853 is more than the 5% level of significance, meaning that the null hypothesis of residual normality is not rejected. As a result, data was spread evenly.

### 4.4.3 Linearity

To investigate these impacts, the study used a scatter plot.. The scatter plot of estimated residuals square against the fitted values is shown by Figures 4.3 below. The plots are very symmetrical around 45-degree lines, implying that the model fails to produce systematic errors when making abnormally large or small predictions.

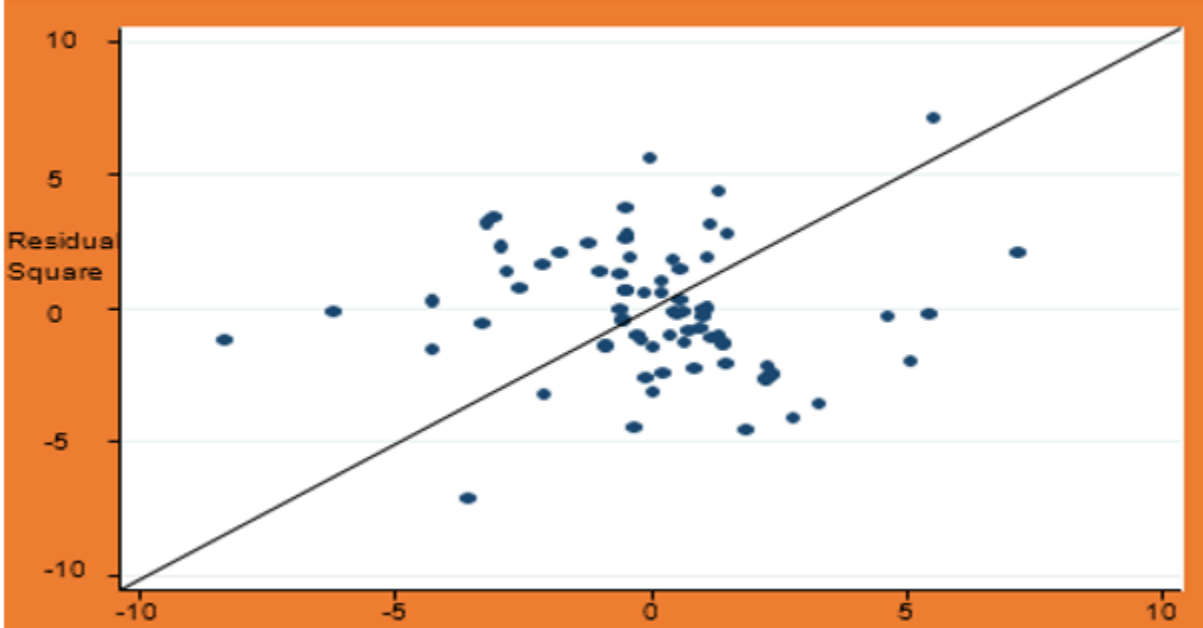


Figure 4.3: Graph of Residual Squares against the fitted values of Firm Financial Performance

#### **4.5 Discussion of the findings from random effects model**

The study attempted to provide an explanation on effect of corporate diversification on the financial performance of listed commercial banks in Kenya. Corporate diversification as the main variable of the interest was the explanatory variable. The findings showed that corporate diversification had a negative linkage with the financial performance of listed commercial banks in Kenya. Further, this implied that an increase in unit of corporate diversification makes the performance to decrease by 0.026 holding other factors constant.

The negative impact could also be attributed to a weak and ineffective corporate governance framework, which encourages enterprises to diversify and, as a result, has a detrimental influence on commercial banks' financial performance. This finding differed with the works of Lewellen, (1971) who argued that corporate diversification can advance revenue streams, debt capacity, mitigate likelihood of collapse as a result of bankruptcy by venturing into new offering/markets and expand asset disposition and profitability. It is argued that market based risk measures facilitates tradeoff between decrease in operating danger caused by diversification with augmented financial leverage, and as a result systematic risk remains the same (Raphael & Livnat, 1988).

Firms reduce their operating risk by diversification and surge financial leverage to ride on the coat-tails of tax benefits. A diversified firm can shift money from unit with excess to those starved of cash without taxes or transaction outlays (Bhide, 1993).

Furthermore, although not significantly connected to performance of commercial banks listed on the NSE, company size was found to have a favorable relationship with performance. This may be as a result of the fact that big firms are highly decentralized and scattered over different operating locations which give rise to information overloads to management. This finding contrasted with the works of Speckbacher et al., (2003) who examined the implication of organization growth and size on firm's performance.

The authors concluded that expansion of the firm size is more likely to lead to more dispersed and complicated management processes. Consequently, large firms require a systematic, specialized, formal and sophisticated management control system which give rise to more operational overhead costs and lower the value of the firm. A similar study supporting the negative association between firm size and performance include Kartikasari and Merianti (2016).



## **CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS**

### **5.1 Introduction**

This chapter provides the summary, conclusion, recommendation from the research findings. The areas of further research is provided.

### **5.2 Summary of the study findings**

Product diversification occurs whereby the company develops a new product to be offered in the same market it operates. Market diversification occurs whereby the company enters a completely new market with the same product it offers. . The goal of the study was to determine the impact of business diversity on the financial performance of Kenyan commercial banks. The study used a panel survey research design and collected secondary data from 11 commercial banks that are listed on the NSE.

The research took place between 2014 and 2019. A combination of descriptive and inferential statistics were used to analyze the data. The size of the firm was employed as a control variable. The study used the average performance as evaluated by ROA, which was .0486 on average, as a basis for estimation. The corporate diversification as measured by HHI had a mean of 10849.2 implying highly concentrated market. The model coefficient of determination  $R^2$  which indicates the percentage of variation that can be attributed to the model was found to be 27.2%. This signifies that the captured explanatory variables namely corporate diversification and firm size are important explainers of banks performance. The model is thus deemed good for making further prediction on banks performance level.

The other 72.8% is attributable to factors outside the consideration of this model. The study tried

to explain the impact of corporate diversification on the financial performance of Kenya's publicly traded commercial banks. According to the random effects results, corporate diversity has a negative relationship with the performance of Kenya's listed commercial banks on the Nairobi Stock Exchange (NSE). This means that increasing a unit of business diversification lowers performance by 0.026 units, assuming everything else is equal. It was discovered that the effect was statistically significant. Firm size, on the other hand, had no statistical significance despite having a beneficial influence.

### **5.3 Conclusions**

As argued in the literature, corporate diversification can advance revenue streams, debt capacity, mitigate likelihood of collapse as a result of bankruptcy by venturing into new offering/ markets and expand asset disposition and profitability. This in turn is expected to improve the value and performance of business establishment. On basis of the study findings, listed commercial banks are highly concentrated in the market.

Furthermore, the study finds that corporate diversity has a negative and substantial link with the performance of commercial banks listed on the New York Stock Exchange. The finding's implication could be linked to excessive diversification, as evidenced by the Herfindahl-Hirschman Index. Too much diversification could hurt a company's performance by increasing costs associated with internal inefficiencies, agency fees, and internal control issues among and among publicly traded commercial banks.

### **5.4 Recommendations**

Over the last decade, organizations and other institutions including those in financial sector have largely embraced the concept of diversification. Most have diversified their revenue streams in

order to achieve higher margins of profits. As indicated by the empirical evidence, there is a negative relationship between corporate diversification and the performance of NSE-listed commercial banks, with a strong HHI score indicating excessive diversification. As a result, the study advocates for dynamic approaches to market competition with the ultimate goal of improving performance. Top management teams need to define clearly the corporate purpose by outlining the direction in which they want to move. It is thus clear that corporate diversification might make sense if there's no room for growth in the core business, while focusing on the core makes more sense if there's a big economy of scale and room for growth in that core business.

### **5.5 Areas of further study**

The study's main goal was to determine the impact of corporate diversification on enlisted banks' financial performance in Kenya. The majority of the data was derived from secondary sources. There is thus need to have more studies focusing on the qualitative study as well as other industries such as manufacturing sector. Further, there is need to have similar study focusing on east Africa countries for comparison purposes.

## REFERENCES

- Adebayo, O. And John, A. O. (2013). Effect of firm's size on performance of listed manufacturing firms in Nigeria, *Prime Journal of Business Administration and Management* 3(9), 1171-1175,
- Becker-Blease, J., Kaen, F., Etebari, A., and Baumann, H. (2010). Employees, firm size and profitability in U.S. manufacturing industries. *Investment Management and Financial Innovations*, 7(2), 7-23.
- Bhide, A. (1993). The Hidden Cost of Stock Market Liquidity, *Journal of Financial Economics*, 34(1), 31- 51
- Boubaker, A., Mensi, W. and Nguyen, D. K. (2008). "More on Corporate Diversification, Firm Size and Value Creation", *Economics Bulletin*, Vol. 7, No. 3, 1-7
- Chkir, E. I. and Cosset, J. (2001). Diversification strategy and firm Performance of multinational corporations, *Journal of Multinational Financial Management* 11, 17–37
- Daud, W., Salamudin, N. & Ahmad, I. (2009). Corporate diversification performance, *Strategic Management Journal*, 2, 1, 01-18
- Doaei, M. and Shavazipour, B. 2013. Corporate diversification's effects on efficiency and productivity: case study of manufacturing firms listed in Bursa Malaysia. *International Journal of Business and Development Studies*, 5 (1), pp. 77-96.

- Gujarati, D. N. and Porter, D. C., (2009). *Basic Econometrics*. 5th ed., Singapore: The McGraw-Hill Companies, Inc.
- Hymer, S. H. 1976. The international operations of national firms; A case study of foreign investment. Cambridge, Mass: MIT Press.
- Iraya C. and Musyoki L. N. (2013). Performance of socially screened portfolio at the Nairobi Securities Exchange. *International journal of humanities and social science*, 3 (6)
- Jensen, M. C. & Meckling, W. H. (1976). Theory of the Firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3 (4)
- Lewellen, W. G. (1971). A pure financial rationale for the conglomerate merger. *Journal of Finance*, 26, 521-537.
- Mansi, S.A. & Reeb, D.M. (2002). Corporate diversification: *Journal of Finance*, 57, 2167–2183
- Mazur, K. (2007). The determinants of capital structure choice: Evidence from Polish companies. *International Advances in Economic Research*, 13(4), 495-514
- Meyer, M., Milgrom, P., & Roberts, J. (1992). Organizational prospects, influence costs, and ownership changes. *Journal of Economics & Management Strategy*, 1(1), 9–35.
- Mwangi, M. (2018). The influence of firm size on value of the commercial banks in Kenya, *European Scientific Journal March 2018 edition 14(7)*, 1857 – 7881

Mwaniki, G. M, and Omagwa, J. O. (2017). The influence of asset structure on the profitability of quoted firms in commercial and services segment, *Research Journal of Finance and Accounting* 8(4)

Mwaniki, G. M, and Omagwa, J. O. (2017). The influence of asset structure on the profitability of quoted firms in commercial and services segment, *Research Journal of Finance and Accounting* 8(4)

Nairobi Security Exchange. (2018). History of organization, Nairobi stock exchange Handbook, various editions, NSE

Naslmosavi, S. Sofian, S. & Mohamed Saat, B. (2013). EFFECT of Audit Firm Size on Auditors Opinion, *Asian Social Science*9 (9); 1911-2025

Noyé, D. (2002). Manager les performances [Managing Performance], Insep Consulting Editions, Paris,

Osifo. O. and Osagie, E. E (2020). Foreign Diversification and Performance of Quoted Deposit Money Banks in Selected Sub-Sahara African Countries. *Journal of Business and Economics, Volume 5*

Romano, C. A., Tanewski, G. A., and Smyrnios, K. X. (2000). Capital structure decision making: A model for family business. *Journal of Business Venturing*, 16, 285-310

Stulz, R. M. (1990). Managerial discretion and optimal financing policies. *Journal of Financial Economics*, 26(1), 3–27

## APPENDICES

### Appendix I: Listed Commercial Banks in Kenya

1. Barclays Bank of Kenya
2. Stanbic Kank
3. Diamond Trust Bank
4. Equity Bank
5. Housing Finance Company
6. I & M Bank
7. Kenya Commercial Bank
8. National Bank of Kenya
9. NIC Bank
10. Standard Chartered Bank
11. Cooperative Bank of Kenya





**Appendix III: Data on market share**

<b>Bank</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
Stanbic Holdings Plc.	21.36%	22.12%	18.91%	18.73%	20.90%	22.12%
HF Group Ltd	6.05%	7.21%	6.34%	5.34%	4.82%	4.79%
NCBA Group PLC	17.27%	21.03%	18.21%	18.51%	18.89%	24.39%
The Co-operative Bank of Kenya	29.72%	32.61%	31.45%	29.93%	30.31%	32.77%
I&M Holdings Ltd	22.43%	22.34%	17.93%	18.29%	20.78%	22.19%
KCB Group Ltd	39.01%	60.40%	49.82%	49.24%	50.95%	53.63%
Standard Chartered Bank Ltd	24.72%	25.52%	22.32%	22.72%	21.86%	22.16%
BK Group PLC	47.51%	55.05%	50.41%	55.21%	60.43%	60.74%
Diamond Trust Bank Kenya Ltd	23.14%	27.28%	26.99%	29.33%	28.34%	26.40%
National Bank of Kenya Ltd	12.43%	12.87%	10.15%	8.64%	8.37%	8.71%
Equity Group Holdings	35.56%	43.37%	38.86%	40.85%	42.35%	44.32%

**Appendix IV: Profit after tax**

<b>BANK</b>		Stanbic Holding s Plc.	HF Group Ltd	NCBA Group PLC	The Co- operativ e Bank of Kenya Ltd	I&M Holdings Ltd	KCB Group Ltd	Standard Chartere d Bank Ltd	BK Group PLC	Diamon d Trust Bank Kenya Ltd	National Bank of Kenya Ltd	Equity Group Holdings
<b>2014</b>	<b>Q1</b>	4,456,539	221,181	1,468,659	2,465,574	1,695,487	13,674,565	2,513,091	5,807,046	4,005,464	410,770	3,878,656
	<b>Q2</b>	3,007,857	474,442	1,786,586	4,715,331	2,358,698	8,756,864	6,060,905	9,674,592	3,487,675	880,090	7,660,671
	<b>Q3</b>	4,053,876	719,782	2,754,569	6,312,924	4,457,498	11,674,549	8,226,251	13,785,662	5,986,509	1,020,724	11,213,010
	<b>Q4</b>	5,686,661	975,336	1,189,056	7,756,409	3,365,598	16,848,862	10,436,180	18,316,825	5,708,430	870,702	17,151,365
<b>2015</b>	<b>Q1</b>	5,063,466	221,552	1,768,698	5,685,609	1,975,640	14,974,685	1,808,849	16,359,345	3,376,087	494,955	4,295,147

	<b>Q2</b>	3,378,565	485,140	2,286,759	6,489,750	2,267,554	9,241,716	3,877,266	18,750,900	2,164,800	1,732,024	8,568,216
	<b>Q3</b>	5,377,629	777,465	3,365,498	7,145,933	6,189,650	13,734,458	6,225,813	15,875,094	3,177,659	2,253,346	12,810,611
	<b>Q4</b>	4,905,734	1,196,969	3,497,580	11,705,559	3,308,675	19,623,071	6,342,427	20,484,058	6,599,806	(1,153,477)	17,303,438
	<b>Q1</b>	4,687,765	776,587	2,109,567	10,785,659	2,117,305	15,646,750	2,582,948	14,747,562	7,456,798	334,576	4,155,256
	<b>Q2</b>	1,976,643	612,553	2,497,860	7,410,084	4,176,807	10,500,253	2,583,876	21,804,376	3,698,609	311,294	10,079,935
	<b>Q3</b>	2,709,975	837,748	1,870,856	10,541,184	5,957,324	15,947,450	7,730,202	20,664,580	4,497,587	521,045	15,013,416
<b>2,016</b>	<b>Q4</b>	4,418,589	905,829	2,008,569	12,676,210	6,717,452	9,408,497	9,049,307	20,755,867	7,728,140	162,190	16,545,794

<b>2,017</b>	<b>Q1</b>	4,503,793	88,338	3,345,908	3,227,854	7,278,065	17,805,672	2,053,076	22,678,580	5,878,550	59,453	4,850,112
	<b>Q2</b>	1,737,229	159,012	4,175,553	6,637,412	3,430,086	13,684,680	3,426,768	21,785,698	4,478,608	179,822	9,338,685
	<b>Q3</b>	5,209,658	159,728	2,298,647	5,897,509	7,756,459	15,076,294	4,709,355	24,765,094	3,345,507	138,137	14,603,963
	<b>Q4</b>	4,309,494	126,216	3,785,601	11,405,065	6,766,256	19,705,130	6,914,098	23,348,880	6,925,040	410,783	18,869,209
<b>2,018</b>	<b>Q1</b>	3,309,758	37,056	3,364,609	3,448,266	1,702,161	5,183,508	1,837,000	24,785,608	1,680,883	(278,543)	19,690,663
	<b>Q2</b>	3,552,336	6,828	2,599,757	7,140,160	3,868,111	12,111,360	4,466,719	25,437,690	3,497,634	(282,766)	10,941,384
	<b>Q3</b>	6,108,675	(332,017)	4,006,759	10,313,936	5,850,835	18,044,182	6,305,589	26,006,409	5,344,979	21,968	15,726,698

	<b>Q4</b>	6,277,166	(44,884)	4,509,645	12,732,487	7,950,819	23,994,970	8,099,193	27,366,616	6,686,612	7,008	14,530,976
<b>2,019</b>	<b>Q1</b>	2,386,480	(158,294)	3,007,975	3,599,109	2,786,598	19,786,509	2,409,806	27,007,659	1,832,117	106,338	6,153,081
	<b>Q2</b>	4,705,478	(97,031)	3,387,657	7,469,480	4,525,867	12,722,943	4,705,902	30,674,579	3,884,030	150,070	11,919,475
	<b>Q3</b>	5,598,860	(84,617)	4,178,658	9,256,498	6,634,673	19,163,215	6,226,150	34,678,560	5,621,046	407,152	19,824,654
	<b>Q4</b>	6,380,616	(34,314)	4,606,020	14,311,247	10,309,038	25,165,168	8,236,773	37,308,336	6,785,603	(302,277)	22,561,470

**Appendix V: Total Assets**

<b>BAN K</b>		Stanbic Holdings Plc.	HF Group Ltd	NCBA Group PLC	The Co- operative Bank of Kenya Ltd	I&M Holdings Ltd	KCB Group Ltd	Standar d Charter ed Bank Ltd	BK Group PLC	Diamon d Trust Bank Kenya Ltd	Nationa l Bank of Kenya Ltd	Equity Group Holdings
<b>2014</b>	<b>Q1</b>	188,660,873	50,884,600	154,977,658	247,319,159	189,506,308	448,675,492	217,681,007	386,508,953	203,564,408	99,148,949	295,263,079
	<b>Q2</b>	201,564,515	49,443,003	160,648,754	266,672,685	211,864,573	462,896,750	228,719,900	402,786,329	208,675,098	109,284,516	302,915,330
	<b>Q3</b>	197,859,409	56,885,752	178,648,646	270,767,929	207,563,917	47,768,007	222,945,749	443,762,980	210,780,566	117,095,238	339,442,401
	<b>Q4</b>	180,998,985	60,961,680	123,897,556	288,607,559	199,675,490	490,338,324	222,495,824	482,607,964	211,539,412	123,091,996	344,571,649
<b>2015</b>	<b>Q1</b>	196,984,672	62,515,629	177,470,634	298,076,075	201,675,409	504,676,038	232,844,222	497,503,692	229,057,554	116,946,418	372,525,130

	<b>Q2</b>	200,564,701	66,018,469	198,564,562	311,760,094	212,867,409	566,609,777	228,193,508	499,785,350	232,786,508	124,427,662	400,993,037
	<b>Q3</b>	207,460,763	66,503,799	201,674,051	232,417,659	207,009,757	607,251,909	231,642,457	511,786,409	258,987,609	118,080,998	445,753,525
	<b>Q4</b>	208,451,915	71,659,434	210,645,008	342,499,809	198,607,654	558,094,154	233,965,447	561,226,400	271,608,597	125,440,316	428,062,514
<b>2016</b>	<b>Q1</b>	212,087,586	71,549,830	199,674,565	363,008,665	203,186,225	554,307,665	249,757,072	523,865,098	288,606,097	115,575,086	382,786,453
	<b>Q2</b>	215,086,376	71,302,429	203,780,658	359,536,403	210,337,904	559,941,978	249,757,072	543,986,509	291,788,509	116,522,007	444,436,850
	<b>Q3</b>	217,546,930	73,464,830	211,897,040	354,048,191	209,494,764	570,100,886	264,258,028	587,470,293	319,288,856	113,585,707	468,046,563
	<b>Q4</b>	214,682,729	71,930,140	212,674,571	351,856,250	191,656,837	579,754,620	250,482,000	638,336,598	328,044,501	115,292,392	473,713,133

<b>2017</b>	<b>Q1</b>	222,066,577	71,906,926	224,883,664	378,462,425	203,708,665	588,563,097	274,234,901	633,498,160	330,785,697	115,659,466	393,863,646
	<b>Q2</b>	234,258,513	71,622,852	217,049,640	383,326,294	229,223,755	617,674,563	289,077,286	689,894,301	334,675,099	116,628,892	504,944,293
	<b>Q3</b>	233,764,760	70,787,763	244,764,067	385,067,409	233,654,099	643,832,809	310,504,845	702,764,985	455,786,076	116,281,301	518,248,176
	<b>Q4</b>	248,738,719	67,541,116	255,784,567	386,857,657	240,110,741	646,668,939	285,724,441	727,204,700	363,303,400	109,873,141	524,465,745
<b>2018</b>	<b>Q1</b>	255,437,659	66,839,938	243,706,480	397,793,423	246,327,093	647,473,915	293,994,828	745,740,982	370,786,509	105,233,300	573,384,730
	<b>Q2</b>	278,780,976	65,510,228	266,565,619	398,426,995	283,070,163	667,681,636	295,955,246	751,785,406	376,077,751	113,341,453	542,016,243
	<b>Q3</b>	288,785,682	63,372,953	244,865,866	404,152,889	289,595,306	684,165,200	288,574,370	844,975,692	384,976,405	112,450,342	560,385,886



	<b>Q4</b>	290,570,254	60,588,226	250,865,477	413,413,215	288,522,049	714,312,591	285,404,023	877,401,364	377,719,314	114,849,105	578,650,905
<b>2019</b>	<b>Q1</b>	303,274,090	59,079,545	264,897,456	425,674,260	290,768,402	725,663,429	301,366,355	892,564,920	370,091,181	104,742,164	605,667,335
	<b>Q2</b>	313,309,838	56,995,658	267,986,482	429,591,235	317,053,693	746,519,266	294,542,970	911,897,409	375,929,682	114,595,518	638,662,575
	<b>Q3</b>	309,674,513	57,411,060	270,764,809	445,879,609	324,349,839	764,334,651	290,564,005	986,045,632	382,496,447	107,163,530	677,105,654
	<b>Q4</b>	303,624,592	56,454,917	272,019,060	457,008,946	315,290,674	714,312,591	302,139,056	1,019,075,587	386,230,186	111,950,635	673,688,542