EFFECT OF PRIVATIZATION ON PROFITABILITY OF COMMERCIAL STATE COMPANIES IN KENYA

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

2021

DECLARATION

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

Signed……..…….... Date…….....10-11-2021.....

FREDRICK ABUGA ONSONGO

D63/87403/2016

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

PROF. MIRIE MWANGI

DEPARTMENT OF FINANCE AND ACCOUNTING

Signed ……..…….. Date…12/11/2021……

ACKNOWLEDGEMENT

Foremost, I would like to say a big thank you to God for giving me life and good health throughout my Masters Programme.

Secondly to appreciate the contribution of My Supervisor Prof. Mirie Mwangi for his guidance throughout the research project in ensuring I present quality research work. My moderator Dr. Morris Irungu for his feedback and support during the Project proposal stage and also my fellow students and the whole University of Nairobi both teaching and support staff for their assistance in one way or the other during the entire academic study period.

Finally, to my Employer, Colleagues, Friends and all others who have supported or encouraged me throughout this entire research project

DEDICATION

This project is dedicated to my Parents David Onsongo and Jane Isanda. Siblings Denis, Joyce, Lillian, Pauline and the entire family at large for their love, encouragement and moral support during the very many trying moments during my Study and Research Project.

In a very Special way I humbly dedicate this Research Project to my wife Daphine Nyambeki for being my support this whole period and lastly, to thank my friends Obuya and Mbugua for their relentless advices. May God grant you good fortunes?

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ABBREVIATIONS AND ACRONYMS

BAT: British American Tobacco

BOD: Board of Directors

CMA: Capital Market Authority

EAC : East Africa Community

KCB: Kenya Commercial Bank

KENGEN: Kenya Electricity Generating Company Limited

KQ: Kenya Airways

LTD: Limited Company

NSE: Nairobi Securities Exchange

OLS: Ordinary Least Squares

PLC: Public Limited Company

ROA: Return on Assets

ROE: Return on Equity

SOEs: State-Owned Enterprises

VIF: Variance Inflation Factor

ABSTRACT

The study sought to establish the impact of privatization on state owned companies' profitability in Kenya. The study used descriptive design to collect and analysis data collected from a target population of sixteen privatized firms listed at the NSE. The study was a census of all the 16 firms with data getting collected for a period of 10 years, 5 pre-privatization years and 5 post-privatization years. The study tested the presence of multicollinearity, heteroscedasticity and normality. Completeness of data was checked being entered into excel sheet. The excel data sheet was exported to STATA software that was used in analysis. Descriptive statistics were first generated before inferential analysis. Minimum, maximum, mean and standards deviation were generated. The study adopted pooled cross- sectional regression in estimating the coefficients of the explanatory variables. The regression assisted in establishing the effect of privatization, state ownership, firm size, and domestic competition on profitability of privatized state firms. The coefficient of determination of showed that majority of the total variation in profitability was explained by privatization, state ownership, firm size and domestic. Further, the p-value associated with the F-statistic showed that privatization, state ownership, firm size and domestic competition had a significant impact on state owned commercial firms' profitability. The study also established that the effect of privatization, firms size and market competiveness had a significant direct effect on profitability. The effect of state ownership was significant but inverse. Overall, the F-test had showed that privatization, state ownership, firm size and domestic competition majorly effected profitability of the commercial state-owned companies. The government of Kenya should continue adopting privatization programs through the privatization commission by giving up majority of their stake to the private sector. The top management of commercial state firms to should increase their assets holdings and improve their domestic competition.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Globally, academician, practitioners and policy experts have been preoccupied with the concept of privatization. The role of privatization in economic transformations of economic situations in most countries cannot be over emphasized. The idea and concept of privatization shot into popularity with about eighty countries initially adopting the practice and over six thousand five organizations public organizations being privatized (Hinnawi & Ahmed, 1995). The concept of privatization initially was developed in United Kingdom but with time, the concept has spread to other countries including developing countries. A number of countries have already adopted privatization with dozens of state owned corporation being privatized; however, some governments are reluctant to relinquish control of state firms to private sector leading to a number of privatization programs being halted (Tran, Nonneman & Jorissen, 2015).

The theory of allocation efficiency was proposed by Adam, Cavendish and Mistry (1992). The allocation efficiency theory holds that competition introduced by private sector is crucial for state firms to achieve allocative efficiency. The productive efficiency theory was proposed by Farrell (1985). It holds that productive efficiency is about the firm training its efforts in reducing production costs and having efficient processes that deliver products. The theory of public choice theory has major proponents in Niskanen (1972) and Boycko, Shleifer and Vishny (1996). The public choice theory assumes a more an a approach with bureaucracies in which state owned firms are seen as tool of achieving the goals for the politicians in terms of maximization of budgets and votes (Niskanen, 1972; Boycko et al., 1996).

The relationship between Privatization and profitability is not only a global issue but a local issue too. Kenya has witnessed several privatization efforts with a number of companies already privatized. Ochieng and Ahmed (2014) evaluated the extent to which financial performance is affected by privatization in Kenya airways establishing that privatization was highly associated with financial performance. Ndegwa (2015) also examined the link between profitability and privatization of state-owned corporations in Kenya. Ndegwa (2015) noted improved profitability of state-owned corporations with privatization. The improved profitability was due to cost and management efficiency and improved labour productivity. When fully done, privatization promises to improve employment opportunities in the country and relieve the taxpayers the burden of supporting underperforming government firms. Privatization also promises government more tax revenues from the improved profits of the privatized firms.

1.1.1 Privatization of Firms

Privatization generally refers to relinquishment of control of state firm to private sector in terms of resources and management. Megginson (2017) explained that privatization involves the practice of government transferring capital structure and ownership to private companies or any form of public private partnership in the running of state enterprises. According to Xia and Walker (2015), described privatization and conscious steps taken to encourage private the participation of private sector in the public affairs where the government transfers ownership of some state-owned corporation wholly or partially. Tran, Nonneman and Jorissen (2015) noted that privatization is the elimination of total control of public institutions into the hands of private citizen's hands. Rajwani

and Liedong (2015) on the other described privatization as an act of issue of shares of public corporations to the private sector.

The goals of privatization may be political or economic; Economic objectives involves enhancing productivity, encouraging stronger private sector, lowering debt burden on the state and encouraging state firm to run independently (Bruton, Peng, Ahlstrom, Stan and Xu, 2015). The Political objectives may involve making free resources for reallocation to priority areas, eliminate interference by politicians and to actualize the participation of staff as stock holders. Whereas firm oriented objectives may include improving performance, consumer-oriented objective is about improving services and/or goods. All privatizations ought to be evaluated to ensure that the goals have been achieved. (Sheshinski and López, 2003). The study adopted dummy variable where 1 represents pre privatization years and 0 represents post privatization years (Gitundu, Sifunjo, Kiprop & Kibet, 2015)

1.1.2 Profitability of Firms

Profitability is the ability of business to generate enough revenues to offset expenses of running the organizations and compensate the owners or entrepreneur inform of profits. Profitability is also described as the measure of performance of business-oriented firms. Profitability can also be defined as an aspect of overall performance where a business organization generates adequate revenues to cover the cost of operation. Profitability just like other aspects of performance of firms can be measured using number proxies. According to Tonchia and Quagini (2010), the stakeholders of a firm in general and shareholders in particular expect to earn a return on investment after the firm offsetting cost of operations including payment to employees, suppliers, financiers, government

taxation. All the stakeholders have a claim on the profits generated by a firm (Tanui, Magadi, Tanui & Rotich, 2018).

Profits of a business in principle total revenues generated less total expenses incurred by a firm. The profits can be a positive figure when sales revenues are more than total costs incurred. The profit figure can also be negative in cases whereas total revenues generated cannot settle the total cost incurred by a firm completely, negative profits can be called losses (Quagini & Tonchia, 2010). Practitioners have presented various proxies to measure profitability including return on equity that is the ratio between profit and equity. Return on sales is a measure of profits as percentage of sales also referred to as net profit margin. Another measure commonly used in profitability measure is return of assets that can be a ratio or percentage. Return on assets (ROA) as a ratio is the ratio of profits after tax to total assets of the firm (Estrin & Pelletier, 2018). The study will adopt ROA to measure profitability of commercial privatized firms in Kenya.

1.1.3 Privatization and Profitability

The process of privatization is associated with improved performance that comes by improved efficiency and effectiveness as managers are exposed to competition hence must find avenues of generating enough revenues especially through means like privatization (Estrin & Pelletier, 2018). Therefore, privatization can play a crucial role in any economic reform programme. Estrin and Pelletier (2018) noted that that privatizations could only be successful if the private sectors is associated with efficiencies and productivity. The success of privatization must be evaluated against specific objectives and that privatization when successfully carried out leads to cost saving and efficiency that reduces the burden on tax payer inform of subsidies for such

firm and tax revenues generated in the process from profits earned by such firms (Liljeblom, Maury & Hörhammer, 2019).

Businesses owned and managed by government tends to underperform in terms of profitability since they concentrate on other goals apart from profitability. Government owned businesses tends to concentrate on other objectives that may be political or economic in nature. Porta et al (1998) further noted that government owned businesses are not run like private businesses in that they are sometimes used to rewards cronies and have bureacracies that hurts their performance. In addition, Doğan (2013) noted that businesses that are privately owned tends to be more efficient and profitable compared to state owned firms. Privatization is based on the premise that government to achieve other equally pressing needs of the country can utilize funds generated during privatization. Ina addition, privatized firms tends to operate efficiently hence becoming more profitable during post privatization period. This has made it logical for the state to disassociation itself with manufacturing of goods and services provision (Dinc & Gupta, 2011).

1.1.4 Privatized State Corporations in Kenya

In the early 1980s, the Government of Kenya came up with policies aimed revitalizing the economy through mechanisms such as privatization so as to involve the private sector in economic development. The government achieved this through privatization of state-owned corporations leading to reduced need for supporting the firms through tax revenues. In 1988, the government privatized KCB through public offer of the shares at the NSE leading to sale of 20% stake. In the year 1996, the government privatized Kenya Airways. In the year 2006, the government through NSE, initiated a working committee aimed at actualizing demutualization (NSE, 2019).

The demutualization at NSE has provided the government with an avenue for the liberalization firms that were previously public dominated. The NSE has provided the government to divest in the said firms. The government has already offered some its stake in Eveready batteries Limited, Stanbic Kenya Limited, Safaricom, Mumias Sugar Company, Kengen, Kenya Reinsurance Corporation, KCB, among others. The NSE has provided an opportunity for the public to acquire ownership in the profitable companies hence getting the opportunity to earn income inform of dividends offered by the company. NSE has also provided opportunity to small-scale investors with opportunity to purchase a stake into profitable companies (NSE, 2019).

1.2 Research Problem

Privatization has been famed with job creation in the entire country, as the companies become efficient and expanded operations. Even with privatization efforts in Kenya, the process has been slow given bureaucracies in government processes. However, when fully done, privatization promises to improve employment opportunities in the country and relieve the taxpayers the burden of supporting underperforming government firms. Privatization also promises government more tax revenues from the improved profits of the privatized firms. Rakhman (2018) noted that hold that privatization is an avenue for the government to improve the performance of lowly performing state-owned firms as well as improve service delivery for the benefit of the citizens. The Privatization program is expected to improve financial fortunes of dwindling state-owned firms, improve profitability as well as efficiency of the state firms (Babu & Ashok, 2018).

The privatizations programs have been successful in some firms while other have not be successful. The successful privatizations have been Safaricom Telecommunication

Kenya, Electricity Generating Company, Kenya Reinsurance Corporation, Kenya Commercial Bank Ltd, and Stanbic Kenya Ltd Banking, National Bank of Kenya Banking, BAT Development (K) Ltd, CMC Holdings Automobile, Housing Finance Company of Kenya. For instance Safaricom Ltd has had positive ROA of 0.35 in 2016, 0.43 in 2017, 0.47 in 2018 and 0.47 in 2019. The assets have grown from 158 billion in 2016, 161 billion in 2017, 167 billion in 2018 and 192 billion in 2019. Another set of companies that have been performing poorly even with privatization includes Mumias Sugar Company, Eveready Batteries Kenya Ltd, Kenya Airways Commercial, E.A. Oxygen Ltd- BOC, Uchumi Supermarkets Ltd and. Bamburi Portland Cement Co. Ltd. For instance Kenya airways has been performing poorly with firm size in terms of total assets shrinking from 158 billion in 2016, 147 billion in 2017 and 136 billion in 2018. The ROA has also been negative for the last five years. The ROA was -14% in 2015, -16.58% in 2016, -4.35% in 2017 and -5.5% in 2018 (Kenya Airways ltd, 2018; Safaricom ltd, 2019; privatization commission of Kenya, 2020)

Globally, Al Hinai (2016) investigated the link between privatization through initial public offer and performance of state-owned corporations. The study revealed that firms that were privatized performed better with privatization in terms of improving cost efficiency, profitability and employee efficiency. Estrin and Pelletier (2018) investigated the experience at the international sate associated with privatization in developing economies. The study established that privatizations could only be successful if the private sector is associated with efficiencies and productivity. Siddiqui and Lodhi (2015) evaluated the link between privatization and Pakistani banks performance. The findings revealed that privatized banks outperformed the public banks. The study concludes that

privatization has crucial impact on performance of privatized banks in Pakistan as it enhances profitability, efficiency, and productivity.

Domestically, Ochieng and Ahmed (2014) evaluated the causality of privatization on financial performance of firms in the air transport in Kenya revealing that privatization was highly associated with financial performance in the air transport industry. In a study of state owned firms in Kenya, Ndegwa (2015) investigated the link between profitability and privatization. The study revealed improved profitability of state-owned corporations with privatization. Makokha (2013) evaluated the impact on financial performance of former state firms by privatization. The research showed that financial performance was positively affected by privatization. Gitundu, Sifunjo, Kiprop and Kibet (2015) studied the difference in performance of privatized and other listed firms. The findings revealed significant difference based on ownership of the firms. The study revealed significant differences in cost efficiency and Tobin Q. There exist various studies on the association between privatization and performance; however, gaps exist in literature. First, majority of studies already done have been based on primary data with few studies relying on secondary data. Second, studies done have tended to examine performance in general with few studies examining profitability. Finally, few studies have been done on privatized firm listed at NSE. The study therefore sought to answer the research question: what is the effect of privatization on profitability of is commercial state-owned companies in Kenya?

1.3 Research Objective

To establish the effect of privatization on profitability of commercial state-owned companies in Kenya.

1.4 Value of the Study

The study will be useful for policy, practice and theory. For practice, financial managers and directors of state owned enterprises may benefit from this study as it will enable them to convince the government to surrender their stake in the state firms to enhance efficiency and improve workforce performance as well as government expenditure is reduced or eliminated and replaced by revenue being generated.

The study may also benefit the investing public to run their businesses in a market environment that is liberalized with free flow of information to enable them operate in a competitive environment to ensure the state owned firms yield profitable returns on their investments. Concerning theory, this will add to literature on the role of privatization in enhancing performance of state-owned companies.

Academicians will therefore gain more knowledge on the success factors of privatization of State-owned Corporation. This will enable them to enhance their literature on the financial benefits of privatization of state-owned firms. The findings of the study will serve as background knowledge on which further research on the relationship between privatization and profitability will be based.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter examined theoretical and empirical literature on the relationship between privatization and profitability of firms. The aim of the literature review was to identify research gaps to fill in the current study.

2.2 Theoretical Foundations

Number of theories exist on relationship between privatization and profitability; however, the current study was underpinned by Allocative Efficiency, Productive Efficiency and Public Choice Theories.

2.1.1 Allocative Efficiency Theory

The allocation efficiency was proposed by Adam et al., (1992). The theory holds that private sector introduces competition that is helpful for government owned businesses to accomplish allocative efficiency. The process of privatization enables free flow of information that is necessary for achieving best resource use in an organization. The theory further holds that adjusting operation in allocation of resources is almost impossible in a market where there is no competition. Business organizations operating in less competitive market are often riddled with inefficiencies at the management level hence production of low quality products that are not in demand hence falling profitability (Zhongsheng & Hanwen, 2008). The major problem associated with allocative efficiency is often blamed on political appointees in state firms who have no interest in best resource allocation apart from their own political ambitions and that of the of their appointees. This results to inefficient managers who run state firms carelessly without any form of allocative efficiency (Bhandari & Javakhadze, 2017).

The theory hold that only private sector ownership can deliver the goal of allocative efficiency that can benefit the consumers in terms of quality products and affordable prices that benefit the industry in terms of improved healthy competition and the nation as a whole in terms of relieving the government from spending taxpayer money on failing state owned enterprise (Adam et al., 1992). The proponents of the theory holds that only privatization can deliver the allocative and public financing efficiency by lowering budgetary allocation to state owned enterprises, elimination of public debts directed at recuing struggling and insolvent state firms and helping the country solve the problem of deficit financing contributed by financial demands of poorly performing state firms (Bartels & Weiss, 2019).

Even with the criticisms of allocative efficiency theory in relation to its application in improving performance of privatized sate companies, the theory informs the purpose of privatization in state owned firms to achieve profitability. The theory notes that a state firm can improve their performance in general and profitability in particular through privatization that is associated with improved allocative efficiency. State firms can enhance their profitability level by embracing private ownership that will encourage them to operate in a market environment where profitability is the main goal to be achieved.

2.2.2 Productive Efficiency Theory

The productive efficiency theory was proposed by Farrell (1985). The theory holds that productive efficiency is about the firm training its efforts in reducing production costs and having efficient processes that deliver products. Neoclassical economists hold that privatization of state-owned firms is associated with encouraging productive efficiency policies. The theory argues that in modern large limited public companies, the ownership

of the company may be diluted hence managers acquire a lot of power and freedom in control of operations of the firm and therefore they tend to focus on goals that are in their in their interest. The management usually focus on profitability since most of the remuneration are tied to profitability (Adam et al., 1992). The impact of the change in ownership on productive efficiency after privatization of the state-owned firms is more depended on the environment in which the firms operates (Bitzenis, 2016).

According to Adam et al., (1992) privatization is crucial in achieving productive efficiency in that it provides an environment that encourages elimination of unwarranted cost that may be eating in the profits of the company. The competitive environment in which the business is thrust is essential in encouraging implementation of efficient processes that encourages cost reduction that leads to improved profitability. Competition will force firms to implement better methods of which is associated with improved production and productivity and reduced cost of production. The process of privatization that leads to private sector getting into ownership and management of former state firms promises the productive efficiency in that profitability becomes the driving force and all decisions and actions are made in the backdrop of profitability goal (Cook & Kirkpatrick, 2016).

The theory identifies areas of efficiency that can be achieved with privatization. Theory state that with privatization, a firm can achieve profitability through cost reduction strategies that leads to reduced cost of operations and improved profitability both in the short run and long run period. Productive efficiency demands that the firm identifies areas of production where cost can be reduced to enhance profitability that is only possible for firms operating in competitive environment accorded by privatization.

2.2.3 Public Choice Theory

The theory of public choice has major proponents in Niskanen (1972) and Boycko et al., (1996). The theory assumes an a approach that is more bureaucratic where government owned firms are seen as tools of achieving the goals for the politicians in terms of maximization of budgets and votes (Niskanen, 1972; Boycko et al., 1996). The theory holds that governments world over are not keen on profitability maximization goal. They are however concerned with goals of optimizing employment creation and optimizing budgets use.

Boycko et al. (1996) proposes a business model where state owned firms are privatized in within the boundaries of public choice theory where the state firms can still achieve government goals with efficiency and competiveness associated with private sector. The model explains that the privatization can lead to improved achievement of goals of employment and other goals in struggling state firms by passing the cash flow and management right to private entities that can run the firms efficiently withought losing their main goal of service provision and production of essential products in the economy.

The theory informs the variable privatization and its contribution to profitability. The theory suggests privatization mechanisms within the boundaries of public choice for delivering products and services to the public with efficiency only seen in private business firms. Privatization of management and control makes it hard for government businesses to continue being inefficient in resource use and applying wasteful labour practices that are not helpful in enhancing efficiencies.

2.3 Determinants of Profitability

The extent to which privatization impacts on profitability of state-owned corporations depends on several factors that are associated with privatization of firms. The factors include privatization, state ownership, firm size and domestic competition.

2.3.1 Domestic Competition

State firms tends to be monopoly firms hence they do not face any serious competition in the market. The absence of competition encourages inefficiency as a firm can increase profits by just increasing prices rather than produce efficiently and attract new customers. Xia & Walker (2015) noted that private firms on the other hand tends to face stiff competition from other firms and they cannot just increase prices to increase profitability as the demand is elastic and they would lose all the customers if they increased prices beyond market prices. Such firms can only increase profits through efficient operations and improved productivity. Bruton, Peng, Ahlstrom, Stan & Xu (2015) explained that state firms operate under flexible budget with promise of money from exchequer making them inefficient. The authors further state that privatization of state firms introduces them operation under strict budget constrain hence they must find better ways of operation that leads to improved efficiency and profitability.

2.3.2 Privatization

The process of privatization is associated with improved performance that comes by improved efficiency and effectiveness as managers are exposed to competition hence must find avenues of generating enough revenues especially through means like privatization (Estrin & Pelletier, 2018). The process of privatization is associated with improved performance that comes by improved efficiency and effectiveness as managers are exposed to competition hence must find avenues of generating enough revenues

especially through means like privatization (Estrin & Pelletier, 2018). Therefore, privatization can play a crucial role in any economic reform programme. Estrin and Pelletier (2018) noted that that privatizations could only be successful if the private sectors is associated with efficiencies and productivity. The success of privatization must be evaluated against specific objectives and that privatization when successfully carried out leads to cost saving and efficiency that reduces the burden on tax payer inform of subsidies for such firm and tax revenues generated in the process from profits earned by such firms (Liljeblom, Maury & Hörhammer, 2019).

2.3.3 Firm Size

Firms that Large in terms of their operation are able to enjoy the internal economies of scale making it possible for them to offer goods and services at lower average costs compared to relatively smaller firms (Akbas & Karaduman, 2012). Large firm can also compete favourably with their competitors in the market place and be able to take advantage of opportunities arising in the market with no or little competition. Past empirical literature tends to establish positive causal effect link between firm size and profitability of firms. However, expansion beyond certain levels have also been associated with negative profitability. Ayaydin and Karakaya (2014) established that high growth rates may be associated with falling profitability in the short run especially if the expansion is in heavy investment. Ayaydın and Hayaloglu (2014) noted that size, location, age, and industry have little explanatory power over profitability.

2.3.4 State Ownership

There exist three kinds of ownership controls including owner-controlled, managerially-controlled and externally controlled organizations. Owner-controlled firms are the kind of

firms with managers being dominant shareholder for instance state controlled firms have the government being the dominant shareholder employing managers to run the firms (Yu, 2013). Managerially controlled firms are firms where the mangers are more powerful because they exist no dominant shareholder to control them as individuals. Externally-controlled are firms that are neither controlled by owners or the managers but outside parties like in the case of companies taken over (Zhou, Gao & Zhao, 2017) According to the agency theory, if managers of an organization are also owners, they are most likely to maximize shareholders wealthy. However, Agency conflict is an important problem associated with ownership structure. Profitability in the short run period has been established to be directly related with institutional ownership (Iwasaki & Mizobata, 2018).

2.3.5 Operational Costs

Studies have revealed that a rise in cost of operations leads to reduced profits. The operational cost includes cost of labour, material cost and overheads (Boubakri, Guedhami, Kwok & Wang, 2019). Estrin and Pelletier (2018) noted that a firm could increase its profits by lowering its cost of production or increasing its productivity. Lowering cost of production is only possible by having a process that minimizes and cist down on wastes to achieve the same level of production within lower costs of operation. On the other hand, firm can improved their profitability by implementing more productive technology that leads to improved output with same level of resources and associated costs. Bachiller (2017) noted further that a firm a firm with high fixed costs needs to operate at high scale of operation to take advantage of economies of scale that is associated with lowered average costs.

2.3.6 Labour Productivity

Labour productivity is an important facet of productivity that focus on the productive level of labourers employed by a firm, Labour productivity is often measured as increase in total output associated with increased use of labour. Labour productivity is change in productivity associated with additional labourer employed in production process (Kennedy, 2017). Improved labour productivity is associated with improved productive capacity of the firm that intern leads to improved profitability. Productive labourer produces more with minimal cost hence increased productivity and profits (Brown, Earle & Telegdy, 2016). Ina addition, efficient labourer can produce more high quality products that when released to the market attracts high prices and are sold extensively leading to improved profitability (Hung, Thien, & Liem, 2017).

2.4 Empirical Review

Empirical studies on privatization and performance exist in the literature. In as study of Kenya Airways, Ochieng and Ahmed (2014) evaluated the contribution of privatization to financial performance. The study was based on adopted approach with target population being the management of KQ and finance experts. The study employed a sample consisting of thirty-seven employees chosen while employing stratified random sampling. The study adopted OLS regression to analysis data with the results showing that privatization was highly associated with financials at KQ. The study was however based on KQ only and the findings may not be wholesomely applied to other firms.

Gitundu, Sifunjo, Kiprop and Kibet (2015) studied the difference in performance of non privatized and privatized at the NSE. The study employed a sample of sixteen firm of which eight were privatized firms and the remaining eight were other listed firms

between the period beginning 2007 and ending 2013. Performance was measure using proxies such as ROA, cost efficiency and Tobin Q. Data used was secondary nature obtained from financial statements, CMA reports and NSE website. The study adopted paired t test with findings showing significant difference based on ownership of the firms. The study revealed significant differences in cost efficiency and Tobin Q.

Al Hinai (2016) investigated the link between privatization through initial public offer and performance of state-owned corporations. The study examined sixty-one firms in sixteen years. Measures of financial performance such operating efficiency, profitability and employment creation. The study revealed that former state firms privatized firms performed better with privatization. They became cost efficient, profitable and employed more people. The study further examined the difference in performance of privatized and private companies finding that there was significant improvement in earnings and profitability levels.

A study by Ndegwa (2015) among Kenyan firms investigated the link between profitability and privatization. The descriptive study used systematic random sampling. The study targeted one hundred and two privatized state firms as from the end of the year twenty fourteen. The used OLS regression model with findings revealing improved profitability of state-owned corporations with privatization. The improved profitability was due to cost and management efficiency and improved labour productivity.

A study by Makokha (2013) in a study of former state firms in Kenya evaluated the contribution of privatization to financial performance. Listed former state-owned corporations at the NSE were the target population. The study adopted descriptive survey design and a target population of all listed former state-owned corporations at the NSE.

The research employed five-year secondary data before and privatization. The expiatory variables used in the study included liquidity, leverage and the depended variables was profitability measured using ROA. The research revealed financial performance was positively affected by privatization.

A study by Estrin and Pelletier (2018) investigated the experience at the international sate associated with privatization in developing economies. The study established that privatizations could only be successful if the private sectors is associated with efficiencies and productivity. The study further reveals that success of privatization must be evaluated against specific objectives and that privatization when successfully carried out leads to cost saving and efficiency that reduces the burden on tax payer inform of subsidies for such firm and tax revenues generated in the process from profits earned by such firms.

Ireri (2016) studies the factors leading to poor performance among state owned enterprises in Kenya. The study targeted factors including appointment of management, legal framework, politicization, indebtedness, gender diversity in appointments of the board and economic conditions. The study revealed that appointment of BOD that did not follow the law was a contributor to poor performance of state owned corporations, as the appointees do not run the state owned firms in the interest of the public good rather than selfish goals of the appointing authority.

Siddiqui and Lodhi (2015) investigated the link between performance and privatization of Pakistani banks. The difference in performance between sate owned privatized banks and public banks was examined. The study collected secondary data running from 2009 to 2014. Data analysis revealed that privatized banks outperformed the public banks. The

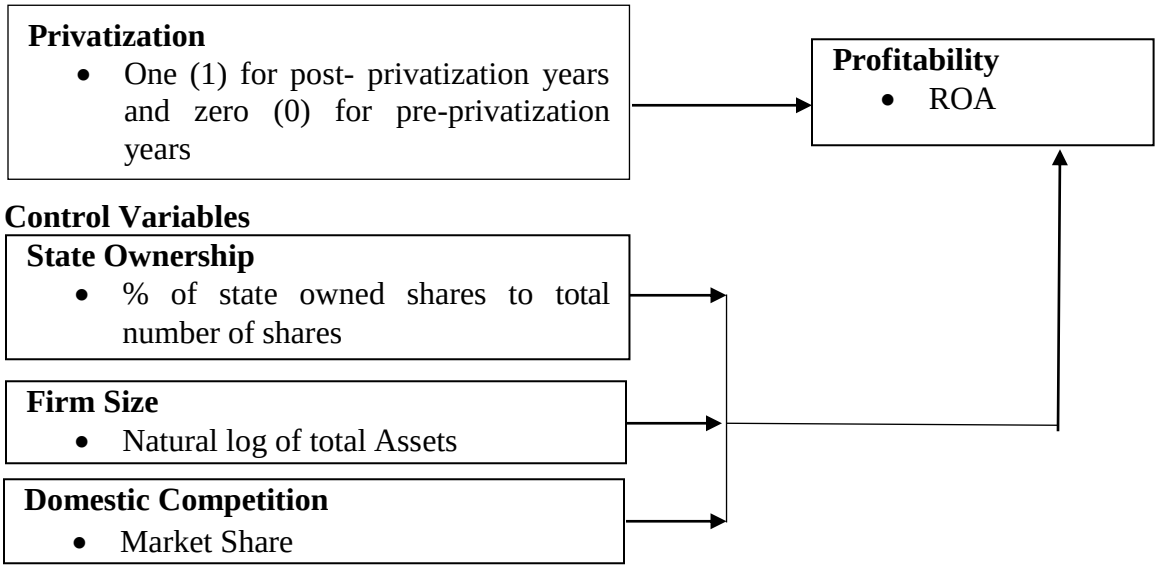
study concludes that privatization has crucial impact on performance of privatized banks in Pakistan as it enhances profitability, efficiency, and productivity.

2.5 Summary of Literature

Ochieng and Ahmed (2014) revealed that privatization was highly associated with financial performance in the air transport industry. Gitundu, Sifunjo, Kiprop and Kibet (2015) findings showed significant difference based on ownership of the firms. The study revealed significant differences in cost efficiency and Tobin Q. Al Hinai (2016) revealed that privatized firms performed significantly better after privatization. Ndegwa (2015) revealed improved profitability of state-owned corporations with privatization. Estrin and Pelletier (2018) showed that privatization when successfully carried out leads to cost saving and efficiency.

2.6 Conceptual Framework

Independent Variable



Explanatory Variables **Dependent Variable**

Figure 2. 1: Conceptual Framework

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

The chapter presents the methodology that were utilized in carrying out the study. The chapter expounds on how the data will be collected, analyzed, and presented.

3.2 Research Design

The study adopted descriptive design. The design is necessary when data to be collected will be reported, as they exist in the natural environment without any form of manipulation of the environment (Riff, Lacy, Fico & Wats, 2019). The design enabled the researcher to collect relevant data describing privatization and profitability. The data analyzed using quantitative methods to establish the contribution of privatization to profitability of commercial state-owned firms in Kenya.

3.3 Target Population

Sixteen (16) privatized companies listed at the NSE was the target population (Appendix II). Population describes the totality of all the elements or objects a researcher is interested in studying and upon which generalization has been made at the end of the study (Creswell & Creswell, 2017).

3.4 Sample and Sampling Procedure

Sample are the elements picked form the population that represents the population. The study was a census of all the 16 privatized companies listed at NSE hence no sampling was carried out.

3.5 Data Collection

Annual panel data was collected for a period of 10 years (5 pre- privatization years and 5 post-privatization years). The data obtained was annual and secondary in nature and

obtained from the different sources. Data on profitability and firm size was sourced from audited financial statements; data on government ownership was obtained from privatization commission of Kenya. Data on domestic competition of the firm was obtained from competition authority of Kenya. Data for privatization will assume a value of zero (0) for pre- privatization period and a value of one (1) for post privatization period. The study collected data on profitability, state ownership, firm size, and competition for five year period before privatization and after privatization for each firm. The year of privatization was ignored with data collected being recorded on data collection sheet (Appendix I).

3.5.1 Operationalization of Study Variables

The operationalization of study variables is presented in Table 3.1 showing the variables, notation, proxies and measurement of variables.

Table 3. 1: Measurement of Study Variables

Variable	Notation	Proxy	Measurement
Dependent Variable			
Profitability	ROA	ROA	After tax profit to total assets ratio
Independent Variable			
Privatization	PRIV	Dummy	Value of one (1) for post-privatization years and zero (0) for pre- privatization years.
Control Variables			
State Ownership	SO	Share ownership by Government	Percentage of shares ownership by government.
Firm Size	Size	Total Assets	Log of total assets of the firm.
Domestic competition	Dcomp	Market Share in terms of assets	Ratio of total assets of the firm to total assets of all firms

3.6 Diagnostic Test

Classical least squares assumptions were tested to ensure the model to be used is robust. The study tested the presence of multicollinearity, heteroscedasticity and normality. Serial correlation and unit roots were not tested because pooled cross-sectional studies do not suffer from them. Multicollinearity is said to exist when the exogenous variables are highly correlated. The problem of multicollinearity leads to inflated and misleading parameter estimates (Alin, 2010). The research used Value Inflation Factor (VIF) test to determine the existence of multicollinearity. A VIF value above 10 signify presence of multicollinearity.

Heteroscedasticity is said to exist when the residuals do not have a constant variance. The parameter estimates become misleading and may not be relied on for forecasting purposes. The study adopted Wald test in which a p-value greater than 0.05 signify absence of heteroscedasticity. Normality describes the quality of observed data set and residuals to show normal distribution where the mean and median are equal. The data set concerning a given variable is said to be normal when it fits into a symmetrical bell-shaped curve. The study adopted Shapiro Wilk test where a p-value greater than 0.05 signify normality of observed data and residuals (Linton, 2019).

3.7 Data Analysis

The data collected keyed into excel sheet and thereafter proxies were generated. The excel sheet was copied to data editor section of STATA Version 14 for eventual analysis. Descriptive statistics analysis involved minimum, maximum, mean and standards deviation. Inferential statistics used regression analysis. The study adopted pooled cross-sectional regression model for estimation of coefficients of the explanatory variables.

3.7.1 Empirical Model

The study adopted pooled cross-sectional regression model in equation [1] to examine the effect of privatization on profitability.

$$ROA_{tj} = \beta o + \beta_1 PRIV_{tj} + \beta_2 SO_{tj} + \beta_3 Size_{tj} + \beta_4 Dcomp_{tj} + \varepsilon i \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (1)$$

Where ROA = profitability

PRIV = Privatization measured by dummy variable; it takes a value of one (1) for each year in the post- privatization period and zero (0) in the pre- privatization period. Privatization is the independent variable.

SO, Size, Dcomp are the control variable

SO = State ownership that captures the extent of privatization measured by percentage of shares ownership by government to total number of shares in the specific company.

Size = Firm size measured by natural logarithm of total assets of the firm.

Dcomp = Domestic Competition measured by ratio of firm assets to total assets of all firms.

β0 = Intercept term

β1, β2, β3 and β4 are the coefficients of explanatory variables

ε = Error term capturing an observed characteristics

j= 1, 2, 3....., 15 Are the cross-sectional units representing the number of privatized companies.

t= time period of ten years (5 pre privatization years and 5 post privatization years)

3.7.2 Test of Significance

The regression assisted in establishing the effect of privatization, state ownership, firm size, and domestic competition on profitability of privatized state firms at 5% level of significance.

CHAPTER FOUR: RESULTS AND DISCUSSION

4.1 Introduction

The chapter presents the data analysis and interpretation and discussions. The data analysis involved descriptive, diagnostic tests and inferential analysis. The inferential analysis involved pooled cross-section regression analysis.

4.2 Descriptive Analysis

Descriptive analysis was carried out with the purpose of establishing general movement of study variables. The descriptive analysis was also critical in identifying outliers that would interfere with inferential analysis. The descriptive analysis included mean, standard deviation, minimum and maximum.

Table 4. 1: Descriptive Analysis

	10 Years Before Privatization			
	Size(Ksh.Millions)	ROA	SO	Dcomp
MEAN	58814.3125	0.0363	0.5845	0.0215
SD	85518.9193	0.1339	0.3309	0.0312
MIN	1150.0000	-0.0814	0.1500	0.0004
MAX	282493.0000	0.2488	1.0000	0.1031
N	16	16	16	16
	10 Years After Privatization			
	Size(Ksh.Millions)	ROA	SO	Dcomp
MEAN	117,272.3125	0.041469	0.28	0.0428
SD	218,397.0396	0.242488	0.21	0.079707
MIN	1,094	-0.48809	0.00	0.000599
MAX	874,490	0.47087	0.70	0.319157
N	16	16	16	16

Return on assets (ROA), Privatization (PRIV), State ownership (SO), Firm size (Size) and Domestic Completion (Dcomp).

The Table 4.1, return on assets was measured by the ratio after tax profit to total assets. The mean ROA was 0.036 and 0.041 for before and after privatization implying that ROA of commercial state-owned companies in Kenya improved with privatization. The

standard deviation for ROA was 0.13 and 0.24 before and after privatization respectively implying that the ROA of individual firms was spread around the mean with about 13% before privatization and 24% after privatization. The minimum ROA was -0.081 and -0.48 before and after privatization respectively implying that a given firm had the lowest ROA after privatization. The maximum ROA was 0.24 and 0.47 for before and after privatization respectively implying that that a firm had the highest ROA after privatization period.

Firm size was measured by the total assets of the firms. The mean firm size was Ksh.58.8 billion and Ksh.117.2 billion before and after privatization respectively implying that mean firm size improved with privatization. The standard deviation for firm size was Ksh.85.5 billion before privatization and Ksh.218.3 billion after privatization implying that the spread of individual firm size around the mean increased with privatization. The minimum firm size was Ksh.1.15 billion and Ksh.1.094 billion for before and after privatization respectively implying that the firm that had the lowest firm was after privatization. The maximum firm size was Ksh.282.4 billion and Ksh. 874.4 billion for before and after privatization respectively implying that the highest firm size was achieved after privatization.

The percentage share ownership by government was used as the proxy of state ownership. The mean state ownership was 0.58 and 0.28 for before and after privatization respectively meaning that state ownership reduced considerably with privatization as government gave up some shares for private sector acquisition. The standard deviation was 0.33 and 0.21 for before and after privatization respectively showing that the spread of state ownership of individual firm around the mean reduced with privatization. The

minimum state ownership was 0.15 and 0 before and after privatization respectively implying that the government gave up all share ownership in one of the firm after privatization. The maximum state ownership was 1 and 0.7 before and after privatization respectively meaning that the firm that had the highest state ownership after privatization was about 70% a reduction from 100% before privatization.

Domestic competition was measured by ratio of firm's total assets to industry total assets. The mean domestic competition was 0.0215 and 0.0428 for before and after privatization respectively implying that the domestic competiveness of individual firms improved with privatization. The standard deviation for domestic competition was 0.0312 and 0.0797 for before and after privatization respectively meaning that the spread of domestic competition for individual firms around the mean increased with privatization. The minimum domestic competition was 0.0004 and 0.00059 for before and after privatization respectively meaning that the lowest domestic competition was before privatization. The maximum domestic competition was 0.1031 and 0.3191 meaning that the highest domestic competition for a firm was achieved after privatization.

4.3 Diagnostic Tests

The study tested the classical least squares assumptions to ensure the model to be used is robust. The study tested the presence of multicollinearity, heteroscedasticity and normality test of model suitability. The study adopted Shapiro Wilk test where a p-value greater than 0.05 would signify normality of observed data and residuals (Linton, 2019). The finding is presented in Table 4.2 showed that the variables used in the study were normally distributed with associated p-values being greater than 0.05 level of significance.

Table 4. 2: Shapiro Wilk test For Normality

Shapiro-Wilk W test for normal data

Variable	Obs	W	V	z	Prob>z
ROA	32	0.97334	0.225	0.022	0.70139
PRIV	32	0.99840	0.053	6.083	1.00000
SO	32	0.94631	1.791	1.210	0.11318
Size	32	0.97053	0.983	0.035	0.51404
Dcomp	32	0.94624	0.136	1.641	0.15326

The study also examined the presence of heteroscedasticity. The study adopted Wald test where a p-value greater than 0.05 signify absence of heteroscedasticity. The findings are presented in Table 4.3 where p-value obtained was greater than 0.05 level of significance. The null hypothesis of panel homoscedasticity was not rejected with the study concluding absence of heteroscedasticity in the model.

Table 4. 3: Wald Test for Heteroscedasticity

```
. estat hettest

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
         Ho: Constant variance
         Variables: fitted values of ROA

         chi2(1)      =     0.07
         Prob > chi2  =   0.7981
```

The presence of multicoliniarity was also examined with the study adopting Value Inflation Factor (VIF) test to examine the presence of multicoliniarity. A VIF value above 10 would signify presence of multicoliniarity. The findings presnted in Table 4.4 showed that there was no problem of multicollinearity given that the VIF values associated with explantory variables were all less thn 10.

Table 4. 4: Variance Inflation Factor Test for Multicollinearity

```
. estat vif
```

Variable	VIF	1/VIF
Size	2.28	0.438679
Dcomp	2.13	0.469164
SO	1.61	0.621992
PRIV	1.47	0.680375
Mean VIF	1.87	

4.5 Regression Analysis

The study adopted pooled cross- sectional regression model for estimation of coefficients of the explanatory variables. The study had sought to examine the effect of privatization on profitability of commercial state-owned companies in Kenya. The study output included the coefficient of determination, the F-Test and T-test. The significance was examined at 5% level of significance as presented in Table 4.5.

Table 4. 5: Pooled Cross-sectional Regression

Source	SS	df	MS	Number of obs	=	32
				F(4, 27)	=	119.15
Model	1.847016804	4	.461754201	Prob > F	=	0.0000
Residual	.10463218	27	.003875265	R-squared	=	0.7175
				Adj R-squared	=	0.7033
Total	1.95164898	31	.465629466	Root MSE	=	.68237

ROA	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
PRIV	.1362506	.0466977	2.92	0.028	.0141397	.4163841
SO	-.2483862	.0743332	-3.34	0.005	-.5424802	.0457079
Size	.316181	.0298101	10.61	0.000	.0449843	.8773462
Dcomp	.0019971	.0849354	2.35	0.041	-1.722761	1.762703
_cons	.0826081	.270959	0.30	0.763	-.4733539	.6385701

The findings presented in Table 4.5 showed that the coefficient of determination (R^2) was 0.7175 implying that the model explained 71.75% of the total variation in profitability of

commercial state-owned companies in Kenya. The remaining variation of 28.25% in profitability was explained by unobserved variables that were not in the scope of the current study.

Further, the p-value associated with the F-statistic showed that privatization, State ownership, firm size and domestic competition had a significant effect on profitability of listed commercial state-owned companies in Kenya (F=119.15 and p=.000< .05).

The t- statistics associated with coefficients showed the effect of each explanatory variable on profitability of listed commercial state-owned companies. The study established that the effect of Privatization on profitability was positive and significant (β_1 = .1362, t = 2.92 and p = .028). The study also established inverse and statistically significant effect of state ownership on profitability (β_2= -.2483, t = -3.34 and p = .005). The effect of firm size on profitability was positive and statistically significant (β_3 = .3161, t= 10.61 and p=.000). The effect of domestic competition on profitability was positive and statistically significant (β_4 = .00199, t= 2.35 and p = .041). The constant term (β_0 =.0826, t = 0.30 and p= .763). The model was this estimated as follows:

$$ROA_{tj} = .1362\ PRIV_{tj} - .2483\ SO_{tj} + .3161 Size_{tj} + .00199\ Dcomp_{tj} \quad \text{..... (1)}$$

4.5 Discussion of Findings

The coefficient of determination (R^2) was 0.7175 meaning that privatization and the control variables explained 71.75% of the total variation in profitability of commercial state-owned companies in Kenya. The coefficient of determination showed a good fit hence it can be concluded that the model explains the variation in profitability of commercial state-owned companies in Kenya. The remaining variation of 28.25% in

profitability captured unobserved factors not in the scope of the current study. Some of the variables not studied includes industry variables and macroeconomic factors. Further, the p-value associated with the F-statistic showed that privatization, State ownership, firm size and domestic competition significant effected profitability of listed commercial state-owned firms in Kenya (F=119.15 and p=.000< .05). The finding implies that privatization programme, state ownership, firm size and domestic competition were responsible for change in profitability.

4.5.1 Effect of Privatization on Profitability

The study shewed that privatization had a direct significant effect on profitability (β_1 = .1362, t = 2.92 and p = .028). Implementation of Privatization programme was associated with 0.1362% improvement in profitability of commercial state-owned companies in Kenya. The finding implies that privatization is privatization is associated with improved performance that comes by improved efficiency and effectiveness as managers are exposed to competition hence must find avenues of generating enough revenues especially through means like privatization. Privatization can help enhance the efficiency and cost effectiveness of firms as the firms become accountable to private owners.

The finding are in agreement with Siddiqui and Lodhi (2015) who concluded that privatization has crucial impact on performance of privatized banks in Pakistan as it enhances profitability, efficiency, and productivity. Further, Makokha (2013) revealed financial performance was positively affected by privatization. Al Hinai (2016) also showed that that former state firms performed better with privatization in terms of job creation, profitability and cost efficiency. However, Estrin and Pelletier (2018) had

contrary opinion establishing that privatizations could only be successful if the private sectors is associated with efficiencies and productivity.

4.5.2 Effect of State Ownership on Profitability

The effect of state ownership on profitability was inverse and statistically significant (β_2= -.2483, t = -3.34 and p = .005). A one percent increase in state ownership was associated with reduction in profitability of commercial state-owned companies in Kenya by 0.248%. The finding implies that state ownership stifles profitability as state ownership is associated with reduced innovativeness and efficiency. More state ownership in a firm is further associated with bureaucracies and red tapes making decision making slower hence impacting on profitability. Government dominated ownership is also associated with political interference in the day to day management of the firms. Such interference leads to decisions that are sub-optimal hence falling profitability.

The findings are in agreement with Gitundu, Sifunjo, Kiprop and Kibet (2015) that showed significant difference in profitability based on ownership of the firms with firm that state owned majority of shares underperforming those that the state owned majority of shares. Ndegwa (2015) also revealed profitability was inversely affected by state ownership change. Rakhman (2018) noted that privatization where the state gives up some shares was an avenue for the government to improve the performance of lowly performing state-owned firms as well as improve service delivery for the benefit of the citizens. However, the findings are contrary to Xia and Walker (2015) who showed that state firms can increase profits by just increasing prices rather than produce efficiently and attract new customers. The state firms could thus increase profits without having to be efficient but by charging high prices for products.

4.5.3 Effect of Firm Size on Profitability

The study also revealed a direct significant impact firm size on profitability (β_3 = .3161, t= 10.61 and p=.000). A one percent increase in firm size leads to increased profitability of commercial state-owned companies in Kenya by 0.31%. The finding implies that large firm with greater assets size can compete favourably with their competitors in the market place and be able to take advantage of opportunities arising in the market with no or little competition. Firms having adequate assets size are able to exploit opportunities as they arise hence improved profitability. However, expansion beyond certain levels have also been associated with negative profitability.

The results are in congruence with Akbas and Karaduman (2012) who revealed that large in terms of their operation and assets size are able to enjoy the internal economies of scale making it possible for them to offer goods and services at lower average costs compared to relatively smaller firms. However, Ayaydin and Karakaya (2014) had contrary findings showing that high asset growth rates may be associated with falling profitability in the short run especially if the expansion is in heavy investment. Ayaydın and Hayaloglu (2014) also showed that size, location, age, and industry have little explanatory power over profitability.

4.5.4 Effect of Domestic Competition on Profitably

The effect of domestic competition on profitability was direct and statistically significant (β_4 = .00199, t= 2.35 and p = .041). A one percent increase in domestic competition competitiveness of the firm is associated with 0.0019% increase in profitability of commercial state-owned companies in Kenya. The finding implies that firms that have large market size also reported dominant profitability. Former state ownership dominated

firms usually tends to be monopolists hence they have great market reach. The established market reach are often exploited by such firms to enhance their profitability.

The finding are in agreement with Xia and Walker (2015) that revealed that state firms tends to be monopoly firms hence they do not face any serious competition in the market. The absence of competition encourages inefficiency as a firm can increase profits by just increasing prices rather than produce efficiently and attract new customers. Bruton et al. (2015) explained that state firms operate under flexible budget with promise of money from exchequer making them inefficient.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The chapter presents the summary of findings, conclusion, recommendations, limitations and areas for further research. The study had sought to establish the effect of privatization, state ownership, firm size and domestic competition on profitability of listed commercial state-owned companies in Kenya.

5.2 Summary of findings

The R^2 showed that majority of the total variation in profitability was explained by privatization, state ownership, firm size and domestic. The remaining small variation captures unobserved factors not within the scope of the current study. Further, the p-value associated with the F-statistic showed that privatization, state ownership, firm size and domestic competition significantly affected profits earned by listed commercial state-owned firms in Kenya. Further, privatization directly and significantly affected profitability and that implementation of privatization programme was associated with improvement in profitability.

The study also revealed an inverse and statistically significant effect of state ownership on profitability and that an increase in state ownership was associated with reduction in profitability of commercial state-owned companies in Kenya. The study also showed that firm size had a direct effect on profitability and that an increase in firm size leads to increased profitability of commercial state-owned companies in Kenya. The study also showed that domestic competition directly and significantly affected profitability and that and increase in domestic competition competitiveness of the firm.

5.3 Conclusion

Overall, the F-test had showed that privatization, state ownership, firm size and domestic competition had a major impact on profitability of listed commercial state-owned firms in Kenya. The study finding meant that privatization programme, state ownership, firm size and domestic competition were responsible for profitability commercial state-owned companies in Kenya. Further, the positive effect of privatization on profitability meant that privatization is associated with improved performance that comes by improved efficiency and effectiveness as managers are exposed to competition hence must find avenues of generating enough revenues especially through means like privatization.

Given the inverse and major effect of ownership by state on profitability, the finding implies that state ownership stifles profitability as state ownership is associated with reduced innovativeness and efficiency. More state ownership in a firm is further associated with bureaucracies and red tapes making decision making slower hence impacting on profitability. The study also revealed a direct major effect of firm size on profitability. The finding means that that large firm with greater assets size can compete favourably with their competitors in the market place and be able to take advantage of opportunities arising in the market with no or little competition.

The research also showed that domestic competition directly affected profitability. The result means that firms that have large market size also reported dominant profitability. Former state ownership dominated firms usually tends to be monopolists hence they have great market reach. The established market reach are often exploited by such firms to enhance their profitability.

5.4 Recommendations

The study suggest to government of Kenya to continue adopting privatization programs through the privatization commission. Privatization is associated with improved performance that comes by improved efficiency and effectiveness as managers are exposed to competition hence must find avenues of generating enough revenues. Further, privatization has enhanced the efficiency level in business firms given that privatized firm becomes accountable to private shareholders.

The study also suggest to government of Kenya through the treasury and privatization commission to give up majority of their state to the private sector. Reduced government ownership in commercial state firms is associated with improved profitability. Further, businesses that owned and managed by government tends to underperform in terms of profitability since they concentrate on other goals apart from profitability. Government owned businesses tends to concentrate on other objectives that are often political or social in nature that conflict with profitability objective.

The research also recommends to the top management of commercial state firms to increase the assets holdings of the firms. Firms that have adequate assets in terms of current and noncurrent assets are able to take advantage of opportunities as they rise. Moreover, large firms with more assets are able to benefit from economies of scale whereby they can operate at lower average costs than their competitors hence more profitability. Large firm can also compete favourably with their competitors in the market place and be able to take advantage of opportunities arising in the market with no or little competition.

The study also suggest to top management of commercial state firms in Kenya to improve their domestic competition. Firms that occupy larger market share are also known to enjoy high profitability given that their products occupy the largest portion of the total available market. One of the way of improving firm domestic competiveness is through aggressive marketing and improved assets size. The directors and executive of the commercial state firms in Kenya should take advantage of the monopolistic characteristics created by state ownership to even expand their market reach further through increased efficiency and customer satisfaction focus.

5.5 Limitation of the study

The study relied was limited to four explanatory variables affecting profitability of commercial state companies including privatization, state ownership, firm size and domestic competition. The parameter estimates should thus be used with caution for decision making since inclusion of additional variable leads to change in the magnitude of the parameter estimates. There are other more variables that affect profitability in addition to privatization, state ownership, firm size and domestic competition that should also be studied.

The measure of privatization where five years taken before and after privatization may needs to be adjusted. As time passes, there are a few firms that performed better immediately after privatization but then the performance dwindled some years after privatization. There are also firms that did not perform well in terms of profitability immediately after privatization, however their profitability improved years later after privatization.

The research also relied on secondary data that may not adequately capture all aspects of privatization. The secondary data that was quantitative in nature may not capture all that happens at privatization. Privatization is a complicated matter that has qualitative aspects that can only be captured by primary data collected through instruments such as questionnaires and interview schedule.

5.6 Areas of Further Research

The current study focused on four explanatory variables affecting profitability of commercial state companies in Kenya including privatization, state ownership, firm size and domestic competition. The study suggest that future studies should be carried out with additional explanatory variables that affect profitability of commercial state firms in Kenya. Some other variables that may be studied may include liquidity, capitalization, and financial leverage among other variables. A study with comprehensive explanatory variables improves their applicability for decision making while relying on parameter estimates.

The current study also measured privatization as a dummy variable where five years before privatization was awarded a value of zero (0) and five after privatization was awarded a value of one (1). Future studies should adjust the period before and after privatization such that as number of years after privatization increases so does the number of years taken before privatization should increase. Studies should also explore alternative measures of privatization to establish if the findings still hold.

The research also relied on secondary data to capture privatization. The study suggest to future researcher to adopt mixed data where both secondary and primary data is used. The adoption of ore data source in the form of primary data would help capture aspects of

the variables that may not be adequately measured by secondary quantitative data. Primary data collection instruments should thus be included to the data collection sheet used to collects secondary data.

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APPENDICES

Appendix I: Data Collection Sheet

	Size of firm (total assets)	ROA (NPAT/TA)		Privatization (Dummy variable)	Competitiveness (HH Index)	State Ownership % of shares owned by government to total number of shares	
	Total Assets	NPAT	Total assets	Where '1' is for years after privatization and '0' represents years before privatization		shares owned by government	total number of shares
year t-10							
year t-9							
year t-8							
year t-7							
year t-6							
year of privatization	Data omitted for the year of privatization						
year t-4							
year t-3							
year t-2							
year t-1							
year t							

Appendix II: Study Variables

	Company	ROA	PRIV	SO	Size	Dcomp
Pre-PRIV Mean	Bamburi	0.189878	0	0.26	9.26179	0.003842
Post -PRIV Mean	Bamburi	0.246323	1	0	10.444	0.012532
Pre-PRIV Mean	BAT	0.2488	0	0.2	7.91305	0.000997
Post -PRIV Mean	BAT	0.239087	1	0	9.39935	0.004409
Pre-PRIV Mean	CMC	0.017905	0	0.2	9.46939	0.004729
Post -PRIV Mean	CMC	0.018303	1	0	9.41719	0.004488
Pre-PRIV Mean	HFC	0.020591	0	0.5	10.7661	0.017295
Post -PRIV Mean	HFC	-0.010604	1	0.3	11.0112	0.022098
Pre-PRIV Mean	KCB	0.034684	0	1	12.5514	0.1031
Post -PRIV Mean	KCB	0.048328	1	0.35	13.6814	0.319157
Pre-PRIV Mean	Kengen	0.016094	0	1	12.43	0.091316
Post -PRIV Mean	Kengen	0.030961	1	0.7	12.8462	0.13845
Pre-PRIV Mean	KenyaRe	0.141884	0	1	8.16735	0.001286
Post -PRIV Mean	KenyaRe	0.158041	1	0.6	7.35372	0.00057
Pre-PRIV Mean	KQ	0.06131	0	1	11.3094	0.029776
Post -PRIV Mean	KQ	-0.05694	1	0.2	11.8251	0.049866
Pre-PRIV Mean	Mumias	-0.081449	0	0.384	10.2139	0.009957
Post -PRIV Mean	Mumias	-0.144506	1	0.2	10.0674	0.0086
Pre-PRIV Mean	NBK	0.035579	0	1	11.137	0.02506
Post -PRIV Mean	NBK	0.040442	1	0.425	11.6539	0.042023
Pre-PRIV Mean	Safaricom	0.141878	0	0.6	11.7152	0.04468
Post -PRIV Mean	Safaricom	0.47086	1	0.35	12.16	0.069708
Pre-PRIV Mean	Stanbic	0.008274	0	0.4	9.58218	0.005293
Post -PRIV Mean	Stanbic	0.027662	1	0.23	9.81307	0.006668
Pre-PRIV Mean	UCHUMI	0.062446	0	0.9	8.84188	0.002525
Post -PRIV Mean	UCHUMI	-0.488098	1	0.44	8.37263	0.001579
Pre-PRIV Mean	eveready	0.059925	0	0.2487	7.04752	0.00042
Post -PRIV Mean	eveready	0.0601	1	0.2087	6.99756	0.000399
Pre-PRIV Mean	BOC	0.153239	0	0.15	7.48156	0.000648
Post -PRIV Mean	BOC	0.175346	1	0	7.5761	0.000712
Pre-PRIV Mean	General M	0.066512	0	0.51	8.83942	0.002519
Post -PRIV Mean	General M	-0.219391	1	0.465	9.1804	0.003542

Appendix III: Privatized State Companies in Kenya

Company	Type Of Privatization	Year Privatized
Safaricom Telecommunication	IPO	2008
Kenya Reinsurance Corporation	IPO	2007
Kenya Electricity Generating Company	IPO	2006
Mumias Sugar Company	IPO	2001
Kenya Commercial Bank Ltd	Public Floatation (Partial Divestiture)	1998
Eveready Batteries Kenya Ltd	Pre-emptive Rights	1997
Stanbic Kenya Ltd Banking	Pre-emptive Rights	1997
Kenya Airways Commercial	Public Floatation	1996
National Bank of Kenya Banking	Public Floatation	1994
BAT Development (K) Ltd.	Liquidation	1993
E.A. Oxygen Ltd- BOC	Public Floatation	1993
CMC Holdings Automobile	Public Floatation	1993
Uchumi Supermarkets Ltd.	Public Floatation (Partial Divestiture)	1992
Housing Finance Company of Kenya	Public Floatation (Partial Divestiture)	1992
Bamburi Portland Cement Co. Ltd	Public Floatation	1991
General Motors	Public Floatation	1991

Source: http://www.pc.go.ke