THE EFFECT OF PRIVATISATION ON FINANCIAL PERFORMANCE OF FIRMS IN KENYA

BY

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D61/60911/2013

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

NOVEMBER, 2014
DECLARATION

This research project is my original work and has not been submitted for a degree in any other university. I also declare that this project contains no material written or published by other people except where due reference is made and author duly acknowledged.

Signed……………………………………….………Date…………………………

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

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DEDICATION

I dedicate this work to My Dear Wife Esther and Son Max Mwangi for the sacrifice they made for me to complete this project. Also to My Mum Jane Mwangi, Bro Magochi, Sisters Tabby, Jeddy and Cynthia for their love, care, concern, support, encouragement and enthusiasm that inspired me to achieve this goal.
ACKNOWLEDGEMENTS

I take this opportunity to thank God for good health and for bringing me this far. I also want to extend special gratitude to my supervisors Mr. Mirie Mwangi & Vincent Kamasara whose guidance, encouragement and patience in reading, correcting and insightful comments have seen this study a success. May God bless you abundantly.

I wish also to thank the University of Nairobi fraternity both the lecturers and non-academic staff for their undying support during the entire period of the MBA course. Your support is highly appreciated.

To my fellow students, I value your moral support and encouragement.

Lastly to my family who have been with me throughout this journey. God bless you all.
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LIST OF ABBREVIATIONS

IPO – Initial public offer
NSE - Nairobi securities exchange.
ROA- Return on Assets
ROS- Return on Sales
ROE- Return on Equity
SALEFF- Sales per employee
NIEFF -Net income per employee
SOEs - State owned enterprises
DIVISAL- Dividends by sales
DPS- Dividends per Share
EMPL-Employment
EPS-Earnings per share
ABSTRACT

The aim of this study was to investigate the effect of privatisation on financial and operational efficiency of firms in Kenya. The data for the study was obtained from secondary sources; specifically, handbook from the Nairobi Securities Exchange, Offer Prospectuses, as well as published annual reports and financial statements of the privatized firms five years before and five years after privatization. To test our predictions, we followed the techniques of Megginson et al. (1994) in order to determine post privatization performance changes. We calculated the mean value of each variable for each firm over the pre and post privatization periods, we then used the T-test and the Wilcoxon sign rank test as principal methods of testing for significant changes in the variables. Results obtained from this study were mixed. Whereas some companies showed improvements in some indicators, other companies have shown decline in some indicators after privatization. However, in spite the mixed results, the overall picture showed improvement in performance for the listed firms and no improvements for non-listed firms in our sample.
CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

The transfer of government owned shareholding in public enterprises to private shareholders is one of the revolutionary innovations in economic policies of both developed and developing countries (Chambers, 2008). However, its rationale, application and levels of success vary from country to country. Fierce debates have been conducted on two controversial principles of theory of privatization comparative efficiency of public and private enterprises and public as opposed to private ownership.

The general belief and literature tend to suggest a greater internal efficiency in private firms than in public firms. However evidence in many countries including Kenya does not bear this out. There seems to be to be no clear cut difference in performance between private and public firms (Ogot, 1997).

State intervention in the economy has been supported by a number of economic theories, including those developed by Pareto and Walras. However, state intervention in corporate management has been contested by agency theory and property rights theory.

Pareto (1923), Walras (1910), argued that it was important and necessary for the state to intervene in the economy in order to regulate the failures and imperfections of the ‘invisible hand of the market’.

By contrast, Shleifer and Vishny (1997) and Vickers and Yarrow (1988) argued that state intervention in public firms results in excessive staff numbers, poor product choices, a lack of investment and poor management incentive plans. Research on the comparative efficiency of public and private firms has required empirical studies in order to test
competing hypotheses. Megginson et al. (1994) developed a widely recognized method aimed at assessing changes in firm performance before and after privatization.

Based on a global sample of 61 firms in 32 industries over the period of 1961-1990, Megginson et al. (1994) showed that privatization resulted in increased profitability and lower debt levels. Other studies have produced different results. For example, a study by Harper (2001) based on an analysis of 178 Czech companies found that profitability declined immediately after privatization.

In their landmark study ‘From state to market’, Megginson and Netter (2001) presented a review of the literature in this area. More recently, Bozec (2004) reviewed 89 empirical studies in the field. 56 studies suggested that private firms were more efficient than public firms, while 11 studies found that public firms were more efficient than private firms. Charreaux (1997) questioned whether public firms are ‘necessarily less efficient’.

Most empirical studies have highlighted the greater efficiency of private firms compared to public firms. However, the results are too inconsistent to draw any definitive conclusions. The conflicting results of research in this area cannot be ignored.

1.1.1 Privatization

Privatization is the transfer of ownership of an enterprise through the sale of assets from the public to the private sector (Kibera, 1996). Privatization is also defined as the supply-side economics, which hinges on neo-classical hypothesis that private enterprises bring better efficiency and more rapid growth of such organizations (Ogot, 1997). Privatization
may also be defined as a generic term employed to describe a range of policy initiatives designed to alter the mix of ownership or management away from the government in favour of the private sector (Nyong’o, 2000).

Schneider (2003), defines privatization as options for involvement of private capital and management in the running and operations of public enterprises. It may involve the total transfer of public ownership and assets structures to private companies or conversion of public enterprises to private entities or incorporation of new private entities in place of public enterprises or public-private participation in the running of public enterprises, which can be by management transfers, leases, operational concessions, development leases, build and transfers.

According to Heydari (2001), privatization refers to all initiatives designed to increase the role of private entities for applying society resources to produce products and services by decreasing and restricting government or official’s roles. Mullins (2002) sees privatization as being the creation of freedom from direct state control and the transfer of business undertakings to private hands. Lynch (2000) also defined privatization to be the selling of an organization’s shares into private ownership.

World Bank (1999) defined privatization as “a transaction or transactions utilizing one or more of the methods resulting in either the sale to private parties of a controlling interest in the share capital of a public enterprise or of a substantial part of its assets or the transfer to private parties of operational control of a public enterprise or a substantial part of its assets”.

4
A key decision to be made by the government is the method of privatizing public entity. Generally the following factors are considered: (1) the history of the assets’ ownership, (2) the financial and competitive position of the public entity, (3) the government’s ideological view of markets and regulation, (4) the past, present and potential future regulatory structure in the country, (5) the need to pay off important interest groups in the privatization, (6) the government’s ability to credibly commit itself to respect investors’ property rights after divestiture, (7) the capital market conditions and existing institutional framework for corporate governance in the country, (8) the sophistication of potential investor, and (9) the government’s willingness to let foreigners own divested assets (Megginson and Netter, 2001).

1.1.2 Firm Performance

Firm performance is an objective measure of how well a firm can use assets from its primary mode of business and generate revenues. This term is also used as a general measure of a firm’s overall financial health over a given period of time, and can be used to compare similar firms across the same industry or to compare industries or sectors in aggregation. There are many different ways to measure financial performance, but all measures should be taken in aggregation. Line items such as revenue from operations, operating income or cash flow from operations can be used, as well as total unit sales.

According to Richard (2009), organizational performance encompasses three specific areas of firm outcomes financial performance (profits, return on assets, return on investment); product market performance (sales, market share); and shareholder return.
(total shareholder return, economic value added). In a survey on the quality, uses and perceived importance of various financial and non-financial measures, Lingle and Schiemann (2006) reported wide disparities between the perceived quality and importance of non-financial measures as compared to financial measures. Perceived inadequacies in a traditional performance measurement system that focuses on financial measures have led many organizations to switch to and put greater emphasis on forward-looking non-financial measures such as customer satisfaction, employee learning and innovation (Ittner and Lacker, 2008).

1.1.3 Privatization and Firm Performance

It is expected that as firms move from public to private ownership, their profitability increases. First, privatization leads managers to focus on profit goals because under private ownership, management is directly responsible to shareholders (Yarrow, 1986). Second, to the extent that privatization transfers both control rights and cash flow rights from politicians to managers, profitability increases through and reorient the role of government to concentrate on the provision of social and economic infrastructure efficiency gains in the form of redress of the excess labour spending that politicians needed for electoral reasons (Boycko et al., 1996). Similarly, after privatization firms should employ their human, financial and technological resources more efficiently because of a greater stress on profit goals and a reduction of government subsidies (Boycko et al., 1996; Kikeri et al., 1992). Moreover, it is also expected that output(sales revenues) was increase following privatization, because of better incentives, more flexible financing opportunities, and greater scope for entrepreneurial initiative
(Megginson et al., 1994). Regarding leverage, the shift from public to private ownership can be expected to lead to a decrease in the share of debt in the capital structure since with the end of government debt guarantees the firm’s cost of borrowing was increase and the firm has new access to public equity markets (Megginson et al., 1994). In addition, if the bankruptcy costs are significant, once government guarantees are removed the newly privatized firm should reduce its debt (Boubakri and Cosset, 2002). Furthermore, we expect that the level of employment should decline once the SOE, which is usually overstaffed, turns private and no longer receives government subsidies. Finally, once the productivity of newly privatized firms’ increases as a result of privatization, employee income should improve.

1.1.4 Privatised Firms in Kenya

From independence in 1963 up to the late 1970s, the Kenya Government pursued a Policy of mixed economy where the private sector and the public sector were allowed to exist side by side. The Government's direct involvement in productive economic activities was aimed at achieving faster economic development, regional balance, local participation and control of the economy.

By early 1980s however, the Kenya Government had realized that these State Owned Enterprises (SOE's) were not achieving their primary objectives. A number of them had accumulated huge debts/losses and depended on the Treasury for financial survival. It therefore became clear that this situation was no longer tenable and it became evident that
most of the farming, industrial and commercial activities undertaken by the Government could be more efficiently handled by the private sector.

In June 1982 the Government appointed a Working Party on Government expenditure chaired by Mr. Philip Ndegwa whose report revealed that the Government was directing a lot of its budgetary resources to support commercial activities and to provide services at subsidized rates. Consequently the Working Party recommended divestiture from some of the parastatals and full privatization of others.

The current Public Enterprise Reform and Privatization program started in July 1992, with the issuance by the Kenya Government of a Policy Paper on Public Enterprise Reform and Privatization which set out the objectives, principles, scope, and other significant aspects of the Public Enterprise Reform Program and the principles and procedures that would guide the Parastatals Reform Programme Committee (PRPC) and its secretariat, the Executive Secretariat and Technical Unit (ESTU) to facilitate the privatization process.

Under the Parastatals Reform and Privatization Program the government listed 33 strategic parastatals to be restructured and retained in the public domain and 207 non-strategic parastatals to be privatized.

Methods which have been used for privatization in Kenya are; public offering of shares, concessions, leases, management contracts and other forms of public-private partnerships, negotiated sales resulting from the exercise of pre-emptive rights, sale of assets, including liquidation and receivership.(Okelo, 1997)
As of today the following privatization transactions has taken place: 86 full divestitures 7 partial divestitures, 9 subsidiaries and associate companies and 39 tea factories.

1.2 Research Problem

Widespread privatization in recent decades has generated a large empirical literature concerning the effect of ownership on firm performance. Most studies find that privatization has a positive impact on the profitability and efficiency of firms (see Megginson and Netter (2001) for a recent survey). Surprisingly, little is known about the effect of privatization where the firms are not listed. This paper seeks to address this gap in the literature by investigating whether the performance of state-owned enterprises in Kenya is affected by privatization including non-listed firms. A number of local and international studies have been conducted on effect of privatisation on performance of firms: Makokha (2013) did a study on the effect of privatisation on financial performance of firms listed at the Nairobi securities exchange. Ochieng (2014) did a study on the effects of privatization on the financial performance of Kenya airways. The study concluded that private firms generally have higher performance than state owned firms in terms of profitability and efficiency.

Hongo (2006) did a study on the privatization rate on the performance of listed at the NSE. They concluded that private companies generally have higher performance than the other firms in terms of profitability and efficiency.

Otieno (1998) observes that little research has been undertaken in Kenya to compare the performance of SOEs before and after privatization. Makokha (2013) in her study on the effect of privatisation on financial performance of firms listed at the Nairobi securities exchange, observed no study has been conducted on privatisation has included non-listed firms.

From these analyses, the studies conducted so far have been limited to firms listed at the Nairobi Securities Exchange. No study has included non-listed firms. Further the variables used to measure performance in these studies were profitability, liquidity, leverage and efficiency. This study also seeks to expand the variables used to measure performance by including output, capital investment, dividends and employment. This paper seeks to address this gap in the literature by investigating whether the performance of state-owned enterprises in Kenya is affected by privatisation including non-listed firms. To achieve this, the study will answer one question: What is the effect of privatization on the financial performance of privatised firms in Kenya?

1.3 Research Objective

The study objective of this paper was to assess the effect of privatization on the performance of privatized firms in Kenya.
1.4 Value of the Study

The findings of this research will be beneficial to the following stakeholders.

The government as an initiator of the privatization projects will be the major beneficiary. In Kenya this role is mandated to the Privatization commission. The Privatization Commission was be able to determine whether such projects are beneficial to the economy or detrimental. From the recommendations given, it was be able to review the process and determine the areas to work on.

Stakeholders of the companies scheduled for privatization such as lenders, suppliers and customers will also realize the consequences of the process. They will be able to lobby for a better and a more transparent deal. They will hence know whether their interests will be protected even after the sale.

Financial analysts may also use the research findings to do an assessment of the securities of the studied firms. This could enable them provide a basis for rating securities of companies that would experience a similar occurrence. In addition to this, they was be in a better position to recommend an investment action i.e. to buy, sell or hold a particular security of a company scheduled for privatization.

The public will be able to understand the effect of any prospective privatization and hence be able to input on that. The will also understand their role in the process and the opportunities that may arise such as employment opportunities. The lobby groups representing the people will hence have a strong case for or against privatization of more
institutions. Future researchers interested in this area may also benefit through; provision of new data to the already existing literature on privatization. They could also benefit from the provision of the necessary references mentioned which eases their search for information. They could also generate new ideas for example on improved methodology and other additional variables that could be analyzed.
CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter reviews the literature available on the effect of privatization on the financial performance of firms. The different authors findings relating to the objectives, describe various theories posited which attempt to rationalize privatization.

2.2 Theoretical Review

2.2.1 Public Choice Theory

Under the public choice theory more focus is on the performance. The theory predicts that SOE are low performers because politicians impose objectives on these firms that might help them gain votes but might conflict with efficiency (Buchanan, 1972).

For the general public, the cost of monitoring this behaviour offsets the benefits. Therefore privatization is expected to trigger a change in the goals of the firm and in the bargaining power of different actions in the political market thereby increasing efficiency (Shleifer and Vishny, 1994). Haskel and Szymansks (1999) argue that following privatization, the public places a lot of expectation on future of the firm. This expectation theory covers areas of efficiency and productivity.

2.2.2 Property Rights Theory

Alchian (1965), Demsetz (1988) justify privatization of SOE through property rights theories. They argue that shareholders are the residual claimants to profit in publicly traded firms. Under state ownership, property rights are ill defined. Although the state is
the residual claimant to profits in SOE, the minister has no financial interest in the returns stemming from his action. The minister is unlikely to personally benefit from the profits that may accrue from state firms. Thus, so long as there is no personal gain and some personal cost in designing or managing an effective governance system, state representatives will neither work hard at monitoring managers nor design governance systems to enhance efficiency. To increase this agency problem, managers of SOE are insulated from the threat of takeover and bankruptcy common to privately owned firms (Rowley and Yarrow, 1981).

De Allesi (1980) argues that the critical difference between private and public owned firms is that ownership in the latter is effectively non-transferable. Property rights theory predicts that privatization was enhance incentives tied to firm financial performance by replacing disinterested ministers with shareholders who was design an effective governance system out of self-interest.

2.2.3 Agency Theory

Agency theory focuses on the different agency problems and solutions to them that are available under each form of ownership. Managers in both private and state owned firms are assumed to maximize their own utility rather than that of the owners (Jensen and Meckling, 1976). In private firms this divergence is reduced through external mechanisms such as markets for managers, capital and corporate controls including internal mechanisms such as managerial participation in ownerships, reward systems and the board of directors. In state owned firms these mechanisms are virtually absent.
Agency theory states that agents act merely out of self-interest, and therefore incentives have to be offered that motivate them to adjust their aims to those of the enterprise. Agency theorists believe that privatisation stimulates the design of new MCS, including accounting systems (Macias, 2002). Further, privately owned firms are presumed to be governed by business goals and the capital market acts as a deterrent to managerial non-profit behaviour (Ott & Hartley, 1991).

2.3 Determinants of Firm Performance

Performance is the predictive value for a financial institutions performance. (Kathanje, 2000). This study employs ratios to measure the financial performance of the privatised firms. The ratios to be used in analysing the financial performance of the firms are as follows;

2.3.1 Profitability

Profitability is the quality of affording gain or benefit or profit. Return on sales, return on asset and return on equity are the indicators used to measure profitability. Most studies find that privatization has a positive impact on the profitability of firms. It is expected that as firms move from public to private ownership, their profitability increases. First, privatization leads managers to focus on profit goals because under private ownership, management is directly responsible to shareholders (Yarrow, 1986).

Second, to the extent that privatization transfers both control rights and cash flow rights from politicians to managers, profitability increases through efficiency gains in the form
of redress of the excess labour spending that politicians needed for electoral reasons (Boycko et al., 1996). Similarly, after privatization firms should employ their human, financial and technological resources more efficiently because of a greater stress on profit goals and a reduction of government subsidies (Boycko et al., 1996; Kikeri et al., 1992).

Moreover, it is also expected that output (sales revenues) was increase following privatization, because of better incentives, more flexible financing opportunities, and greater scope for entrepreneurial initiative (Megginson et al., 1994). Megginson, et al 1997, compared the pre- and post-privatization performance of 61 companies in 18 countries and 32 industries. The study reported that privatization has a positive effect on a firm's operating and financial performance.

2.3.2 Liquidity

Liquidity can be defined as the capacity of the company to meet its short-term financial obligations. Continued solvency is a permanent requirement for companies. Liquidity ratios evaluate the liabilities a company faces in the current year and what assets it has to meet them. Liquidity ratios include the current ratio. This is obtained by dividing current assets, or assets you can convert to cash in the current year, by current liabilities. Current assets usually include inventory, but if you liquidate inventory, your business may suffer. The quick ratio is current assets minus inventory divided by current liabilities, and it is a more conservative liquidity ratio.

Liquidity is expected to improve as a result of privatization. As the owner of a public firm, the state is liable for the company’s debts to creditors, who therefore have an added
guarantee. As such, a public firm has more current liabilities than a private firm. This key difference in the structure of the balance sheet is explained by the greater liquidity of private firms compared to public firms and by the positive effects of privatization on liquidity. In developing countries, most of the findings on assessment of financial performance before and after privatization concluded that privatization improves the performance of the enterprise particularly a significant increase in liquidity ratio (Kikeri et al., 2004).

2.3.3 Efficiency

By throwing state-owned enterprises to competition, government clearly hopes that these firms will employ their human and financial resources more efficiently. The shareholders (including employees) in a private company capture most of the benefits of efficiency improvements, but they also suffer most if efficiency is not improved. In removing the noneconomic objectives of the firms, government explicitly state that the trade-off it expected is increased operating and financial efficiency. The efficiency measure we employ is net income per employee.

Privatization programs implemented by governments over the past three decades have changed the size and efficiency of global financial markets, altered the practice of corporate finance in economies that experienced large privatizations, and impacted the returns earned by individual investors who purchased stock in a privatized company (Meggison, 2010).
According to Adegbite (2000) privatization does not only improve financial efficiency but helps in streamlining the financial procedures a factor that leads to designing of good financial policies as well as implementation of the same in order to improve the firm’s financial performance. Additionally, privatization has improved in doing away with bureaucratic activities experienced in state owned enterprises thus making financial information of the firm available to the members of the public, that is, public awareness and transparency. This has led to transparency in privatized enterprises, as well as enabling the public to participate in contributing to the development of the organization (Adegbite, 2000).

2.3.4 Leverage

Leverage indicates the firm’s capacity to meet its long term and short term debt obligations. It provides a measurement of how likely a company was to continue meeting its debt obligations. Leverage ratio measures long term financial position of a firm and the extent to which the firm relied on debt to finance assets. It establishes the relationship between funds supplied by owners of a firm and those provided by creditors of a firm.

The shift from public to private ownership can be expected to lead to a decrease in the share of debt in the capital structure since with the end of government debt guarantees the firm’s cost of borrowing was increase and the firm has new access to public equity markets (Megginson et al., 1994). In addition, if the bankruptcy costs are significant, once government guarantees are removed the newly privatized firm should reduce its debt (Boubakri and Cosset, 2002).
2.3.5 Output

It is expected that real sales was increase after privatization because newly privatized firms now have better incentives, more flexible financing opportunities, increased competition and greater scope for entrepreneurial initiatives. On the other hand, Boycko, Shleifer and Vishny (1993) argue that effective privatization was lead to reduction in output, since government can no longer entice managers (through subsidies) to maintain inefficiently high output levels. We test these two competing predictions by computing the average inflation-adjusted sales level for the pre-privatization period and comparing it with the post privatization period.

2.3.6 Capital Investment

The general expectation is that, greater emphasis on efficiency and profitability will make newly privatized firms increase their capital investment spending. Firms should increase capital expenditure after divestiture because they are no longer tied to government’s bureaucratic procedures and that they have greater access to private debt and capital market.

Moreover, if privatization is accompanied by deregulation and market opening, former SOE’s was face very large investment spending needs in order to become more competitive with other private firms. In addition, years of financial stress often lead firms to defer routine maintenance which must also be made good after privatization. The removal of government control of the SOE also reduces or eliminates the government’s
ability to bribe or force SOE managers to produce politically attractive, but economically wasteful goods (Megginson et al, 1994). Finally, to the extent that privatization promotes entrepreneurship, former public firms were have the incentives and the means to invest in growth options such as launching new products and searching for new markets. We compute capital investment intensity using two proxies, capital expenditures divided by sales and capital expenditures divided by total assets.

2.4 Empirical Review

Megginson et al. (1994) conducted a comparative analysis of the performance of privatized firms. The sample included 18 countries (12 industrialized countries and 6 developing countries). The results showed that after privatization, firms were more profitable and increased their production, their investment spending and their operational efficiency. The study also found that the firms had lower debt levels.

Juliet D’Souza and Wasiam Megginson (1999) compared the pre- and post-privatization financial and operating performance of 85 companies from 28 countries (15 industrialized and 13 non-industrialized) that experience full or partial privatization through public share offerings for the period from 1990 through 1996. The study documents significant increases in profitability, output, operating efficiency, and dividend payments – and significant decreases in leverage ratios- for all the sampled firms after privatization and for most sub- samples examined. Capital expenditures increase significantly in absolute terms, but not relative to sales. Employment declines
but insignificantly. By and large, findings from this study strongly suggest that privatization yields significant performance improvements.

Harper (2001) based on a sample of 178 Czech firms. Using methods developed in previous studies, he found that efficiency and profitability decreased immediately after privatization.

Zuobao Wei, et. al. (2003) examined the pre- and post-privatization financial and operating performance of 208 firms privatized in China during the period 1990-1997. The full sample results show significant improvements in real output, and sales efficiency, and significant declines in leverage following privatization, but surprisingly, no significant change in profitability.

Boubakri, et. al. (2004) examined the post-privatization performance of newly privatized firms in Asia and document how the private ownership structure evolves overtime. The authors show that privatization leads to increase in profitability, efficiency, and output in former state-owned firms from Asia. Employment increases but insignificantly.

In a study on partial privatization and firm performance in India, Gupta N. (2004) uses data from Indian state owned enterprises and found that partial privatization has a positive impact on profitability, labor productivity and investment spending.

Boubakri et al. (2005) assessed the effects of privatization in a study examining privatization in emerging countries. The results showed that privatization had a positive
impact on a sample of firms privatized between 1980 and 1997 in Africa, Latin America, Asia and Eastern Europe. The study also showed that performance after privatization may depend on several factors, including the involvement of foreign shareholders. The results indicate that the level of development is an important factor in the success of privatization, especially in terms of efficiency and profitability. The improvement of performance was found to be more significant in countries with higher average income than in countries with lower average income. The results also showed that firms operating in competitive environments were more efficient than firms operating in a non-competitive environment.

Otieno (2012) studied the effect of privatization on financial performance of parastatals in Kenya. The study was conducted by using a qualitative research method. The results were based on questionnaires administered to senior managers of privatized parastatals in Kenya. The findings of this research showed a positive impact of privatization over firms’ performance.

Makokha (2013) investigated the effect of privatisation on financial performance of firms listed at the Nairobi Securities Exchange. The study employed descriptive survey design on a population of privatized former state owned enterprises quoted at NSE. The study used secondary data sources in collecting information; internet, periodic report and brochures for a period of five years before and five years after privatization of each state owned enterprises. The data was analyzed for variation using a regression model where the independent variable performance is regressed against dependent ratios i.e.
profitability ratio, liquidity ratio, leverage ratio and activity ratios, a t-test statistic, to test
the hypothesis on whether there is any significance difference in financial performance
after privatization was also performed. The study concluded that privatization had a
positive impact on the financial performance of these firms as it increased their
profitability and activity ratios. The results of the study also showed varied performance
results from the other ratios. The recommendation for the study was that the government
should relinquish all of their control on the privatized firms and let them operate on their
own.

In Kenya, Ochieng (2014) conducted a study on the effect of privatization on the
financial performance of the Kenyan aviation industry, with specific reference to the
Kenya Airways Limited. The study explored literature on the financial performance of
Kenya Airways before and after it was privatized by analyzing financial statements
throughout this period. The target populations were financial experts, senior and middle-
level management staff at Kenya Airways. The study used a sample of 37 staff, chosen
using the stratified random sampling technique. Questionnaires were used to collect data
from the respondents and analyzed using the SPSS statistical tool. The results showed
that to a larger extent, privatization has had a positive impact on the financial
performance of the aviation industry.

From the above review, we have seen that privatization has produced mixed results, but
most of the research conducted reveal strong performance improvements as a results of
privatization. Only a few studies have indicated dismal performance after privatization.
Although most empirical studies have shown that private firms are more efficient than
private firms, the results are too ambiguous to draw any definitive conclusions. The conflicting results of research in this area highlight the significance of this unprecedented empirical study of Kenyan privatized firms.
CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter gives a description of the research methodology that was used in achieving the research objectives of this study. It includes the research design adopted, population and sampling, data collection, data analysis and presentation.

3.2 Research Design

Research design is a plan outlining how information is to be gathered for an assessment or evaluation that includes identifying the data gathering method, the instruments to be used, how the instruments will be administrating, and how the information will be organized and analyzed.

A descriptive research design was employed in this study. According to Mugenda and Mugenda (2003), descriptive research studies are based on some previous understating of the nature of the research problem. This study employed descriptive design that aims at establishing the effect of privatisation on performance of firms. Descriptive designs result in a description of the data, either in words, pictures, charts, or tables, and indicate whether the data was show statistical relationships or is merely descriptive.

3.3 Population and Sampling

Target population can be defined as a complete set of individuals, cases/objects with some common observable characteristics of a particular nature distinct from other population. According to Mugenda and Mugenda (1999), a population is a well-defined
as a set of people, services, elements and events, group of things or households that are being investigated.

The target population for this study was all the firms that changed ownership from state to private hands while still in operation. This is because the focus of the study was on the pre and post privatisation performance of the firms in Kenya. The sample of the number of firms to be studied was chosen on the basis of ease of data retrieval and the time the privatization took place. All the firms privatised in the last one decade were studied. From the website of Privatisation Commission of Kenya, the firms privatised in the last 10 years are six (6).

3.4 Data Collection

This study used secondary data collection methods. Secondary data collection is the use of information got from the financial books. Data concerning the firms was retrieved were retrieved from the respective company’s website and the NSE handbooks. For each of the six firms sampled, the data collected was; Net income after tax, sales, current assets, total assets, current liabilities, total liabilities, number of employees and equity figures. The data was for 5 years prior to privatisation and 5 years after privatization of the firms.

3.5 Data Analysis

To test predictions listed in Table 3.0, the study followed the techniques of Megginson et al (1994). In order to determine post-privatization performance changes, we utilized a matched pair methodology (i.e. compare pre – and post – privatization results). We began
by calculating performance measurement proxies for every firm for the ten-year period, with five years before and five years after privatization. Then we developed a performance “time line” that reflects operating results from the last five years of public ownership through the first year as a privatization entry. We next calculated the mean value of each variable for each firm, over the pre – and post – privatization periods (pre – privatization years −5 to −1 and post privatization years +1 to +5) we therefore excluded year 0 (zero) from our mean calculations. Having computed our mean, we used the T-test and the Wilcoxon sign-rank test as our principal methods of testing for significant changes in the variables. The procedure tests whether the average difference in variable values between pre and post–privatization samples is zero. We computed ratios using current-year “flow” measures such as sales, capital, operating profits and net income; others include total assets and common equity.

It is important to note that the approach used paired or dependent samples (i.e. data relating to the same firms). There are two possible scenarios: either the data follow a normal distribution, or they do not. If they do, the test is parametric; if they do not, the test is non-parametric. Even when the conditions of application of the parametric test are met, the advantage of parametric tests over non-parametric tests remains limited. If the variable is Gaussian, the relative effectiveness of the Mann-Whitney-Wilcoxon test compared to the Student’s t-test is $3/ \pi \approx 95\%$, which is highly convincing.

There are two types of non-parametric tests. Both tests can be used irrespective of whether the sample is large or small: the Mann and Whitney U test and the Wilcoxon W test2. A recent trend involves combining them by referring to the Mann-Whitney-Wilcoxon test.
The null hypothesis H0 is a hypothesis of no difference (i.e. no significant difference between the financial ratios of firms in the \(-5\) and \(a+5\) samples, i.e. five years before and after privatization).

The aim is to reject the null hypothesis.

According to Gujarati (2004), the \(p\)-value is the lowest significant level at which the null hypothesis can be rejected. If the \(p\)-value is higher than \(\alpha\), H0 is not rejected. Therefore, if the Wilcoxon statistic is below 1.96 or if the \(p\)-value is higher than 5%, H0 is not rejected, indicating that there is no clear evidence to suggest that H0 is invalid. By contrast, if \(W\) is above 1.96 or if the \(p\)value is below 5%, the alternative hypothesis H1 is validated, where H1 posits that there is a significant difference in a ratio before and after privatization.

Table 3.0 Performance Measures: Definitions and Expected Changes

<table>
<thead>
<tr>
<th>Performance Measure</th>
<th>Definition</th>
<th>Expected Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1 Profitability</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Return on Assets (ROA)</td>
<td>Income before tax/Total Assets</td>
<td>Increase</td>
</tr>
<tr>
<td>Return on Sales (ROS)</td>
<td>Income before tax/Sales</td>
<td>Increase</td>
</tr>
<tr>
<td>Return on Equity (ROE)</td>
<td>Income before tax/Equity</td>
<td>Increase</td>
</tr>
<tr>
<td><strong>2 Efficiency</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales Efficiency (SALEFF)</td>
<td>Sales /Number of Employees</td>
<td>Increase</td>
</tr>
<tr>
<td>Net Income Efficiency (NIEFF)</td>
<td>Net Income /Number of Employees</td>
<td>Increase</td>
</tr>
<tr>
<td><strong>3 Capital Investment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital Expenditure to Sales (CESA)</td>
<td>Capital Expenditure /Sales</td>
<td>Increase</td>
</tr>
<tr>
<td>Capital Expenditure to Assets (CETA)</td>
<td>Capital Expenditure/Total Assets</td>
<td>Increase</td>
</tr>
<tr>
<td></td>
<td>Output</td>
<td>Nominal Sales/ Consumer Price Index</td>
</tr>
<tr>
<td>---</td>
<td>----------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>5</td>
<td>Leverage</td>
<td>Total debt/Total Assets</td>
</tr>
<tr>
<td></td>
<td>Debt to Assets (LEV1)</td>
<td>Term Debt/ Equity</td>
</tr>
<tr>
<td>6</td>
<td>Employment</td>
<td>Number of Employees</td>
</tr>
<tr>
<td>7</td>
<td>Pay out</td>
<td>Dividends/Sales</td>
</tr>
<tr>
<td></td>
<td>Dividends to Sales (DIVSAL)</td>
<td>Dividends/ No. of shares outstanding</td>
</tr>
<tr>
<td>8</td>
<td>Earnings</td>
<td>Profit (Loss) before tax/No. of shares outstanding</td>
</tr>
</tbody>
</table>

Source: Megginson et al. (1994)
CHAPTER FOUR: DATA ANALYSIS, FINDINGS AND DISCUSSIONS

4.0 Introduction

This chapter presents the findings of the study, analysis of data and presentations of major findings.

4.1 Changes in Profitability

State-owned enterprises are often chronically unprofitable; this is to an extent because they are charged with other objectives such as maximizing employment and not the objective of profit maximization. Privatization therefore, is designed to substitute the single objective of profit maximization with the many other objectives. It is also expected to enhance the development of capital market and focus employees on raising revenues and lowering costs. Also, government withdraws its guarantee to the enterprises debts after privatization, which exposes them to the real threat of bankruptcy which leads to their liquidation. This inevitably makes enterprises to promote greater emphasis on profit maximization.
Table 1. Profitability

<table>
<thead>
<tr>
<th>Name of Firm</th>
<th>Variable</th>
<th>Mean Before</th>
<th>Mean After</th>
<th>Change</th>
<th>T-test</th>
<th>Wilcoxon test</th>
</tr>
</thead>
<tbody>
<tr>
<td>KENGEN</td>
<td>ROS</td>
<td>0.0570</td>
<td>0.5779</td>
<td>0.0008</td>
<td>0.9338</td>
<td>0.730</td>
</tr>
<tr>
<td></td>
<td>ROA</td>
<td>0.0076</td>
<td>0.0838</td>
<td>0.0076</td>
<td>0.5988</td>
<td>0.73</td>
</tr>
<tr>
<td></td>
<td>ROE</td>
<td>0.0977</td>
<td>0.1081</td>
<td>0.0103</td>
<td>0.5973</td>
<td>0.73</td>
</tr>
<tr>
<td>Kenya Re</td>
<td>ROS</td>
<td>0.1953</td>
<td>0.2307</td>
<td>0.0354</td>
<td>0.3314</td>
<td>0.826</td>
</tr>
<tr>
<td></td>
<td>ROA</td>
<td>0.0267</td>
<td>0.0407</td>
<td>0.014</td>
<td>0.0367</td>
<td>0.135</td>
</tr>
<tr>
<td></td>
<td>ROE</td>
<td>0.1721</td>
<td>1.4091</td>
<td>1.2369</td>
<td>0.0075</td>
<td>0.146</td>
</tr>
<tr>
<td>Safaricom</td>
<td>ROS</td>
<td>0.029</td>
<td>0.0446</td>
<td>0.0157</td>
<td>0.2344</td>
<td>0.365</td>
</tr>
<tr>
<td></td>
<td>ROA</td>
<td>0.0251</td>
<td>0.2485</td>
<td>0.2234</td>
<td>0.4536</td>
<td>0.365</td>
</tr>
<tr>
<td></td>
<td>ROE</td>
<td>-3.16</td>
<td>0.2602</td>
<td>3.4203</td>
<td>0.3255</td>
<td>0.135</td>
</tr>
<tr>
<td>Mumias</td>
<td>ROS</td>
<td>0.1294</td>
<td>0.1625</td>
<td>0.0331</td>
<td>0.2643</td>
<td>0.405</td>
</tr>
<tr>
<td></td>
<td>ROA</td>
<td>0.1538</td>
<td>0.2503</td>
<td>0.0965</td>
<td>0.1411</td>
<td>0.135</td>
</tr>
<tr>
<td></td>
<td>ROE</td>
<td>0.3091</td>
<td>0.2731</td>
<td>-0.036</td>
<td>0.6428</td>
<td>0.73</td>
</tr>
<tr>
<td>Telkom Kenya</td>
<td>ROS</td>
<td>0.0508</td>
<td>0.0321</td>
<td>-0.0188</td>
<td>0.0131</td>
<td>0.647</td>
</tr>
<tr>
<td></td>
<td>ROA</td>
<td>0.1011</td>
<td>0.0992</td>
<td>-0.0019</td>
<td>0.8988</td>
<td>0.647</td>
</tr>
<tr>
<td></td>
<td>ROE</td>
<td>0.2242</td>
<td>0.2333</td>
<td>0.0093</td>
<td>0.8647</td>
<td>0.647</td>
</tr>
<tr>
<td>Kenya Railways</td>
<td>ROS</td>
<td>0.2335</td>
<td>-0.0409</td>
<td>-0.2744</td>
<td>0.0029</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>ROA</td>
<td>0.3675</td>
<td>-0.0266</td>
<td>-0.3942</td>
<td>0.0036</td>
<td>0.135</td>
</tr>
<tr>
<td></td>
<td>ROE</td>
<td>0.3752</td>
<td>-0.1024</td>
<td>-0.4776</td>
<td>0.0115</td>
<td>0.146</td>
</tr>
</tbody>
</table>

Source: Research findings (*, + = significance at 5%; ++ = significance at 10%)

Profitability was measured using three ratios: return on sales (ROS); return on assets (ROA) and return on equity (ROE) for the selected six companies. Three of the companies, KENGEN, Kenya Re and Safaricom have shown positive improvements after privatization using the three ratios. On the other hand, the other two companies, Telkom Kenya and Kenya Railways have shown negative performance using the three ratios. ROS and ROA have improved for Mumias while ROE declined after privatization. For instance, ROS and ROA have increased by about 3% and 9% respectively. In the case of Telkom Kenya, ROS and ROA have declined after privatization while ROE shows an
improvement after privatization. For example, ROS declined from about 5% to about 3% while ROA recorded a slightly negative change from 10% to 9%. Only Safaricom has recorded significant increases using the three ratios at 5% level.

The overall results are mixed and sometimes contrary to expectations. While some variables tested positive, some have tested negative for the same company. However, we may not draw any conclusions to the fact that all the firms in our sample have become more profitable after privatization. It is also important to note that most of the firms that recorded improvements after privatization were already profitable firms even before privatization, but their performance after privatization for all the three ratios have shown that they are set on the path of more profits in the future.

4.2. Efficiency Changes
By subjecting state-owned enterprises to competition, government hopes that these firms will employ their human and financial resources more efficiently. The shareholders in a private company gain most of the benefits of efficiency improvements, but they also suffer most if efficiency is not improved. In removing the non-economic objectives of the firms, government explicitly state that the trade-off it expected is increased operating and financial efficiency.
### Table 2. Operating Efficiency

<table>
<thead>
<tr>
<th>Name of Firm</th>
<th>Variable</th>
<th>Mean before</th>
<th>Mean after</th>
<th>Mean Change</th>
<th>T-test</th>
<th>Wilcoxon test (-)</th>
</tr>
</thead>
<tbody>
<tr>
<td>KENGEN</td>
<td>SALEFF</td>
<td>2079.6</td>
<td>9735.89</td>
<td>7656.28</td>
<td>0.0022</td>
<td>0.135</td>
</tr>
<tr>
<td></td>
<td>NIEFF</td>
<td>274.38</td>
<td>1722</td>
<td>1447.61</td>
<td>0.0119</td>
<td>0.405</td>
</tr>
<tr>
<td>Kenya Re</td>
<td>SALEFF</td>
<td>5609.34</td>
<td>13068.96</td>
<td>7459.62</td>
<td>2.3651</td>
<td>1.826++</td>
</tr>
<tr>
<td></td>
<td>NIEFF</td>
<td>1292.8</td>
<td>-598.75</td>
<td>-1891.56</td>
<td>0.0509</td>
<td>0.135</td>
</tr>
<tr>
<td>Safaricom</td>
<td>SALEFF</td>
<td>2851.91</td>
<td>7907.22</td>
<td>5055.31</td>
<td>0.0038</td>
<td>0.095</td>
</tr>
<tr>
<td></td>
<td>NIEFF</td>
<td>142.28</td>
<td>262.42</td>
<td>120.14</td>
<td>0.0653</td>
<td>0.095</td>
</tr>
<tr>
<td>Mumias</td>
<td>SALEFF</td>
<td>5.687</td>
<td>823.68</td>
<td>818</td>
<td>8.707</td>
<td>1.826++</td>
</tr>
<tr>
<td></td>
<td>NIEFF</td>
<td>19.35</td>
<td>272.19</td>
<td>252.843</td>
<td>0.0016</td>
<td>0.674</td>
</tr>
<tr>
<td>Telkom Kenya</td>
<td>SALEFF</td>
<td>4.576</td>
<td>876.98</td>
<td>872.4</td>
<td>0.00014</td>
<td>0.095</td>
</tr>
<tr>
<td></td>
<td>NIEFF</td>
<td>6.813 83</td>
<td>0.006 7</td>
<td>6.19</td>
<td>0.0006</td>
<td>0.095</td>
</tr>
</tbody>
</table>

**Source:** Research findings (+ = significance at 5%; ++ = significance at 10%)

The efficiency measures employed include inflation-adjusted sales per employee (SALEFF) and net income per employee (NIEFF). SALEFF show significant changes at 5 per cent level in while NIEFF shows significant changes at 5 per cent level in all the firms. The results are consistent with the general expectations of our hypothesis.

### 4.3. Changes in Capital Investment

The general expectation is that, greater emphasis on efficiency and profitability will make newly privatized firms increase their capital investment spending. Firms should increase capital expenditure after divestiture because they are no longer tied to government’s bureaucratic procedures and that they have greater access to private debt and capital market.

Moreover, if privatization is accompanied by deregulation and market opening, former state owned enterprises face very large investment spending needs in order to become
more competitive with other private firms. In addition, years of financial stress often lead firms to postponed routine maintenance which must also be made good after privatization. The removal of government control of the firm also reduces or eliminates the government’s ability to bribe or force firm managers to produce politically attractive, but economically wasteful goods (Megginson et al, 1994). Finally, to the extent that privatization promotes entrepreneurship, former public firms will have the incentives and the means to invest in growth options such as launching new products and venturing in new markets.

Table 3. Capital Investment

<table>
<thead>
<tr>
<th>Name of Firm</th>
<th>Variable</th>
<th>Mean Before</th>
<th>Mean After</th>
<th>Mean Change</th>
<th>T-test</th>
<th>Wilcoxon test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>CESA</td>
<td>CETA</td>
<td></td>
<td></td>
<td>(-)</td>
</tr>
<tr>
<td>KENGEN</td>
<td>CESA</td>
<td>0.0081</td>
<td>0.0316</td>
<td>0.235</td>
<td>0.1994</td>
<td>0.674</td>
</tr>
<tr>
<td></td>
<td>CETA</td>
<td>0.0164</td>
<td>0.1</td>
<td>0.083</td>
<td>0.0087</td>
<td>0.135</td>
</tr>
<tr>
<td>Kenya Re</td>
<td>CESA</td>
<td>1.1124</td>
<td>0.0323</td>
<td>-1.08</td>
<td>0.0002</td>
<td>0.095</td>
</tr>
<tr>
<td></td>
<td>CETA</td>
<td>0.0384</td>
<td>0.0073</td>
<td>-0.031</td>
<td>0.0081</td>
<td>0.095</td>
</tr>
<tr>
<td>Safaricom</td>
<td>CESA</td>
<td>0.0062</td>
<td>0.1707</td>
<td>0.1646</td>
<td>0.1561</td>
<td>0.674</td>
</tr>
<tr>
<td></td>
<td>CETA</td>
<td>0.0095</td>
<td>0.1292</td>
<td>0.1196</td>
<td>0.166</td>
<td>0.674</td>
</tr>
<tr>
<td>Mumias</td>
<td>CESA</td>
<td>0.036</td>
<td>0.065</td>
<td>0.0285</td>
<td>0.0096</td>
<td>0.135</td>
</tr>
<tr>
<td></td>
<td>CETA</td>
<td>0.412</td>
<td>0.096</td>
<td>0.0552</td>
<td>0.014</td>
<td>0.405</td>
</tr>
<tr>
<td>Telkom Kenya</td>
<td>CESA</td>
<td>0.0163</td>
<td>0.0306</td>
<td>0.0143</td>
<td>0.3636</td>
<td>0.135</td>
</tr>
<tr>
<td></td>
<td>CETA</td>
<td>0.1895</td>
<td>0.1934</td>
<td>0.0038</td>
<td>0.9628</td>
<td>1.095+</td>
</tr>
<tr>
<td>Kenya Railways</td>
<td>CESA</td>
<td>0.0766</td>
<td>0.0162</td>
<td>-0.06</td>
<td>0.0676</td>
<td>0.135</td>
</tr>
<tr>
<td></td>
<td>CETA</td>
<td>0.0097</td>
<td>0.0028</td>
<td>-0.007</td>
<td>0.0299</td>
<td>0.095</td>
</tr>
</tbody>
</table>

Source: Research findings (+ = significance at 5%; ++ = significance at 10%)

We measure capital investment intensity using two proxies, capital expenditures divide by sales (CESA) and capital expenditures divide by total assets (CETA). Four out of six firms in our sample have shown improvement in both indicators, however, Kenya Re and
Kenya Railways have shown a reduction in both CESA and CETA during the post privatization period. In our entire sample, Safaricom has shown high increases in capital expenditure where it recorded increase from 0.6 per cent to 17 per cent, 0.9 per cent to 12 per cent for CESA and CETA respectively. This is significant at 10 per cent level for both CESA and CETA. KENGEN and Telkom Kenya have recorded significant improvement at 10 per cent in CESA.

4.4. Changes in Output
Governments expect that real sales will increase after privatization because newly privatized firms now have better incentives, more flexible financing opportunities, increased competition and greater scope for entrepreneurial initiatives. On the other hand, Boycko, Shleifer and Vishny (1993) argue that effective privatization will lead to reduction in output, since government can no longer entice managers (through subsidies) to maintain inefficiently high output levels.

Table 4. Output

<table>
<thead>
<tr>
<th>Name of Firm</th>
<th>Variable</th>
<th>Mean Before</th>
<th>Mean After</th>
<th>Mean Change</th>
<th>T-test</th>
<th>Wilcoxon test</th>
</tr>
</thead>
<tbody>
<tr>
<td>KENGEN</td>
<td>SAL</td>
<td>1467.95</td>
<td>710.28</td>
<td>242.32</td>
<td>0.3352</td>
<td>0.356</td>
</tr>
<tr>
<td>Kenya Re</td>
<td>SAL</td>
<td>3666.25</td>
<td>2978.09</td>
<td>-688.16</td>
<td>0.0529</td>
<td>0.095</td>
</tr>
<tr>
<td>Mumias Sugar</td>
<td>SAL</td>
<td>578.9</td>
<td>683.27</td>
<td>104.37</td>
<td>0.3071</td>
<td>0.135</td>
</tr>
<tr>
<td>Safaricom</td>
<td>SAL</td>
<td>25.07</td>
<td>72.28</td>
<td>47.21</td>
<td>2.486</td>
<td>2.023+</td>
</tr>
<tr>
<td>Telkom Kenya</td>
<td>SAL</td>
<td>5120.62</td>
<td>9105.74</td>
<td>5034.44</td>
<td>0.0259</td>
<td>0.135</td>
</tr>
</tbody>
</table>

Source: Research findings (+ = significance at 5%; ++ = significance at 10%)

We test these two competing predictions by computing the average inflation-adjusted sales level for the pre-privatization period and comparing it with the post privatization
period for the six firms in our sample. Five firms recorded positive increase in output during the post privatization period, namely; KENGEN, Kenya Re, Safaricom, Telkom Kenya and Mumias. This result is in line with the first argument.

4.5. Leverage Changes
In order to place greater priority on improving the financial soundness of the newly privatized firms, leverage ratios are expected to drop after privatization. There are several reasons why leverage should decline after privatization, for one thing, public firms traditionally have extremely high debt levels at least partly because they cannot sell equity to private investors, and thus the only equity available to the firms are capital injections and retained earnings (Megginson et al 1994). Leverage ratio measures long term financial position of a firm and the extent to which the firm relied on debt to finance assets. It establishes the relationship between funds supplied by owners of a firm and those provided by creditors of a firm.

Table 5. Leverage

<table>
<thead>
<tr>
<th>Name of Firm</th>
<th>Variable</th>
<th>Mean Before</th>
<th>Mean After</th>
<th>Change</th>
<th>T-test</th>
<th>Wilcoxon test</th>
</tr>
</thead>
<tbody>
<tr>
<td>KENGEN</td>
<td>LEV1</td>
<td>4.4761</td>
<td>0.7787</td>
<td>-4.0282</td>
<td>7.3403</td>
<td>1.826++</td>
</tr>
<tr>
<td></td>
<td>LEV2</td>
<td>9.5584</td>
<td>0.0062</td>
<td>-9.6334</td>
<td>5.8751</td>
<td>1.841++</td>
</tr>
<tr>
<td>Kenya Re</td>
<td>LEV1</td>
<td>0.4104</td>
<td>0.2095</td>
<td>-0.2007</td>
<td>4.5664</td>
<td>1.826++</td>
</tr>
<tr>
<td></td>
<td>LEV2</td>
<td>0.2975</td>
<td>0.0046</td>
<td>-0.2929</td>
<td>2.0985</td>
<td>1.841++</td>
</tr>
<tr>
<td>Safaricom</td>
<td>LEV1</td>
<td>0.4518</td>
<td>0.391</td>
<td>-0.0617</td>
<td>0.8317</td>
<td>0.675</td>
</tr>
<tr>
<td></td>
<td>LEV2</td>
<td>2.7264</td>
<td>0.0503</td>
<td>-2.6761</td>
<td>0.3145</td>
<td>0.675</td>
</tr>
<tr>
<td>Mumias</td>
<td>LEV1</td>
<td>1.1401</td>
<td>1.7012</td>
<td>0.5611</td>
<td>0.4721</td>
<td>0.675</td>
</tr>
<tr>
<td></td>
<td>LEV2</td>
<td>LEV1</td>
<td>LEV2</td>
<td>LEV1</td>
<td>LEV2</td>
<td></td>
</tr>
<tr>
<td>----------------</td>
<td>------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
<td>-------</td>
<td></td>
</tr>
<tr>
<td>Telkom Kenya</td>
<td>0.5194</td>
<td>0.1064</td>
<td>-0.413</td>
<td>0.0027</td>
<td>0.095</td>
<td></td>
</tr>
<tr>
<td>LEV2</td>
<td>0.0445</td>
<td>0.7787</td>
<td>0.7342</td>
<td>6.2389</td>
<td>1.826++</td>
<td></td>
</tr>
<tr>
<td>Kenyatta Railways</td>
<td>0.0594</td>
<td>0.0062</td>
<td>-0.0532</td>
<td>0.0807</td>
<td>0.135</td>
<td></td>
</tr>
<tr>
<td>LEV2</td>
<td>0.518</td>
<td>0.9177</td>
<td>0.3996</td>
<td>0.0023</td>
<td>0.674</td>
<td></td>
</tr>
<tr>
<td>LEV2</td>
<td>0.0298</td>
<td>0.0007</td>
<td>-0.0291</td>
<td>0.1853</td>
<td>0.365</td>
<td></td>
</tr>
</tbody>
</table>

Source: Research findings (+ = significance at 5%; ++ = significance at 10%)

Leverage is measured using the total debt to total assets (LEV1) and by long term debt to equity ratio. Although the results are mixed, majority of the firms considered conform to general expectation. Three of the firms studied recorded reduction in both LEV1 and LEV2; namely, KENGEN, Kenya Re and Safaricom. Also LEV2 has fallen for Kenya Railways, Telkom Kenya and Mumias, while LEV1 has not fallen. This is confirms to general expectation.

### 4.6. Changes in Employment

Most governments have expressed great fear that, the objectives of efficiency and profitability as a result of privatization can only be achieved at the cost of large scale job losses. In other words, people expect large declines in employment levels following privatization. We tested this by computing the average employment levels for the pre-privatization and post privatization periods in order to ascertain whether employment has actually fallen after privatization.

Two firms recorded reduction in employment in the post privatization period. Telkom Kenya staffing strength fell from 19600 to 15200 on the average. Kenya Railways also
recorded reduction from 13323 to 11112. These results conform to expectation. On the other hand, four companies have recorded increase in employment in the post privatization period. Safaricom recorded increase (on average) from 774 to 2000, Kenya Re increased from 113 to 248 and Mumias increased it employment from 1788 to 2345 during the post privatization period.

This is contrary to our hypothesis.

Table 6. Employment

<table>
<thead>
<tr>
<th>Name of Firm</th>
<th>Variable</th>
<th>Mean before</th>
<th>Mean after</th>
<th>Mean change</th>
<th>T-test</th>
<th>Wilcoxon test</th>
</tr>
</thead>
<tbody>
<tr>
<td>KENGEN</td>
<td>EMPL</td>
<td>1532</td>
<td>1889</td>
<td>357</td>
<td>0.058</td>
<td>8</td>
</tr>
<tr>
<td>Kenya Re</td>
<td>EMPL</td>
<td>113</td>
<td>248</td>
<td>135</td>
<td>1.117</td>
<td>1.841++</td>
</tr>
<tr>
<td>Safaricom</td>
<td>EMPL</td>
<td>774</td>
<td>2000</td>
<td>1226</td>
<td>0.078</td>
<td>2</td>
</tr>
<tr>
<td>Mumias</td>
<td>EMPL</td>
<td>1788</td>
<td>2345</td>
<td>557</td>
<td>0.067</td>
<td>5</td>
</tr>
<tr>
<td>Telkom Kenya</td>
<td>EMPL</td>
<td>19600</td>
<td>15200</td>
<td>-4400</td>
<td>5.5</td>
<td>1.826 ++</td>
</tr>
<tr>
<td>Kenya Railways</td>
<td>EMPL</td>
<td>13323</td>
<td>11112</td>
<td>-2211</td>
<td>1.637</td>
<td>5</td>
</tr>
</tbody>
</table>

Source: Research findings (+ = significance at 5%; ++ = significance at 10%)

4.7. Changes in Dividend Payouts

The general expectation is that dividend should increase after privatization. This is because unlike government, private investors generally demand dividend and dividend pay-outs are a classic response to the atomized ownership structure to which most privatization programs lead (Meggisson et al; 1994). It is also expected that earnings per share was increase after privatization since profits are expected to rise.
Table 7. Dividend Pay out

<table>
<thead>
<tr>
<th>Name of Firm</th>
<th>Variable</th>
<th>Mean before</th>
<th>Mean after</th>
<th>Mean change</th>
<th>T-test</th>
<th>Wilcoxon test</th>
</tr>
</thead>
<tbody>
<tr>
<td>KENGEN</td>
<td>DIVISAL</td>
<td>0.0194</td>
<td>0.0211</td>
<td>0.0015</td>
<td>0.8697</td>
<td>1.069+</td>
</tr>
<tr>
<td>KENGEN</td>
<td>DPS</td>
<td>0.3712</td>
<td>0.4788</td>
<td>0.1075</td>
<td>0.8293</td>
<td>1.069+</td>
</tr>
<tr>
<td>Kenya Re</td>
<td>DIVISAL</td>
<td>0.0357</td>
<td>0.0708</td>
<td>0.0351</td>
<td>0.1092</td>
<td>0.135</td>
</tr>
<tr>
<td>Kenya Re</td>
<td>DPS</td>
<td>0.2969</td>
<td>0.4368</td>
<td>0.1399</td>
<td>0.1787</td>
<td>0.654</td>
</tr>
<tr>
<td>Safaricom</td>
<td>DIVISAL</td>
<td>0.381</td>
<td>0.0706</td>
<td>0.0325</td>
<td>0.1391</td>
<td>0.356</td>
</tr>
<tr>
<td>Safaricom</td>
<td>DPS</td>
<td>0.1996</td>
<td>0.3095</td>
<td>0.1099</td>
<td>0.2511</td>
<td>0.436</td>
</tr>
<tr>
<td>Mumias</td>
<td>DIVISAL</td>
<td>0.0246</td>
<td>0.0053</td>
<td>-0.0192</td>
<td>0.0228</td>
<td>0.405</td>
</tr>
<tr>
<td>Mumias</td>
<td>DPS</td>
<td>0.12</td>
<td>2.4025</td>
<td>2.2825</td>
<td>0.3699</td>
<td>0.356</td>
</tr>
<tr>
<td>Telkom Kenya</td>
<td>DIVISAL</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Telkom Kenya</td>
<td>DPS</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Kenya Railways</td>
<td>DIVISAL</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Kenya Railways</td>
<td>DPS</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: Research findings (+ = significance at 5%; ++ = significance at 10%)

We examine these using total dividend payments divided by sales (DIVISAL) and dividend divide by outstanding ordinary share capital (DPS) and changes in earning per share (EPS) following privatization. EPS has shown substantial improvement in all the companies except in Mumias, Telkom Kenya and Railways where EPS ratios have fallen. DIVISAL and DPS ratios have increased in three out of the six firms studied, namely; Kenya Re, KENGEN and Safaricom. This implies that investors are better off in these companies. On the other hand, both DIVISAL and DPS have declined in Mumias. Telkom and Kenya railways paid no dividends.

Although, this may be attributed to the internal policies of the companies, it is contrary to our hypothesis.
Table 8. Earnings per Share

<table>
<thead>
<tr>
<th>Name of Firm</th>
<th>Variable</th>
<th>Mean Before</th>
<th>Mean After</th>
<th>Mean Change</th>
<th>T-test</th>
<th>Wilcoxon test</th>
</tr>
</thead>
<tbody>
<tr>
<td>KENGEN</td>
<td>EPS</td>
<td>0.75</td>
<td>7.92</td>
<td>7.17</td>
<td>0.0324</td>
<td>1.826+</td>
</tr>
<tr>
<td>Kenya Re</td>
<td>EPS</td>
<td>2.17</td>
<td>4.44</td>
<td>2.27</td>
<td>0.088</td>
<td>0.944</td>
</tr>
<tr>
<td>Safaricom</td>
<td>EPS</td>
<td>2.07</td>
<td>3.33</td>
<td>-1.23</td>
<td>0.0115</td>
<td>0.453</td>
</tr>
<tr>
<td>Mumias</td>
<td>EPS</td>
<td>8.17</td>
<td>1.24</td>
<td>-6.93</td>
<td>0.1329</td>
<td>0.645</td>
</tr>
<tr>
<td>Telkom Kenya</td>
<td>EPS</td>
<td>0.16</td>
<td>1.46</td>
<td>1.29</td>
<td>0.0019</td>
<td>0.135</td>
</tr>
<tr>
<td>Kenya Railways</td>
<td>EPS</td>
<td>0.54</td>
<td>0.60</td>
<td>0.06</td>
<td>0.6992</td>
<td>1.509+</td>
</tr>
</tbody>
</table>

Source: Research findings (+ = significance at 5%; ++ = significance at 10%)
CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction
This chapter provides the summary of the findings from chapter four, the conclusions and recommendations of the study. The objective of the study was to determine the effect of privatization on the financial performance of firms in Kenya.

5.2 Summary and Conclusion
The analysis of the financial performance of firms following privatization is a rich and controversial area of research. The value of research in this area is not only theoretical but also empirical, since it involves using econometric techniques and collecting a significant amount of data on firms before and after privatization.

The objective of this study was to examine the impact of privatization on financial performance of firms in Kenya by using both descriptive and quantitative ratio analysis. In order to achieve this objective, the study addressed the theoretical aspects of privatization, by reviewing concepts, objectives, methods, impacts, and experiences of different countries in the world.

To examine the performance of firms, the study followed the standard methodology of comparison used in the literature and empirical studies to compare the pre- and post-privatization financial and operating performance of the company that experienced full privatization through selling the government shares in the last 10 years.

The result of the study revealed that despite mixed results, the overall results show improvement in profitability for the listed firms in our sample. The operational efficiency measures statistically significant change at 5 per cent for most of the firms in our sample.
This study also reveals an improvement in capital spending for the six firms in our sample using the two indicators during the post-privatization period. We obtain mixed result in output changes, four firms recorded positive changes, while two firms recorded a reduction in output after privatization. With regards to changes in leverage, in spite mixed results, most firms in our sample have recorded a decline in leverage after privatization. However the cost of borrowing remained high despite access to public equity markets. On employment changes, privatization has led to reduction in the number of workers in most of the privatized firms.

We also observe increase in earnings per share, whereas dividend has shown substantial decline after privatization in most of the companies considered. This means that shareholders are not better off with privatization. Overall our results provide evidence that privatization has caused an improvement by all indicators in the listed firms however this is not the case with non-listed firms which continue to perform poorly after privatisation. This shows privatisation has had significant positive impact on the performance of listed firms whilst for the non-listed firms it no effect on their performance.

5.4 Limitations of the Study
The study used financial data derived from financial statements of the six companies studied collecting the data proved quite a challenge because it had to be gotten from the Nairobi securities exchange handbooks.

The researcher faced a challenge in determining a sample for the companies to be studied. This was brought about by the limiting time frame of the researchers study which was 5 years prior to and five years after privatization.
The study also faced difficulties in pursuit of drawing firm conclusions regarding privatization and performance of firms listed at the NSE, among them was lack of adequate time, this was because the study applied descriptive design which is time consuming because of nature of financial data collected. Therefore capturing all aspects therefore was not possible due to time constraints.

The study used descriptive statistics to value performance and to obtain valid information, however reliability of this method and its validity was in questions because most companies tend to manipulate financial data to show that the company is performing well. Lastly financial constraints were the other limiting factor for the researcher as the research became quite expensive exercise especially when gathering data.

5.5 Policy Recommendation

The results of this study have shown that privatization had mixed results on the performance of the firms. For the listed firms, privatisation has positive impact on their performance whilst for the non-listed firms i.e. Telkom Kenya and Kenya Railways which were privatised through strategic sale and concessioning respectively, they continue to perform poorly. This study therefore recommends that the Government of Kenya should privatise poorly performing state firms as this can improve their performance. The method of sale should be by public offer as firms sold through other methods did not improve in performance.

5.6 Suggestions for Further Research Studies

From the study and related conclusions, the researcher recommends further research should be done on the effect of privatisation on financial performance of firms which are
not listed on the Nairobi Securities Exchange. This will be able to show if there are any major differences.

We also recommend further research on the effect of privatisation on financial performance of firms listed versus non-listed firms.

We also recommend a study on the effect of privatization on economic growth in Kenya.
REFERENCES


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Teresa B.J W. (2011), The effects of privatisation on companies’ economic performance: The Spanish case, Department of Business Economics & Administration, Universitat Autònoma de Barcelona, 08193 Bellaterra – Cerdanyola (Barcelona), Spain


APPENDICES

Appendix I: List of firms privatised in the last 10 years in Kenya

<table>
<thead>
<tr>
<th>IPO</th>
<th>COMPANY</th>
<th>YEAR</th>
<th>SECTOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Kenya Reinsurance Corporation</td>
<td>2006</td>
<td>Insurance</td>
</tr>
<tr>
<td>2.</td>
<td>Mumias Sugar Company</td>
<td>2006</td>
<td>Manufacturing</td>
</tr>
<tr>
<td>3.</td>
<td>Safaricom</td>
<td>2008</td>
<td>Tele Communications</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CONCESSIONING</th>
<th>COMPANY</th>
<th>YEAR</th>
<th>SECTOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Kenya Railways Corporation</td>
<td>2006</td>
<td>Transport</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>STRATEGIC SALE</th>
<th>COMPANY</th>
<th>YEAR</th>
<th>SECTOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Telkom Kenya</td>
<td>2007</td>
<td>Tele Communications</td>
</tr>
</tbody>
</table>