ANALYSIS OF THE DETERMINANTS OF VARIATION IN PERFORMANCE OF PRIVATIZED FIRMS LISTED IN THE NAIROBI STOCK MARKET.

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Analysis of the determinants of

DECEMBER, 2013
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This research project is my original work and has not been submitted for a degree award in any other university.

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This research project is dedicated to my dear wife Rachael and my lovely daughter Abigail who are the source of my inspiration and strength
ACKNOWLEDGEMENT

This study is due to the almighty God who gave me the courage to face the numerous challenges in getting the information needed for the study. I would also like to acknowledge my supervisor Mr. Ngaba for his guidance, patience and encouragement during my proposal writing period without which the research project would not have been successful.
ABSTRACT

In Kenya attempts to enhance the performance of parastatals have favoured partial privatization. Most of the privatized companies have had a complete turnaround in terms of their performance for example Kenya Airways, while others continue with the depressing record even after privatization for example Telkom Kenya. This study sought to answer the fundamental question of whether privatization achieves the objective of improving the performance of all the privatized firms as envisaged by the policy makers. It was also aimed at finding out the causes of the variation in performance in the privatized firms. The factors identified that were studied include percentage of residual government shares after privatization, board composition, size of the company in terms of total shareholders’ equity, and operating efficiency of the firm. The measure of performance was Return on Equity-(ROE), while operating efficiency was measured by sales to fixed assets ratio, which indicates the extent to which long-term assets are being used to produce sales. All the 15 listed companies with government shareholding were studied and they formed the basis of the findings. In this study secondary data collection methods from government records, published financial statements especially from the capital markets authority, periodicals, journals and textbooks were used. The data collected was analyzed using qualitative and quantitative techniques depending on the nature of the data. The SPSS program was used in entering, managing and cleaning the data. Finally the analyzed data was presented in the form of statistical output tables generated by the statistical tools such as regression analysis. The findings indicated a positive relationship between ROE and operating efficiency and size and a negative relationship between ROE and residual government shares. Board composition was not a significant determinant of ROE.
TABLE OF CONTENTS

DECLARATION ...................................................................................................................... ii
ABSTRACT ............................................................................................................................. iii
TABLE OF CONTENTS .......................................................................................................... vii
LIST OF ABBREVIATIONS .................................................................................................... ix
CHAPTER ONE ....................................................................................................................... 10
INTRODUCTION ...................................................................................................................... 10
  1.0 Background to the Problem ......................................................................................... 10
  1.1 Statement of the problem ............................................................................................. 13
  1.2 Objectives .................................................................................................................... 15
  1.2.1 General objective ..................................................................................................... 15
  1.2.2 Specific objectives .................................................................................................... 15
  1.3 Hypothesis .................................................................................................................... 16
  1.4. Justification of the study ............................................................................................. 16
  1.5 Significance of the study ............................................................................................. 17
  1.6. Scope and Limitation of the study .............................................................................. 18
CHAPTER TWO ..................................................................................................................... 19
LITERATURE REVIEW .......................................................................................................... 19
  2.0 Introduction .................................................................................................................. 19
  2.1 Effect of residual government shareholding on performance .................................... 19
  2.2 Effect of government representation in the board of management ......................... 22
  2.3 Effect of firm size and performance ........................................................................... 24
  2.4 The effect of operating efficiency on performance of privatized companies ........... 27
  2.5 Theoretical framework ............................................................................................... 28
  2.7 Conceptual framework ............................................................................................... 30
CHAPTER THREE ................................................................................................................ 31
RESEARCH METHODOLOGY ............................................................................................. 31
  3.1 Introduction ................................................................................................................ 31
  3.2 Research Design ........................................................................................................ 31
  3.3 Economic Model specifications .................................................................................. 31
  3.4 Target population of the study ................................................................................... 34
  3.5 Sampling techniques ................................................................................................... 34
  3.6 Sample size ................................................................................................................ 34
  3.7 Data collection............................................................................................................. 34
  3.8 Data analysis .............................................................................................................. 35
  3.9 Data presentation ........................................................................................................ 35
REFERENCE ....................................................................................................................... 46
DATA COLLECTION TEMPLATE ......................................................................................... 49
RESEARCH SCHEDULE ....................................................................................................... 50
RESEARCH BUDGET ........................................................................................................... 51
DEFINITION OF TERMS

Corporation: This is a business or a group of people having the authority to operate a single unit with a separate legal existence.

Parastatal: This is a state corporation under the state corporations Act Cap 446 (1987). It may be a body corporate established by or under an act of parliament or may represent a bank or financial institution licensed under the banking Act or other company incorporated by the government.

Public Enterprise (PE) / State Corporation (SC): Enterprises which are generally majority owned by the government and their borrowing is implicitly or explicitly guaranteed by the government. Public enterprises, parastatals will be used interchangeably with SCs, which are government owned, or controlled eco-entities that generate the bulk of its revenues from selling goods and services World Bank (1995).

Privatization: The transfer of all or any of the three kinds of property rights from the state to the private sector. These are ownership rights, operating right, and development right since these constitute the most common type of privatization in Sub-Saharan Africa.

Performance: An “action of achievement, consideration in relation to how successful it is.” In this study, Return On Equity (RoE) which measures the total earnings (Net profit or profit after tax) divided by the total ordinary shareholders’ fund will be used to measure performance.

Firm size: The capitalization of the firm (total equity held by shareholders) will be proxy for size of the firm.

Operating efficiency: Fixed assets turnover ratio, measured by sales to fixed assets, indicates the extent to which long-term assets are being used to produce sales.
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<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tr>
<td>NSE</td>
<td>Nairobi Stock Market</td>
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<tr>
<td>SPSS</td>
<td>Statistical Package for Social Sciences</td>
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<tr>
<td>CGD</td>
<td>Centre for Governance and Development</td>
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<td>SOEs</td>
<td>State Owned Enterprises</td>
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<td>SC</td>
<td>State Corporation</td>
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<td>CEO</td>
<td>Chief Executive Officer</td>
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<td>PEs</td>
<td>Public Enterprises</td>
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<td>RoE</td>
<td>Return on Equity</td>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>GoK</td>
<td>Government of Kenya</td>
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<td>OECD</td>
<td>Organization for Economic Cooperation and Development</td>
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<td>CMA</td>
<td>Capital Markets Authority</td>
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CHAPTER ONE

INTRODUCTION

1.0 Background to the Problem

State-owned enterprises (SOEs) are now responsible for approximately one-fifth of global stock market value, which is more than two times the level observed just one decade ago. According to a survey, government-controlled firms account for about 80 percent of the market capitalization in China, 60 percent in Russia, and 35 percent in Brazil (Economist, 2011). In Kenya a third of the firms listed in the Nairobi stock exchange are privatized firms with a substantial amount of government equity.

Governments all over the world have in the past decade engaged in privatization of the government owned corporations. Privatization reduces the role of government and increases the role of private sector in an activity or in the ownership of assets. Privatization of public resources injects new value into public assets and increases the privately-held capital base of a country. In some cases, it is a means of achieving gains in economic efficiency, given the extensive prevalence of poor economic performance of public enterprises in many countries and limited success with their reform. Empirical research has shown State Owned Enterprises (SOEs) as relatively inefficient and often a drain on public treasury, which has promoted the concept of privatization, in which the economy is placed in the hands of private sector operators who have been known for their efficiency and competitive spirit, to evolve and be globally embraced. (Jamal, Mahmoud and Khalaf, 2007)
However, the concept of privatization should be seen in the overall context of the respective roles of the state and markets. Government must have a powerful direct access of the market to manage the market breakdowns. There is a misconception that the role of the government is reduced after privatization. In fact the government now provides a more critical function, which is to give a facilitating atmosphere for fair expansion and growth and generates essential environment for development all the way through the investment in human resource development and creating supportive infrastructure (Kouser et al - 2011).

The wave of privatization that began in the United Kingdom in the 1980s, and spread across the globe during the 1990s, produced what is arguably the greatest transfer of ownership in the history of the corporation. Governments all over the world have sold, or are selling large blocks of their ownership positions to the private sector (Bortolotti and Faccio, 2008).

Governments have however separated ownership and control in privatized companies by means of devices that leverage the voting power associated with their investments, such as pyramids, and by means of special powers, such as the power to veto acquisitions, granted to the state (Ellison and Reed, 2003).

In Kenya as with other Sub-Saharan African countries characterized by excessive government ownership, state enterprises have had a depressing record. The poor performance of SCs in Kenya by 1990 led to outflow from central government to parastatals equivalent to 1 percent of the GDP in 1991. Further, in the year 1990 to 1992, the direct subsidies to parastatals amounted to Ksh 7.2 billion and as additional indirect subsidies amounted to Ksh. 14.2 billion. By 1994, the subsidies paid to parastatals or organizations were taking 5.5 % of the GDP. The levels of
inflation in the country then reflected deficits financed by the Central Bank. Some ways were devised to solve these problems, such as negotiations between SC and government in a bid to clarify the former’s objectives and set targets, introduction of competition and better accountability to customers, provision of incentives in form of higher salaries and benefits to employees based on performance and increased training of employees. All these measures were not 100% successful. Failure of the above measures made the governments embark on privatization (Kamung’a, 2000).

This uninspiring record, the attendant drain on the exchequer, and pressure from multilateral and bilateral donors have been the key drivers of the pressure for privatization. To meet this pressure, the Kenya government outlined a privatization strategy in its 1992 parastatal reform program the [Policy Paper on Public Enterprise Reform and Privatization](http://example.com) as well as the [Policy Framework Paper of 1993-96](http://example.com). Under these policies, the government would exit from commercial institutions, scrap or sell non-strategic parastatals and merge all SOEs with similar roles. The government also promised that private sector corporate governance principles would be applied in the management of the SOEs in which it had majority shares or was the sole owner, CGD (2002).

Attempts to enhance the performance of parastatals have favored partial privatization. The Privatization Act of 2005, proposes that rather than divesting its entire stake in parastatals, the government should seek to privatize some selected services and give priority to local investors rather than foreign ones. In addition, the utilities which are likely to be retained in the long run
because they are profitable will still have a sizeable amount of shares owned by the government, Mwaura (2007).

Most firms have had a complete turnaround after they have been privatized, However, there are some firms which have continued to perform social roles hence their performance has not been influenced by their privatization for example Kenya Power and Lighting Company despite being privatized, it still does rural electrification and rarely competes with other firms hence it misses the benefits of competition. Further, privatization act seems to favor commercialization of public services rather than entire privatization of parastatals thus the utilities which are likely to be retained in the long run because they are profitable-will still have a sizeable amount of shares owned by the government, Mwaura(2007)

Its against this background that this study explored the determinants of performance in privatized firms with a view of guiding future privatization ventures and restructuring the non-performing privatized firms in Kenya.

1.1 Statement of the problem

Since the Kenyan government has seemed to favor partial privatization of SOEs, there needs to be studies to evaluate the ultimate success or failure of the privatization ventures. Empirically, there have been numerous studies revealing the superiority of full privatization over the partial privatization. D'Souza, et al (2005) found in their study over a sample of 129 share-issue privatizations from 23 developed (OECD) countries. The same conclusion is also reported by Boubaki et.al (2005) in their research toward a sample of 230 firms from 32 developing
countries. The same finding was also reported by country specific studies, such as in Malaysia (Sun and Tong, 2002). In contrast, very few studies report the success story of partial privatization. Given very well established capital market in India, Gupta (2005) found that there was favorable impact of the partial privatization in India. Bin and Suzuki (2012) found that despite the fact that the stock market in Indonesia was not as well developed as in the Indian case, the partially privatized firms in the country did very well. He attributed this to the government’s commitment to ensure success of the privatization exercise, incentives to managers and proper monitoring of the firms.

Given the special context of Kenya in which institutional development, specifically capital market, has been less developed in comparison with developed countries, partial privatization might indeed work satisfactorily. If this is possible however, the secret behind such success should be documented so that other developing countries intending to adopt partial privatization could learn from Kenya. Since there are very few studies that show how partial privatization may still work successfully in developing country, this study contributes significantly to the body of knowledge.

It is worth noting that most research on government ownership structure and firm performance has been dominated by studies conducted in developed countries. However, there is an increasing awareness that theories originating from developed countries such as the USA, china and the UK among other non African countries may have limited applicability to emerging markets. Emerging markets have different characteristics such as different political, economic and institutional conditions, which limit the application of developed markets’ empirical models.
Kenyan studies have mostly focused on the ownership structure and they are contradictory in theory findings on the relationship between ownership structure, and firm performance (e.g. Mbaabu, 2010; Muka, 2010; Ongore & K’obonyo, 2011 and Kihara, 2006).

There is therefore a gap in literature as far as the factors that affect the performance of privatized corporations in Kenya. This study sought to compare the performance of the different privatized companies in the Kenyan stock market with a view of unearthing the proper blend of factors that should be present in privatized companies to ensure their optimal performance.

1.2 Objectives

1.2.1 General objective.

The goal of this research was to investigate the effect different factors have on the performance of privatized firms in Kenya.

1.2.2 Specific objectives.

This study sought:

1. To establish whether there is a relationship between percentage of residual government shares and performance of Kenyan privatized public firms.

2. To investigate the relationship between government representation on the management board and firm performance privatized firms in Kenya.

3. To establish if the size of the privatized firm affects its performance.
4. To determine if the operating efficiency has an effect on the performance of public privatized firms.

1.3 Hypothesis

So as to realize the above objectives, the study was guided by the following set of hypothesis.

1. There is no relationship between residual government shares and performance of Kenyan privatized public firms.

2. There is no relationship between government representation on the management board and performance of privatized public firms in Kenya.

3. There is no relationship between the size of privatized firms and their performance in Kenya.

4. There is no relationship between the operating efficiency and the performance of public privatized firms.

1.4. Justification of the study.

Privatization planners and policy makers do not have enough information to guarantee that privatized firms will have a complete turnaround once they are privatized especially in terms of what is the optimal residual government stake that should remain in these companies to ensure there is some form of control while at the same time not compromising performance. This study will yield data and information that will be useful in establishing a benchmark on which to rate the performance of SOEs. This is with a view of creating balance of factors that are necessary to ensure peak firm performance of privatized firms in Kenya. The information generated by this study will be important for stock markets in the East Africa in understanding the implications of
privatizing public corporations. This will benefit stock markets in Uganda, Tanzania and wider Eastern Africa which has the stock markets at their infancy stages.

The findings of the study form part of a guide for future privatization ventures not only for government owned enterprises but also for other enterprises with ownership structures similar to that of governments for example family ownership. It will also assist policy makers who want to make use of performance measures of the stock market in advising public corporations on privatization prospects that may arise when listing in the stock market. In addition, it will guide policy makers on new baselines to use when determining privatization options for public corporations. Henceforth predictions of performance will have a factual base and this will greatly help during the strategic planning in the long term.

Educators too in the education industry will find the information obtained from this study beneficial to their curriculum in imparting knowledge to students and researchers who are researching on the sector and how it can greatly benefit the country.

1.5 Significance of the study.

The findings of this study are beneficial in decision making in government in the delicate balancing act of the amount of shares to sell in parastatals when they are undergoing privatization to ensure that state owned corporations are efficiently run without necessarily compromising the oversight role of government. Based on the findings, the investors will also be able to have a basis on which to predict future performance of partially owned state enterprises hence they will be able to make a decision on where and how much to invest. Policy makers will also have useful knowledge to pursue reform that will be useful in the restructuring of the already privatized firms to spur their growth and profitability. Scholars will gain insight on the
relationship between government shareholding and performance of state owned firms and also benefit by gaining useful research material that will form the basis of future research in this field.

1.6. Scope and Limitation of the study
The study was concerned with quasi government owned corporation or fully government owned firms that have been listed in the Nairobi Stock Exchange (NSE). Not all factors that affect the performance of firms were studied. These include among others; the environment factors, competition from other industry players, and economic environment of the country in terms of the value of the shilling or costs of doing business. The study was focused on residual government shares, board composition, size and operating efficiency of the firms.

The study was limited to a period of four years, that is, between 2009 and 2012. This ensured that all the listed government corporations had enough time to have adjusted to market trends and had therefore attained a stability status in the market. Also there was no political instability during this period hence performance was void of political related interference. The effects of the devaluation of the Kenyan shilling during this period was ignored as per the findings of this study as it was assumed that all the listed firms were in the same environment. Only information available from the capital markets authority was used together with other periodicals, textbooks, or publications. Due to the nature of the information required only published records was used.
CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter discusses literature related to this study. The literature review is divided into these section based on the objectives.

2.1 Effect of residual government shareholding on performance.

Bin et al (2012) in their study of 214 Indonesian SOEs founds that the new capital structure of privatized SOEs post privatization is characterized with dispersed ownership among individual shareholders whose objective is to purchase stocks to earn short term gains as opposed to long term divided yields. As a result they do not pay attention to what management does in directing the firm. He further observes that the percentage of residual government ownership negatively affects the performance of the firms. No matter how large the size of the share sold during privatization, as long as it is not followed by transfer of control from the government to private owner, it may not cause a change in the way affirm is being managed. Boubakri, et al (2005) also documents that privatization without control relinquishment by the government may have little impact on the SOEs' performance after privatization in developing countries. In another study in China, Huang and Wang (2011) surveyed the full privatization effects of 127 companies on the China's stock companies. Research results shows that performance of the company after privatization was far better than before. Also, they found that once purchaser of private sector company were new people who had no share in the management of the company before assignment the company has greater profitability and efficiency. As well as, costs of supervision
and management of the company was reduced by assignment of the company to the private sector. Sun and Tong (2003) have also found improvements in the earnings, sales, and workers' productivity for 634 SOEs that were privatized through Share Issue Privatization during the period 1994–1998. Furthermore, they demonstrate that state ownership was in fact associated with poor SOE performance, providing support to a policy of further reduction of state shareholding in these firms. Clarke, Cull, and Shirley (2005) in their study of privatized banks in developing countries, concluded that gains are greater from bank privatization when the government gives up control and does not restrict competition, when banks are sold to strategic investors, and when foreign banks are allowed to participate in the privatization process.

However, in another study as reported by D'Souza, et al (2005), residual government ownership is also considered as insignificant factor in determining Return on Sales. The study used privatized firms in developed countries. Asefi et al. (2008) examined the effects of privatization on productivity in Romanian companies. The results of this research indicate that privatization alone has no effect on the productivity of the company. In addition, the results also indicate that the company's shareholders after privatization, where the government has few shares affect the efficiency of the firm unlike when the government is the major shareholder. The results also indicate that the privatization and restructuring are complements. Gupta (2005) examines the impact of partial privatization of Indian state-owned enterprises where the state remained the controlling owner after privatization. He finds that partial privatization had a positive impact on profitability, productivity, and investment, arguing that the stock market can perform an important role in monitoring and rewarding managerial performance even when the state remains the controlling owner. Aftab and Nasr (2008) descriptive as well as quantitative analysis revealed
that performance of companies that still have the government as co-owner in terms of profitability and liquidity and long term solvency position was better than fully private companies. Their study further concluded that there were no significant differences found in terms of turnover ratios of the government sector and private sector. However, companies that are still partly owned by the government have improved liquidity position. This led to the conclusion that government should sell part of its ownership in companies to the private concerns but should not privatize them in full, and must retain its influence over the companies. This conclusion however does not put a threshold as to how much the government should retain as its shareholding that will promote a firms performance.

Academic research has documented significant improvements in companies’ performance criteria following privatization, namely in terms of profitability, increased capital investment spending, improved operating efficiency and increase in their work force. However, research has also demonstrated that the presence of special rights in a privatized company has a negative effect on the performance of that company. The failure to transfer complete control and to exercise the right incentives, combined with the uncertainty concerning government intervention and the cost of imposing certain conditions, has an impact on the market valuation of the company and may result in an under-pricing of the company’s shares (Boardman, A.E. and Laurin, C (2000).

From the aforementioned literature and other studies not mentioned here, its clear that most of the privatization studies have focused chiefly on transition economies in Latin America, and some Asian countries. Also the studies done in the African countries and Kenya in particular have been contradictory in their findings. The aim of this research was to fill this gap by studying
privatization in Kenya in order to provide factual evidence of the impact of residual government shareholding on performance of privatized companies.

2.2 Effect of government representation in the board of management.
Anna and Maria, (2011) investigate whether board size and or board composition do affect decisions about employment and how they ultimately impact performance. Their main findings indicate that politically connected directors, who dominate boards of directors in Italian public utilities, exert a positive and significant effect on employment, and have a negative impact on performance. Yeh and Woidtke (2005) show that board affiliation to the controlling shareholder is associated to strong, negative entrenchment effects and find that relative firm value is negatively related to board affiliation in family-controlled firm.

Boubakri, et al (2009) examined a sample of major strategic industries located in 39 countries, and reported that governments not only continued to remain as shareholders but also appointed politicians to key positions in firms. Deng, et al (2010) also found that Chinese government sent CEO or chairman to 86% of the SOEs that went public between 1997 and 2000.

Commission of the European communities (2005) documents that the main reasons put forward by governments for retaining ownership control rights over a company post-privatisation include: to ensure that ownership and control of the company does not fall into hostile or undesirable hands (that is, take-over protection) as well as to ensure that the company retains its corporate purpose and jurisdiction of incorporation

Vagliasindi (2008) in studying the effectiveness of the board of directors in SOEs in developing countries found that their role was to protect the interest of their ministries, a task often at odds
with bringing efficiency improvements. The study also notes that boards are seldom provided with any role in the selection of management. Even where targets of performance are set, inadequate explanations for shortfalls in performance are not questioned.

In studying board composition of SOEs, the fundamental issue under review is the independence of the board in making strategic decisions for the firm. Most studies in this aspect have shown that board independence and performance are positively correlated. Usually an independent board is recognized as one of characters of a good board. Ensuring independence of the board from management has been considered crucial to developing effective board structures and operation Liu and Fong, (2010). Many empirical studies have examined the correlation between independent board and firm performance. However, the results of these studies on this topic are inconclusive, such as Panasian (2003) found that increasing proportion of outsiders on the boards is positive to improve firm performance and reduce agency problem, but Bhagat and Black (2000) find that proportion of independent directors and firm performance is unrelated. Even though they have not achieved a conclusive result with regard to the correlation between board composition and firm performance, researches on this topic has been very mature in western countries, especially in UK, the Netherlands, France and Switzerland, which were recognized as the best performing countries in research by Albert-Roulhac & Breen (2005). In China the researches on firm performance and board composition for Chinese listed companies, Li and Zhao (2000) random selected 91 listed companies in the year 1998 and 1999 as samples from Shanghai Stock Exchange and Shenzhen Stock Exchange. They made an assumption that it may result in a poor firm performance when the proportion of inside directors is too high or too low; the firm performance will be good only when the proportion of inside directors is appropriate.
From the outcome by doing a regression analysis, when they chose ROA and ROE as the measurement of firm performance, the results did not support their assumption because they did not find any association. Gao and Ma (2002) obtained a result of insignificant correlation between board composition and firm performance by examine their correlation by a sample composed by 1018 listed companies in Shanghai Stock Exchange and Shenzhen Stock Exchange in the year of 2001. Sun and Zhang (2000) found proportion of independent directors do not have an impact on firm performance.

To sum up, due to the debate on the inefficiency of board of directors in SOEs, this study explored the idea that an independent board is necessary to optimize the function of governance mechanism in the public entities. In order to improve the effectiveness of corporate governance of Kenyan privatized listed companies, it is necessary to enhance independence of the board of directors. This is in order to enable the directors to align the interests of managers with the shareholders. This study researched on the argument of if a higher independency of board devoid of government interference, it is beneficial to the firms performance for public privatized listed-companies in Kenya

2.3 Effect of firm size and performance.
Several arguments favour larger firm sizes in attaining higher performance. Large firms are more likely to exploit economies of scale and enjoy higher negotiation power over their clients and suppliers, Serrasqueiro and Nunes (2008). In addition, they face less difficulty in getting access to credit for investment, have broader pools of qualified human capital, and may achieve greater strategic diversification (Yang and Chen 2009).
On the other hand, small firms exhibit certain characteristics which can counterbalance the handicaps attributed to their smallness. They suffer less from the agency problem and are characterized by more flexible non-hierarchical structures, which may be the appropriate organisational forms in changing business environments. Existing empirical evidence has not been unambiguous, lending support to both a positive and a negative impact of firm size on performance. Yang et al (2009).

A positive relationship between firm size and profitability was found by Vijayakumar and Tamizh selvan (2010). In their study, the authors used different measures of size (sales and total assets) and profitability (profit-margin and profit on total assets) while applying a model on a sample of 15 companies operating in South India. Papadognas (2007) conducted analysis on a sample of 3035 Greek manufacturing firms for the period 1995-1999. After dividing firms into four size classes he applied regression analysis which revealed that for all size classes, firms' profitability is positively influenced by firm size. Abiodun (2013) in his study, the effect of firm size on the profitability of manufacturing companies listed in the Nigerian Stock Exchange analyzed by using a panel data set over the period 2000-2009. Profitability was measured by using Return on Assets, while both total assets and total sales were used as the proxies of firm size. According to the results of the study, firm size, both in terms of total assets and in terms of total sales, had a positive impact on the profitability of manufacturing companies in Nigeria.

Lee (2009) examined the role that firm size plays in profitability. He used fixed effect dynamic panel data model and performed analysis on a sample of more then 7000 US publicly-held firms. Results showed that absolute firm size plays an important role in explaining profitability.
However, this relationship was non-linear meaning that gains in profitability reduced for larger firms. Amato and Burson (2007) tested size-profit relationship for firms operating in the financial services sector. The authors examined both linear and cubic form of the relationship. With the linear specification in firm size, the authors revealed negative influence of firm size on its profitability. However, this influence wasn’t statistically significant. On the other hand, the authors found evidence of a cubic relationship between ROA and firm size. Using financial and economic data, Ammar et al. (2003) examined the nature of the size-profitability relationship on a sample of electrical contractors for 1985-1996 period. They found a significant difference in terms of profitability between small, medium and large firms. Namely, they revealed that profitability drops as firms grow larger than $50 million in sales.

In a study on Portuguese companies Serrasqueiro et al (2008) found that size is related positively to performance but only for the sample of SMEs and not for large firms. A similar finding by Diaz and Sanchez (2008) in the Spanish context suggested that SMEs were more efficient than large firms lending support to earlier studies that identified an inverse relationship between size and performance.

Economic theory prescribes that increasing firm size allows for incremental advantages because the size of the firm enables it to raise the barriers of entry to potential entrants as well as gain leverage on the economies of scale to attain higher profitability. In view of this, it is possible to say that the results of the empirical studies on the effects of size on profitability are far from being unequivocal. Some studies find a positive impact, while others find negative or no relationship between firm size and profitability this research seeks to provide empirical evidence on the relationship between firm size and profitability of privatized quoted firms in Kenya.
2.4 The effect of operating efficiency on performance of privatized companies.

The main goal of privatization is to improve the economic efficiency of privatized state-owned enterprises and their performance. Many studies examined the impact of privatization on privatized firms' operating efficiency by comparing efficiency ratios pre- and post-privatization as measured by sales per employee, and net income per employee. Those studies include different firms from different sectors and different countries. The studies found significant increases in efficiency, Boubakri, Cosset and Guedhami (2005). Omran Mohammed (2007) studied the financial and operating performance of Egyptian banks following privatization. The study found strong evidence that the performance of privatized banks was better. It also suggested that the level of improvement varies with the percentage of private ownership, and the improvement was better when the private ownership was larger. Di Patti and Hardy (2005) investigated the effect of privatization on Pakistani banking system. They found that the profit efficiency improved during the immediate period only. Moreover, they found that the private domestic banks outperformed the private foreign banks. Huang Z., Wang K., (2011) explored the effect of the incidence of transferring the ultimate control of a state-owned company from the government to private owners of Chinese listed companies. They show that privatized firms' operating efficiency and profitability significantly improved. Khrisat, Khasawneh and Al-Waked (2012) in their study to investigates the privatization in Jordan mining sector as a case study of emerging market privatization experience, found that there is a positive impact of privatization on both managerial and operational efficiency measures.

Tatahi and Heshmati (2009) examined the change in operating and financial performance of Swedish firms that were either partly or fully privatized during the period of 1989-2007. They
used accounting data prior to and after the privatization to measure the operating performance of privatized firms. The results found no significant difference in performances under state and private ownerships. Villalonga (2000) examines 24 Spanish firms from different industries and finds that privatization does not increase efficiency—defined as rate of return on assets. He argues that political factors such as the business cycle during which the firm is privatized and foreign ownership are important determinants of firm efficiency.

This study was intended to unearth if the operating efficiency of the privatized firms in Kenya has a direct influence on their performance.

2.5 Theoretical framework

The theoretical framework behind the idea of privatization is largely dependent on understanding the concept of property rights and the Public Choice theory.

The property rights theory argues that differences in performance between private and public firms are a function of their ownership arrangements. This proposition follows from the central idea underlying the property rights approach: that various forms of property ownership give rise to different economic incentives and thereby different economic results. According to property rights theorists, there is no evidence, theoretical or empirical, that the wealth of the owner is less well protected in the dispersed corporation than in the concentrated ownership or closely held firm. Tatahi et al (2009) argues that the property rights analysis of public ownership leads to the conclusion that public enterprises are less economically efficient than private enterprises. Thus, forms of ownership generate different rewards or penal ties. Generally, the more dispersed property rights are, the less motivated their holders will be to use their assets efficiently. An
important implication of well-defined property rights is that it creates strong individual incentives, which, is a significant factor in the quest for long term growth. By creating strong incentives, property rights leads to an increase in investment since people are certain and secure about the ownership of their property

Moreover, according to the property rights, the separation of ownership and management, which is characteristic of the modern corporations, does not lead to any fundamental change in the performance of private enterprise. It acknowledges that shareholders in a large corporation are not able to monitor management as closely as a manager-owned company, but asserts that there are other factors at work in the modern corporation that compensate for this.

Public choice theory is the economic analysis of political institutions and it states that people are rational self-maximizers, which affects voters, legislators and bureaucrats and thus makes it impossible for the government to act in the best interest of the public. It has been the rationale most widely advanced for privatization attempts, and appears to have gained the greatest acceptance at the highest levels of policy development and within the legal and economic circles, Linowes, (1988)

The public choice perspective, like the theory of property rights, holds very strong views about public ownership. Privatization allows profit-maximizing decision-making to take place. Under public ownership, political motives, which lead to large subsidies and other concessions, are much more important than cost efficiency. In contrast, privatization frees an enterprise from the burden of political interference and non-market criteria. Thus it limits politicians' ability to redirect the enterprise's activities in order to promote their personal agenda or to yield short-term political pressures at the expense of market efficiency.
2.7 Conceptual framework.

To respond to the research questions in this study, the relationship between performance and government shareholding was conceptualized as follows.

![Diagram showing the relationship between Government Shareholding, Size of the Firm, Board Composition, Operating Efficiency, and Performance through ROE.](source: Researcher, 2012)

Figure 1: variable relationship in the conceptual framework.
CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction
This chapter gives a brief description of the methodology that was used in conducting this study.
The chapter is organized into the following parts;

3.2 Research Design
This study employed a combination of cross-sectional and longitudinal research designs. Cross sectional research design is used in times when the researcher investigates phenomenon across different subjects (in our case privatized public firms) at a specific period of time. On the other hand, longitudinal research design is appropriate when research is carried out on a subject (privatized public firm) across periods of time. Since this research used both cross-sectional as well as time series data (panel data), then it was ideal to work with a hybrid of the two designs.

3.3 Economic Model specifications
There are many factors or variables that may constitute yardsticks on which performance may be measured in an organization. This study intends to use Return on Equity (ROE) to measure firm performance. This measure of firm performance has been used extensively in research in corporate governance (Ongore, 2008).
ROE measures the earnings generated by shareholders' equity over a period of time, usually one year. It encompasses three main levers which management can utilize to ensure health of the firm: profitability; asset management; and financial leverage.

The economic model used in this study (which should be in line with what is given in the literature) is given as;

\[ Y_{it} = \beta_0 + \beta X_{it} + \epsilon_{it} \]  

Where \( Y_{it} \) is the dependent variable, \( \beta_0 \) is the constant, \( \beta \) is the coefficient of the explanatory variable, \( X_{it} \) is the explanatory variable and \( \epsilon_{it} \) is the error term (assumed to have a zero mean and independent across the time period).

The study employed the financial ratio Return on equity (ROE) to measure a firms' performance. ROE is defined as the total earnings (net profit or profit after tax) divided by the total ordinary shareholders' funds.

By adopting the economic model as in equation (i) above, the following equation (ii) gives the model specific that was used in this study.

\[ \text{PERF (RoE)} = \beta_0 + \beta_1 \text{GOVSHARE} + \beta_3 \text{OPER_EFFI} + \beta_4 \text{SIZE} + \beta_5 \text{BCOMP} + \epsilon_{it} \] (i)
Variable description

Dependent variable description

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description/measurement</th>
</tr>
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<tr>
<td>ROE=Return on equity</td>
<td>Total earnings (Net profit or profit after tax) divided by total ordinary shareholders’ fund.</td>
</tr>
<tr>
<td></td>
<td>Given as:</td>
</tr>
<tr>
<td></td>
<td>ROE= profit after tax</td>
</tr>
<tr>
<td></td>
<td>Total shareholders’ funds.</td>
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</table>

Independent variable description.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description/measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIZE= Capitalization</td>
<td>Total worth of the shareholders equity of the firm. In log of total shares</td>
</tr>
<tr>
<td>BCOMP= Board composition</td>
<td>Proportion of number of government directors in the board of management</td>
</tr>
<tr>
<td>OPER_EFFI= Operating efficiency</td>
<td>Fixed assets turnover ratio, measured by sales to fixed assets, indicates the extent to which long-term assets are being used to produce.</td>
</tr>
<tr>
<td>GOVTSHARE= Government shareholding.</td>
<td>Percentage of shares held by government</td>
</tr>
</tbody>
</table>
3.4 Target population of the study
The target population of this study was all the companies listed in the stock market that have government shareholding as a result of partial privatization. The researcher chose to study the entire population (census) as the number of listed privatized companies are 15 in order to arrive at a conclusion that can be applied to all.

3.5 Sampling techniques
Cooper and Emory (1995) defined population as the total collection of elements about which the researcher wishes to make some inferences. Elements are the subjects on which the measurement is being taken and is the unit of study. The population of interest in this study consisted of listed privatized companies with residual government shareholding in pursuance to the objectives of the study. Attention was focused on all the firms. There was no need to sample since the population was too small (15 companies).

3.6 Sample size.
The study used a census approach in collecting data since the population was small. The entire 15 companies quoted in the Nairobi stock market with some government shareholding were all included in the study. A census eliminates sampling error and provides data on all individuals.

3.7 Data collection.
Secondary data from the Nairobi Stock Exchange was used. Annual data available at the capital markets authority on leverage, size, board composition and profitability was used.
3.8 Data analysis.

Data analysis is a process of inspecting, cleaning, transforming and modeling data with the goal of highlighting useful information, suggesting conditions and supporting decision making (Pallant, 2007). Data collected was analyzed using Microsoft Excel software and the Statistical Package for Social Sciences (SPSS). SPSS allows for contingency analysis, correlation analysis, regression analysis and hypotheses tests using $t$ and $F$ statistics. In addition it facilitates simple statistical analysis such as measures of central tendency. The dependent variable used to measure the performance of the firm (ROE) as well as the independent variables (percentage of government shares, board composition, firm size and operating efficiency) were obtained from financial statements of the firms.

3.9 Data presentation.

The final results of analysis were summarized in form of SPSS charts and a report written about it with necessary recommendations.
CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION.

4.1 Introduction
This chapter gives summary of the data findings and their interpretation. The study sought to investigate some determinants of performance in privatized listed companies in Kenya. The analysis has been computed from 12 privatized and listed companies.

4.2 Response rate.
The researcher targeted a population of 14 privatized companies with residual government ownership listed in the Nairobi stock market of which 12 responses were obtained. This represented 87.71%. according to Babbie (2002) any response above 50% is adequate for analysis so 87.71% is even better.

4.3 Results presentation

Table 4.1: Descriptive Statistics

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<tr>
<th></th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
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<tr>
<td>ROE</td>
<td>.05</td>
<td>.63</td>
<td>.353</td>
<td>.13490</td>
</tr>
<tr>
<td>SIZE(M)</td>
<td>14037</td>
<td>69277</td>
<td>29191.48</td>
<td>21548.319</td>
</tr>
<tr>
<td>GOV_SHARE</td>
<td>.009</td>
<td>23.640</td>
<td>6.03836</td>
<td>10.360564</td>
</tr>
<tr>
<td>B_COMP</td>
<td>.000</td>
<td>.400</td>
<td>.15127</td>
<td>.096489</td>
</tr>
<tr>
<td>OP_EFFI</td>
<td>.078</td>
<td>1.592</td>
<td>.68900</td>
<td>.553282</td>
</tr>
</tbody>
</table>
4.3.1 Descriptive statistics report.
According to table 4.1 the average government shareholding for the selected companies was 6.03836\% for the time period. The standard deviation was 10.360564 while the minimum and maximum value of government shareholding was found to be 0.009\% and 23.640\% respectively. The mean size of the companies studied was found to be 29191.48(M). The minimum size of a company that the government had shares in was 14037(M) while the maximum capitalization of the studied companies was 69277(M). The standard deviation for companies was 21548.319(M). The mean of board composition was calculated as 0.15127 which translated to about 15\% of board members. In companies where government held a small amount of shares, it did not have any board representative. This was explained by the fact that the minimum board representation was 0.000 while the highest was 0.400. This was however only in the companies where the government had more shares.
The operating efficiency average for the firms for the study period was 0.689. The minimum 0.078 while the maximum was found to be 1.592. Some companies were observed to be performing more efficiently than others. The standard deviation for the firms was 0.553282. The minimum and maximum values of RoE were -0.05 and 0.68 respectively. This indicated that some firms made losses during the time period of the study. The average performance was however found to be 0.353. It’s generally accepted that an RoE of between 15\% to 40\% is acceptable standard of performance.
4.4 Normality Test

Shapiro-Wilk W test for normal data was conducted to assess whether data were normally distributed. The criteria is that normally distributed data has W-statistics that are close to 1 for the associated variable. In addition, such variables should display statistical significance (p<=0.05 at 5% level of testing).

Table 4.2: Shapiro-Wilk W test

<table>
<thead>
<tr>
<th>Variable</th>
<th>Obs</th>
<th>W</th>
<th>V</th>
<th>z</th>
<th>Prob&gt;z</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size</td>
<td>12</td>
<td>0.89334</td>
<td>1.782</td>
<td>1.126</td>
<td>0.03013</td>
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<tr>
<td>Govt_share</td>
<td>12</td>
<td>0.87914</td>
<td>7.032</td>
<td>3.800</td>
<td>0.00007</td>
</tr>
<tr>
<td>Board_comp</td>
<td>12</td>
<td>0.87534</td>
<td>2.083</td>
<td>1.430</td>
<td>0.01642</td>
</tr>
<tr>
<td>Oper_efficiency</td>
<td>12</td>
<td>0.87948</td>
<td>2.014</td>
<td>1.364</td>
<td>0.00630</td>
</tr>
</tbody>
</table>

All variables were found to attain W statistics above 0.8 and close enough to 1, despite the fact that they were significant at 5% level. In essence therefore, they were normally distributed.

4.5 Regression analysis

The collected data was subjected to a regression analysis. The results are indicated in the table 4.3.
From the data the following regression analysis equation was obtained:

\[ Y = 0.494 + 2.455 \times 10^{-5} \beta_1 - 0.0726 \beta_2 + 1.308 \beta_3 \]

Where; \( Y \) is ROE (performance) of public privatized firms, \( \beta_1 \) is size, \( \beta_2 \) is government shareholding, and \( \beta_3 \) is operating efficiency. The model illustrates that when all variables are held at zero (constant), the value of performance of privatized companies would be performing at 49.4%.

However holding all other factors constant, a unit increase in government shareholding would lead to a 7.26% decrease in ROE of privatized-public firms, a unit increase in size of the company would lead to a 0.002455% increase in ROE of privatized-public firms, a unit increase in board composition would not significantly affect ROE of privatized-public firms, a unit increase in operating efficiency would lead to a 130.81% increase in performance of privatized-public firms.
Indeed the regression showed that the performance of privatized public firms varied with government shareholding, size, and operating efficiency. It was however not affected by board composition. This effect was observed to be significant at 0.05 level of significance.

4.6 Testing Hypotheses of the Study

F-test for joint significance

**Ho:** All predictors (OP_EFFI, B_COMP, SIZE, GOV_SHARE) are not significant joint determinants of ROE

**Ha:** All predictors (OP_EFFI, B_COMP, SIZE, GOV_SHARE) are significant joint determinants of ROE

Criteria
The procedure for testing the joint significance is that as long as $F_{cal} > F_{critical}$, then we may reject the null hypothesis, in favor of the alternative. Alternatively, as long as the calculated $F$ statistic is significant, we can reject the null hypothesis.

Results
During regression, analysis of variance $F$-statistic was calculated as follows.

\[
\begin{array}{l|c|c|c|c|c|}
\text{Model} & \text{Sum of Squares} & \text{df} & \text{Mean Square} & \text{F} & \text{Sig.} \\
\hline
1 & \text{Regression} & 295.052 & 4 & 73.763 & 2.035 \times 10^{-4} \\
& \text{Residual} & 253.769 & 7 & 36.253 & \\
& \text{Total} & 548.822 & 11 & & \\
\end{array}
\]

a. Predictors: (Constant), OP_EFFI, B_COMP, SIZE, GOV_SHARE

b. Dependent Variable: ROE

Conclusion
Since the $F_{cal} = 2.035$ is statistically significant, then we reject the null hypothesis.
T-tests for individual effects of predictor variables

H01: There is no relationship between residual government shares and performance of Kenyan privatized public firms.

Tcal = -0.370 (p = 0.015 < 0.05), is statistically significant. Thus the null hypothesis is rejected.

Reject null hypothesis of no effect. Therefore, residual government shareholding is an important determinant of ROE.

H02: There is no relationship between government representation on the management board and performance of privatized public firms in Kenya.

Tcal = -0.822 (p = 0.418 > 0.05), is statistically not significant. Thus the null hypothesis is upheld.

Therefore, percentage of government representation on the management board is not an important determinant of ROE.

H03: There is no relationship between the size of privatized firms and their performance in Kenya.

Tcal = 0.190 (p = 0.021 < 0.05), is statistically significant. Thus the null hypothesis is rejected.

Reject null hypothesis of no effect. Therefore, size of the firm is an important determinant of ROE.
H04: There is no relationship between the operating efficiency and the performance of public privatized firms.

Tcal=2.899 (p=0.007<0.05), is statistically significant. Thus the null hypothesis is rejected.

Reject null hypothesis of no effect. Therefore, the firms operating efficiency is an important determinant of ROE.
CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS.

5.0 Introduction
This chapter represents the discussion of key data findings, conclusions drawn from the findings and recommendations made there-to. The conclusions and recommendations made were focused on addressing the purpose of the study.

5.1 Summary of findings.
The study revealed that residual government shares in privatized companies had a negative effect on the performance. This is in line with previous studies and this is explained by the fact that if government has a majority of shares in a company, it will be more concerned with the social aspects that the company serves than profitability.

The study found out that firm size had a positive effect on performance measured by ROE. This is also consistent with most studies that large companies experience higher economies of scale which makes them more profitable than otherwise small firms which have lower economies of scale.

The researcher found out that the governments influence on the board was minimal. Most companies had the right representation of board members and thus it was not a significant factor affecting performance. Most boards of public parastatals were independent as they had a sufficient number of independent board members who ensure that the overall goals of the
organization were met. Thus any increase in government representation was therefore not a significant factor that affects ROE.

The study found out that operating efficiency had a positive influence on the ROE of the firms. This was an expected outcome as the operating efficiency was a ratio measuring the fixed assets turnover ratio, which indicates the extent to which long-term assets are being used to produce revenue.

5.2 Conclusion.

This study concluded that, firstly, operating efficiency and size of firms had a positive influence on the performance of privatized companies. Secondly, residual government shares had a negative influence on the performance of the public privatized companies especially in cases where government had controlling shares. Finally, the percentage of government representation on the board of management of the companies did not have a significant influence on the performance indicating that they were fairly independent.

5.3 Recommendations.

The study came up with the following recommendations based on the findings.

i) The government through the privatization commission of Kenya and other agents of privatization should seek to reduce the number of residual shares it retains to be such that it does not have controlling shares in order for these companies to have an improvement in performance.

ii) The government should strategically increase the size of the privatized companies to increase their economies of scale.
iii) The operating efficiency of the companies should be increased such that the revenue generated by unit of fixed assets is at a maximum.

iv) The government should maintain independent board of management in the all the privatized firms to reduce their interference in decision making.

5.4 Suggestions for further research.
In order to get a more detailed performance analysis, research need to be carried which includes other performance determinants. These include leverage, operating efficiency based on employee productivity among others. Also research should be carried out based on the industry in which the firms are. The classification would be classified broadly into service and production or manufacturing in which a comparison can be done to show any variations.
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<th>COMPANY</th>
<th>YEAR</th>
<th>ROE</th>
<th>SIZE</th>
<th>GOVT SHARE</th>
<th>B-COMP</th>
<th>OPERATING EFFICIENCY</th>
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<td>3 MUMIAS</td>
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### APPENDIX II

#### RESEARCH SCHEDULE

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<th>April</th>
<th>May</th>
<th>June</th>
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## RESEARCH BUDGET

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<td>2</td>
<td>Printing papers</td>
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<tr>
<td>3</td>
<td>Transport</td>
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<tr>
<td>4</td>
<td>Accommodation</td>
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</tr>
<tr>
<td>5</td>
<td>meals</td>
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<td>6</td>
<td>PROPOSAL (Printing and binding)</td>
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<tr>
<td>7</td>
<td>PROJECT WRITING (data analysis</td>
<td>4,000</td>
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<td>printing and binding)</td>
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