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**EFFECT OF PRIVATIZATION ON FINANCIAL PERFORMANCE OF
WATER UTILITIES IN KENYA: A CASE OF WATER COMPANIES
UNDER COAST WATER SERVICE BOARD.**

^{1*} NGUTHU JAYNE KOKI

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¹*Nguthu Jayne Koki
Post Graduate Student, School Of Education
Kenyatta University

***Corresponding Author's Email:**
Jaynekoki@Gmail.Com

Abstract

Purpose: This study therefore sought to evaluate the effects of privatization on financial performance of water utilities in line with water sector reforms objectives aimed at improving performance in the sector in Kenya in order to fulfill the global and national goals. The target population of the study was all seven water utilities registered as public limited companies commonly referred to as water service providers (WSPs) that operate under Coast Water Service Board (CWSB) in coast region.

Methodology: The study used a census approach hence, included the whole population. Secondary data was used in the study for analysis using the Statistical package for Social Sciences (SPSS) to generate descriptive statistics, trend analysis and inferential statistics.

Results: Descriptive results indicate that private sector management is an efficient means of privatization which some water companies in Coast County adopt. Delegated management a method of privatization is most used by most Water Service companies as it improves efficiency in operations, productivity and service delivery. Leasing contracts are considered expensive means of privatization; however, it is equally a performance efficient means of privatization. Corporatization on the other hand promotes efficiency and service delivery. Regression results show a positive and significant relationship between private sector participation, delegated management, leasing contracts and corporatization. ANOVA statistics indicate that the overall model was significant. Pearsons' bivariate correlations show that all the variables had strong and positive correlation, private sector participation (0.893), delegated management (0.151), leasing contracts (0.441) and corporatization (0.536) respectively.

Unique contribution to theory, practice and policy: These results imply that privatization positively affects the overall performance of a company. Through privatization companies are able to positively affect their service delivery, production levels, profitability and increase investment through stock trading.

Keywords: private sector participation, delegated management, leasing contracts, corporatization, financial performance

1.0 INTRODUCTION

1.1 Background of the study

Privatization is the process in which public sector (government) decides to limit the range of its action and to transform ownership or management of some economic entities from state control or ownership to market mechanism (Che, 2007). Privatization means the transfer of public sector assets, control and financing of enterprises to the private sector. Private sector participation and/or privatization of water supply often imply commercialization (Okeyo, 2011). According to World Bank development report (1994), privatization of water supplies and sanitation services, which are both infrastructure utilities, simply implies running the utilities on business lines with clear goals focused on service delivery, performance, autonomous management and accountability for results and enjoy financial freedom (ring-fencing of water revenues).

Privatization has been a key component of structural reforms programs in both developed and developing economies, the aim being to achieve higher microeconomic efficiency, foster growth and reduce public sector borrowing (Megginson & Netter, 2001). The Centre of these policies are the International Monetary Fund (IMF) and World Bank (WB) whose loans are tied to countries' Poverty Reduction Strategy Programs, which contain commitments to a range of policies including privatization (Hall, 1997). The first idea of privatization as an economic policy was pursued by the Republic of Germany in 1957, when the government sold majority stake of Volkswagen to private investors. The next big move in privatization came in 1980's with Margaret Thatcher's privatization of the Britain Telecommunication by sale of shares. After the initial success in Britain, other countries followed suit. However, privatization was a stealth economic policy in sub-Saharan Africa (Megginson, Nash & Randenborgh, 1994). In the 1990s the World Bank and donor agencies promoted a strategy to develop water systems in developing countries through privatization. This was expected to deliver finance for investments, efficiency improvements, and better governance than they believed possible through the public sector in developing countries (Hall, 1997).

Borrowing the classification of Stottman (2000), Onjala (2002) and UN-Habitat (2003, K' Akumu (2006) identifies ten types of Public Private Partnerships (PPP) applicable to water enterprises. The range, is a continuum from Public Enterprises in which the asset ownership, management, tariffs regulation are all under statutory control, followed by Public limited company (PLC), Service contract, Management Contract, Affermage contract, Lease contract, Concession contract, Built-Operate-Transfer (BOT), Joint Venture, to Divestiture in the extreme end. In Divestiture, other than quality monitoring which is in the hands of the public, all other controls including asset ownership, capital, management, and tariff regulation are under private control (Okeyo, 2011). England was the precursor of modern water supply systems, which later spread to Germany, elsewhere in Europe and to the United States. Water supply (and sanitation), especially in developing countries is one of the major challenges facing the development community. Though many developed countries like France and Britain have successfully applied the concept of privatization of water supply and sanitation services, many developing countries have not (Browns & Jackson, 1990). By the end of 1993, at least 93 countries had

privatized some of their piped water services, including Argentina, Chile, China, Columbus, The Philippines, South Africa and the transition economies of Central Europe as well as Australia and the UK (Brubaker, 2001). Between year1990-2002 there were 106 such projects in Latin America and the Caribbean and 73 in East Asia and pacific region. By contrast there were only 7 projects in Middle East, North Africa and 14 in Sub-Saharan Africa (WB, 2005).

There are several important challenges facing the water sector in both developing and developed Countries. The first challenge poses the maintenance of the existing infrastructure which includes reducing leakages, replacing and expanding existing networks (Prasad, 2006). In order to achieve this, there is a need for financial autonomy including sustainable and equitable tariffs, and efficient revenue collection. In addition, the utility company should be properly managed which necessitates building managerial capacities and improving efficiency and productivity. Since water is a basic need, socio-political issues such as affordable price, transparency, and accountability must be considered. And finally, issues of environment and health such as public health needs, conservation, and environmental management must be appropriately dealt with (Prasad, 2006).

Due to deterioration in water sector performance, donor agencies advocated for privatization of public utilities in lower income economies to promote more efficient operation, improve performance, increase investment and service coverage and to reduce financial burden on government budgets (WB, 1994; OECD, 2000). The pressing challenge for public policy towards the water sector reforms is to meet efficiency, financial and social welfare objectives and to determine the extent to which privatization is critical to achieving the Millennium Development Goal seven c for safe, accessible and affordable water services by reducing by half the population without adequate access to water by year 2015 and in addition for Kenya, to achieve the Kenya Vision 2030 for water and sanitation which, is to ensure improved water and sanitation is available and accessible to all (Government of Kenya {GoK}, 2005).

Coast Water service Board is one of the institutions created through Water Act 2002 to implement the sector's reforms. The Board bears the responsibility for water and sanitation service provision in the area of jurisdiction covered by former Coast Province in Kenya but it is not required to provide the service directly. It is required to contract commercially oriented water utilities (MWI, 2007). The water utilities include Mombasa Water, Malindi Water, Kilifi Water, Kwale Water, Tavevo Water, Lamu Water and Tana Water. This study therefore sought to evaluate the effects of privatization on performance of water utilities in line with the sector reforms.

1.2 Statement of the problem

A development report by WB (1994 & 2004), stated that the water sector in developing countries has long suffered from poor performance of its public water utilities. Due to deterioration in water sector performance, donor agencies advocated for privatization of public utilities (WB, 2004). In early 2000's, the government of Kenya recognized the problems in public performance in water sector and the need to reform hence the culmination of Water Act 2002 which outlines water sector reforms and stipulates that one way to tackle challenges and

poor performance in water sector is through privatization. (GoK, 2001; Water Act, 2002; Mumma, 2005). Supporters of privatization say that since public sector has failed, private sector can use market principles to increase efficiency, improve performance and reduce the burden on public budgets (WB, 2004; OECD, 2003; UNDP, 2006; Comair, 2005). Privatization therefore necessitates the need to measure and compare performance levels in the water sector to establish if privatization policy objectives are being met.

The studies and literature in existence on privatization of water sector in Kenya are limited to operational performance of water utilities (Asingo, 2005; Impact Report 2008, 2009, 2010; Nyangeri, 2003; Wambua, 2004; Olum, 2007; Tubmun, 2007; Nyangena, 2008; Wagah et al., 2010). Performance is determined by a lot more variables. The studies ignored and failed to address the financial performance of the water utilities, which is what this study seeks to address. The study therefore evaluated privatization effects on financial performance of water utilities in Kenya with special focus on water utilities under Coast Water Service Board for the seven year post privatization period for the Financial Years 2005/2006-2011/2012 in which four financial measures were examined and analyzed and they include liquidity, profitability, and leverage and activity/turnover variables.

1.3 Objectives of the Study

- i. To establish the effect of private sector participation on financial performance water utilities.
- ii. To determine effect of delegated management on financial performance of water utilities.
- iii. To establish the effect of leasing contracts on financial performance of water utilities.
- iv. To determine the effect of corporatization on financial performance of water utilities.

1.4 Research hypothesis

Privatization has significantly improved financial performance of water utilities.

2.0 LITERATURE REVIEW

2.1 Theoretical review

2.2.1 Theories Supporting Privatization

There are several theories which support privatization. These are Property Rights, Public Choice and Agency theories. An important implication of a well-defined property rights is that it creates strong individual incentives, a significant factor in the quest for long term growth. The property rights approach concentrates on the differences in the ease of capture ability of economic surplus of a resource and the rights to direct an asset's use, alter its form or transfer its claims among existent and potential owners. This approach explores the differences in incentives between public and private agencies caused by variation in the ability of owners to monitor management and the problems that emerge when the goals of owners and managers diverge (Flynn, 2005). Property rights theorists argue that under state ownership, property rights are poorly defined. In private ownership, focus is on the marketability of property rights, (through

securities market) threat of bankruptcy and prevention of the managers from seeking their own advantages. The managers in state owned enterprises are not constrained by this type of control. It is thus, stressed that they are less inclined to maximize profits and attain efficiency (Ramamurti, 2000).

On the other hand public choice theory underlines problems in the functioning of the government. Managers of public sector are more concerned with maximizing their own power, their prestige and the amount of resources under their control to improve their own interests, instead of improving the efficacy of the state run business (Niskanen, 1971). Distortions in both the objective function that managers seek to maximize (Shapiro and Willig 1990) and the constraints they face, through the budget constraints problem (Kornai, 1986), result in lower efficiency under public ownership. Public managers incorporate to the objective function aspects related to maximization of employment, at the cost of efficiency, and political prestige without facing threat of bankruptcy since it will be the interest of central government to bail the firm out using public budget in case of unwise investments. Shapiro and Willig (1990) also stress that change in ownership changes the structure of information, incentives, controls, affecting operating decisions and thus economic performance. Privatization, by limiting the states' ability to reduce the enterprises activities, in ways that promote short term political objectives enhances economic efficiency

2.2 Empirical literature review

Earlier empirical studies such as those by Kay and Thompson (1986); Wortzel and Wortzel (1989) suggested that privatization does not support economic efficiency. Kay and Thompson (1986) argue it is not ownership as such but the interaction of ownership and competition that promotes efficiency. Attempts to increase competition may improve performance of a public firm in an uncompetitive market more than privatization without adequate regulation. Public owned entities maximize an objective function that is weighted average social welfare and bureaucrats' personal agenda while private, maximize profit, which is a component of social welfare. Public entities are formed to fulfill a specific good or service. Providing the good or service is the goal, not profitability. Meeting other social economic goals like job creation, providing industrialization, defending national interests make public entities less economically efficient. Lack of clearly defined objectives and the absence of an adequate reward and incentive system that create organizational culture that is in conflict with economic efficiency (Wortzel&Wortzel, 1989).

2.3 Conceptualization

Independent

Private sector participation
Delegated management
Leasing contracts
Corporatization

Dependent

Financial performance
of water utilities

- Profitability
- Liquidity
- Leverage
- Activity

2.4.1 Financial performance variables

Financial performance relates to ensuring sufficient funding to fulfill the organization obligations. The water sector should be self-financing for WSPs to operate on a commercially sustainable basis. This study will therefore analyze financial performance using liquidity, profitability, leverage and activity ratios. Liquidity variables measure the ability of the water utility to pay its current liabilities when they fall due to avoid bankruptcy. Profitability variables measure the management's ability to control expenses and earn a return on resources committed to the business. Leverage measure the extent to which the utility is relying on use of debt. Does it attract and service debt if any. To measure the degree of capital investment I will employ two ratios, capital expenditures divided by sales and capital expenditures divided by total assets. Activity measures how well the water utility is managing and controlling its assets. This is otherwise referred to as working capital or working ratio (Operations & Maintenance coverage) which is the ratio of operating revenues /income accruing from billing over operating expenses (less depreciation).

3.0 Methodology

The study used a census approach hence, included the whole population. Secondary data was used in the study for analysis using the Statistical package for Social Sciences (SPSS) to generate descriptive statistics, trend analysis and inferential statistics.

4.0 RESULTS FINDINGS

4.1 Response Rate

A successful response rate 100 % was obtained. This high response rate was able to be achieved as a result of the availability of the respondents in the Coast Water Services Companies. The study response rate was very good. Results are presented in Table 1

Table 1: Response Rate

Questionnaires Received	Response Rate
36	100%

4.2 Descriptive Statistics

Primary data collected was analysed using the descriptive statistics whose results are described in this section. This was done according to the objectives of the study. The analysis of data is presented on a mean scale of 1 to 5, the mean score of 1 and 2 represent the level of disagreement, while a mean score of 3 indicate neutral responses and a mean score of 4 and 5 represent agreed responses. A standard deviation of less than one indicates that responses were closer to the mean while a standard deviation greater than one means that the responses varied.

4.2.1 Private Sector Participation and Financial Performance

The respondents were asked to indicate their views on the effects of private sector participation on financial performance. All respondents (100%) agreed that private sector participation has

limited the ownership and management of water utilities in our region. Further, all respondents (100%) agreed that private sector participation has improved service delivery to clients. One hundred percent (100%) of the respondents agreed that private sector participation has been a key component of structural reforms programs in our region. Additionally results indicate that private sector participation has enabled the water utility company achieve higher microeconomic efficiency, growth and reduction in public sector borrowing as indicated by 100%. Through private sector participation, affordability, transparency and accountability of utilities have been considered as indicated by 100% response rate. From the results, respondents agreed to the questions asked as indicated by a mean of 4.47, moreover, the responses received were similar as indicated by a standard deviation of 0.48. The implication of these results is that private sector participation in privation improves structural reforms, service delivery and overall financial performance of the company. These findings agreed with those of Westman (2005) found out that privatization helps companies to run services more efficiently. However, studies by Estache and Rossi (2002) differ with the findings of this study as the researchers indicate that there was no significant difference in financial performance between companies operating privately and those that are state owned.

Table 2: Private Sector Participation and Financial Performance

Statement	Agree	Strongly Agree	Mean	Std. Deviation
Private sector participation has limited the ownership and management of water utilities in our region	50.00%	50.00%	4.5	0.507
Private sector participation has improved service delivery to clients	50.00%	50.00%	4.5	0.507
Private sector participation has been a key component of structural reforms programs in our region	33.30%	66.70%	4.67	0.478
Private sector participation has enabled the water utility company achieve higher microeconomic efficiency, growth and reduction in public sector borrowing	83.30%	16.70%	4.17	0.378
Through private sector participation affordability, transparency and accountability of utilities have been considered	50.00%	50.00%	4.5	0.507
Average	53.32%	46.68%	4.47	0.48

4.2.2 Delegated Management and Financial Performance

The respondents were asked to indicate the effect of delegated management on financial performance of Water Utility Companies. From the results in Table 4.2, all the respondents agreed that delegated management improves the efficiency of operations and service delivery in the water utility as indicated by 100% response rate. One hundred percent (100%) response rate revealed that delegated management is more motivated which increases their productivity. Delegated management was used by most water companies in Coast province as showed by 84% response rate. Delegated management has increased productivity and growth of Water companies as indicate by 100% response rate. From the results, respondents agreed to the questions asked as indicated by a mean of 4.33, moreover, the responses received were similar as indicated by a standard deviation of 0.55. These results imply that delegated management is one among a best privatization practice that could be adopted by companies as the same brings forth positive improvements in companies,' productivity and overall financial performance. These results support those of Martin and parker (1997) who found that companies in Britain experienced increased productivity growth after privatization. Additioanlly, studies by Claessens and Djankov (1999) examine ownership concentration positively improved profitability and productivity.

Table 3: Delegated Management and Financial Performance

Statement	Disagree	Neutr al	Agree	Strongl y Agree	Mean	Std. Deviat ion
Delegated management improves the efficiency of operations and service delivery in the water utility	0.00%	0.00%	50.00 %	50.00%	4.5	0.507
Delegated management are more motivated which increases their productivity	0.00%	0.00%	50.00 %	50.00%	4.5	0.507
For privatization our company used delegated management method	0.00%	33.30 %	50.00 %	16.70%	3.83	0.697
Delegated management has increased productivity and growth of our company	0.00%	0.00%	50.00 %	50.00%	4.5	0.507
Average		8.33%	50.00 %	41.68%	4.33	0.55

4.2.3 Leasing Contracts and Financial Performance

On the question of the effects of leasing contracts on financial performance, respondents indicated that leasing contracts is an expensive way of privatization as showed by 100%. Further results indicate that the Water Utility Companies did not apply the concept of concept of

privatization through leasing contracts as indicated by 50% disagreed responses. Leasing contracts increases ownership concentration which positively affects performance as agreed by all the sample respondents (100%). Results further indicate that privately owned firms are more efficient and profitable than otherwise comparable state owned firms as shown by 100% response firms. As indicated by 66.70% disagreed responses, results indicate that leasing does not assist in increase in productivity and overall performance of the water utilities companies given that it is not a common method for privatization. From the results, the responses received were similar as indicated by a standard deviation of 0.55 These results imply that leasing contract does not have a positive effect on financial performance and productivity of the Water utility Companies in Coast County because it is not a common practice for privatization. The results on leasing contract as a form of privatization that improves performance agrees with those of Asingo (2005) who found that privatization of water services had greatly improved availability and accessibility to water services in Eldoret, Kericho and Nyeri.

Table 4: Leasing Contracts and Financial Performance

Statement	Disagree	Neutral	Agree	Strongly Agree	Mean	Std. Deviation
Leasing contracts is an expensive way of privatization	0.00%	0.00%	83.30%	16.70%	4.17	0.378
Our company has applied the concept of privatization through leasing contracts	50.00%	16.70%	33.30%	0.00%	3.17	0.697
Leasing contracts increases ownership concentration which positively affects performance	0.00%	0.00%	66.70%	33.30%	4.33	0.478
Privately owned firms are more efficient and profitable than otherwise comparable state owned firms	0.00%	0.00%	33.30%	66.70%	4.67	0.478
Leasing helps our company to increase productivity and overall improve performance	66.70%	5.70%	34.30%	0.00%	3.17	0.697
Average	16.68%	11.14%	50.18%	23.34%	3.90	0.55

4.2.4 Corporatization and Financial Performance

On the question of the effects of corporatization on financial performance, respondents indicated that the interaction of ownership and competition promotes efficiency in service delivery and operation in corporatization as indicated 73% agreed responses. It was also demonstrated that corporatization supports efficiency Stock trading has improved upon corporatization as shown by

100% responses. One hundred percent (100%) of the responses indicated that Water Service companies in Coast County have experienced an improvement in labor productivity after corporatization. Sixty seven percent of the responses revealed that through corporatization the company's profitability and productivity changes are positively related to ownership concentration. From the results, respondents agreed to the questions asked as indicated by a mean of 4.00, moreover, the responses received were similar as indicated by a standard deviation of 0.61. The results imply that corporatization, a form of privatization of companies is efficient as it results to positive improvements in companies' productivity and overall financial performance. These findings support those of Kay and Thompson (1986) who argue that the interaction of ownership and competition promotes efficiency. The findings of these study, however, do not confirm with those of Wortzel and Wortzel (1989) who suggested that privatization does not support economic efficiency.

Table 5: Corporatization and Financial Performance

Statement	Disagree	Neutral	Agree	Strongly Agree	Mean	Std. Deviation
The interaction of ownership and competition promotes efficiency in service delivery and operation in corporatization	16.70%	0.00%	66.70%	16.70%	3.83	0.91
Corporatization supports efficiency	0.00%	0.00%	83.30%	16.70%	4.17	0.378
Stock trading has improved upon corporatization	0.00%	33.30%	33.30%	33.30%	4	0.828
Our company has experienced an improvement in labor productivity after corporatization	0.00%	0.00%	66.70%	33.30%	4.33	0.478
Through corporatization the company's profitability and productivity changes are positively related to ownership concentration	0.00%	33.30%	66.70%	0.00%	3.67	0.478
Average	3.34%	13.32%	63.34%	20.00%	4.00	0.61

4.3 Trend Analysis

This section provides graphical representation of the indicators of financial performance of the study.

4.3.1 Trend Analysis in Profitability

Trend analysis in profitability in Figure 4.3 indicates an inconsistent trend. From the results profitability recorded a slight decrease in 2006 which was followed by an increase all through up to year 2009. Another decline was recorded in year 2010, with a major decline 2011 with slight increase in year 2012. This inconsistency in the trend can be explained by the competitive environment in which the companies operate in. Among other factors that may have hindered

profitability in the company are; resources accessibility, geographical location of clients, limited workforce and managerial competence. These findings support those of Ombogo (2009) who conducted a study on water sector reforms in Kenya on improving governance and human rights to water in Kenya and found out that the sector still needed more resources to carry out the water sector reforms. Additionally to his results the researcher found out that it was a major challenge in improving water coverage in both rural areas and informal settlements within urban towns.

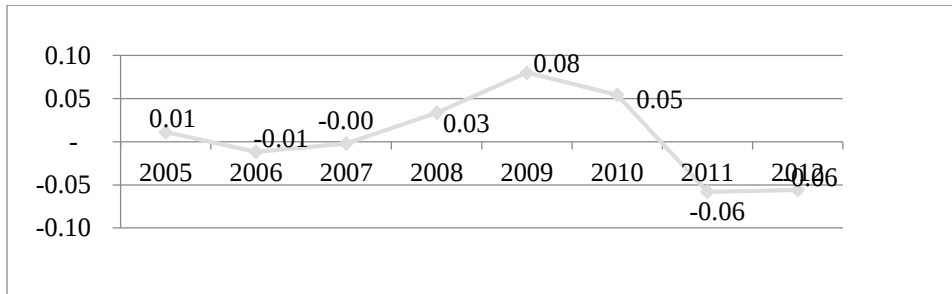


Figure 1 Trend Analysis in Profitability

4.3.2 Trend Analysis in Liquidity

The trend in the companies' liquidity after privatization recorded a decrease in year 2005 to year 2006. Later between years 2006 to 2010 the trend was constant which was later followed by a slight decline in year 2011 then an increase in year 2012. These results indicate that the companies have enough assets to offset their liabilities.

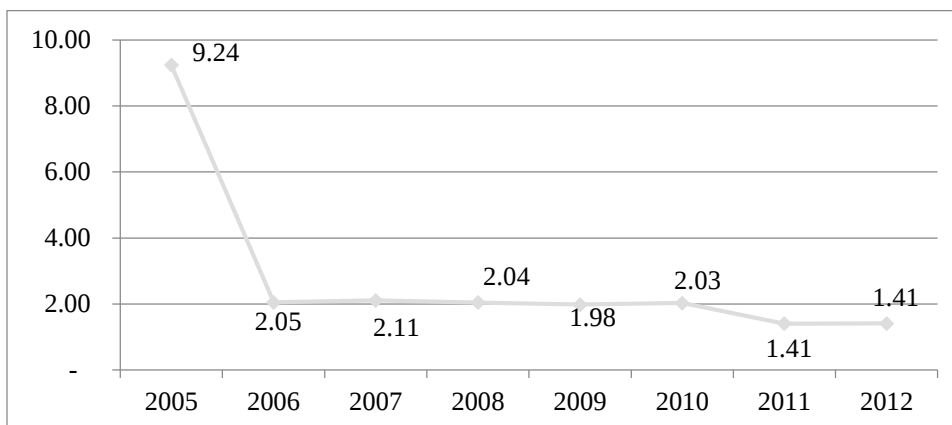


Figure 2: Trend Analysis in Liquidity

4.3.4 Trend Analysis in Leverage

Figure 3 presents an increase in the trend of leverage in the Water Service Company in Coast province. The results marked an increase in from years 2005 to 2007 with minimal decline in year 2008 which was followed by a rise in leverage up to year 2012. This implies that the companies use more debt for funding; this is understandable given that the companies are privatized and there is limited funding from the government.

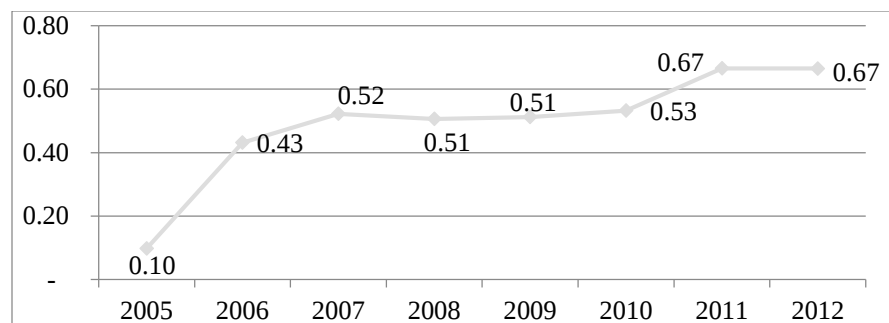


Figure 3 : Trend Analysis in Leverage

4.3.5 Trend Analysis in Activity/Efficiency

Trends in efficiency of the company presents an increase in year 2006 with slight decline in 2007. Further, the results also show an increase in year 2008 and another decline in year 2009. Following this years, the companies experienced slight increments' in their efficiency. These results indicate that through privatization, the company has been able to see slight improvement in terms of companies' growth, increase in workforce, productivity and profitability.

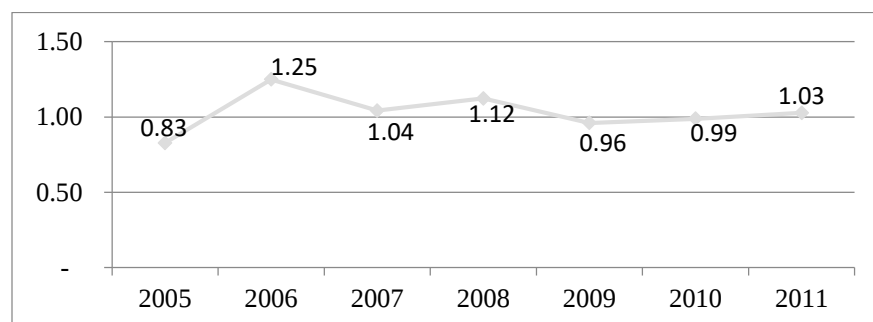


Figure 4: Trend Analysis in Activity/Efficiency

4.4 Inferential Data Analysis

This section provides the analysis of relationship among the independent variables to the dependent variable. As well as determining the significance of the variables under study. In statistics significance testing the p-value indicates the level of relation of the independent variable to the dependent variable. If the significance number found is less than the critical value also known as the probability value (p) which is statistically set at 0.05, then the conclusion would be that the model is significant in explaining the relationship; else the model would be regarded as non-significant.

4.4.1 Pearsons' Bivariate Correlation

The Pearson's Bivariate analysis sought to find whether there was any significant relationship between the independent variables; private sector participation, delegated management, leasing contracts, corporatization and the dependent variable; financial performance. The results of this relationship are presented in Table 4.5. Pearson's Bivariate results shows that private sector

participation (0.000), delegated management (0.038), leasing contracts (0.007), corporatization (0.001) were statistically significant in determining the performance of Water Service Companies as their values were value lower than the conventional p value 0.05. The results further show that all the variables had strong and positive correlation, private sector participation (0.893), delegated management (0.151), leasing contracts (0.441), corporatization (0.536) respectively. This means that an increase in either of the variables positively influences financial performance of Coast Water Services Companies.

Table 4: Pearson's Bivariate Correlation

Variable	Correlation	Financial performance	Private Sector participation	Delegated Management	Leasing Contracts	Corporatization
Financial performance	Pearson Correlation	1				
	Sig. (2-tailed)					
Private Sector participation	Pearson Correlation	0.893	1			
	Sig. (2-tailed)	0.000				
Delegated Management	Pearson Correlation	0.151		1		
	Sig. (2-tailed)	0.038				
Leasing Contracts	Pearson Correlation	0.441		0.366	1	
	Sig. (2-tailed)	0.007		0.028		
Corporatization	Pearson Correlation	0.536		-0.683	-0.132	1
	Sig. (2-tailed)	0.001		0	0.442	

4.4.2 Regression Analysis

Table 4.6 shows the fitness of the model. These results show that coefficient of determination also called the R square was 97.4% which means that the combined effect of the predictor variables (private sector participation, delegated management, leasing contract and corporatization) explains 71.8% financial performance. These results indicate that the different

forms of privatization positively affects performance of companies. These findings support those of Clarke and Wallsten (2002) who reported greater service coverage under private ownership; Baylis (2002) who observed that water privatization points to improvement in terms of financial management attracting investors and Wambua (2004) who indicated that privatization improves efficiency.

Table 5: Model of Fitness

Indicator	Coefficient
R	0.987
R Square	0.974
Adjusted R Square	0.971
Std. Error of the Estimate	0.06055

The results on analysis of variance in Table 4.7 indicate that the overall model was significant. This shows that the combined effect of private sector participation, delegated management, leasing contract and corporatization were statistically significant in explaining financial performance. This was demonstrated by a p value of 0.000 which is less than the acceptance critical value of 0.05.

Table 6: Analysis of Variance (ANOVA)

Indicator	Sum of Squares	Df	Mean Square	F	Sig.
Regression	4.292	4	1.073	292.739	0.000
Residual	0.114	31	0.004		

The results in Table 4.8 present the regression of coefficients of the study. These results show that there is a positive relationship between financial performance and private sector participation, delegated management, leasing contracts and corporatization as supported by beta coefficients of 0.589, 0.378, 0.236 and 0.18 respectively. This means an increase in either of the variables will positively increase financial performance. The analysis also yields results that show all variables used in the study were statistically significant as the probability (p) values were 0.000 for private sector participation, delegated management, leasing contracts and 0.016 for corporatization were lower than the conventional value of 0.05.

Table 7: Regression of Co-efficient

Variable	Beta	Std. Error	t	Sig.
Constant	-1.577	0.418	-3.777	0.001
Private Sector participation	0.589	0.05	11.702	0.000

Delegated Management	0.378	0.079	4.794	0.000
Leasing Contracts	0.236	0.024	10.024	0.000
Corporatization	0.18	0.07	2.56	0.016

5.0 SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.2.1 Private Sector Participation and Financial Performance

This section summarizes findings of both descriptive and inferential statistics of the study variables. One of the objectives of the study was to examine whether private sector participation affects the financial performance of Coast Water Service Companies. Correlation results indicate that private sector participation positively influences financial performance of the companies. Descriptive results indicate that ownership and management of water utilities is limited to private sector and that through privatization service delivery to clients has improved drastically. In addition to improved performance, structural reforms programs, higher growth and reduction in public sector borrowing has been evidenced through private sector participation.

5.2.2 Delegated Management and Financial Performance

Another objective of the study was to determine whether delegated management affects the financial performance of Coast Water Service Companies. Correlation results indicate that delegated management positively influences financial performance of the companies. Data gathered from the descriptive analysis indicate that delegated management a method of privatization used by most Water Service companies improves efficiency in operations, productivity and service delivery which leads to increased revenues to the company. Additionally, delegated management has assisted many water utility companies in the region to have increased productivity and significant growth.

5.2.3 Leasing Contracts and Financial Performance

The third objective of the study was to identify whether leasing contracts privatization method significantly affected performance of Water Utility Companies. Correlation results indicate that leasing contracts positively influences financial performance of the companies. Results indicate that leasing contracts are expensive ways of privatization and the companies did not use the same in privatization. Additional results revealed that leasing contracts increases owners concentration which positively benefits the performance of water utilities companies. From the results, the respondents indicated that leasing contracts as much as it is a good privatization method is not commonly used by the Water service board for privatization.

5.2.4 Corporatization and Financial Performance

The other objective of the study was to establish whether corporatization increased financial performance of the Water Service Companies. Correlation results indicate that corporatization positively influences financial performance of the companies. Respondents indicated that corporatization promotes efficiency in service delivery and improves labor productivity which improves the overall profitability and productivity of the organizations. Additional results also

indicate that corporatization improves investment in companies as from the study's results respondents indicated that corporatization increases stock trading of the company.

5.3 Conclusions

The results of the study lead to the conclusions that private sector participation is a great way for privatization which companies take into consideration during privatization. Private sector is responsible for running the system, in exchange for a fee that is to some extent performance-related. Private sector participation has increased profitability significantly, in both the economic and statistical sense. Further analysis result to the conclusion that most of the changes occurred in utilities with private shareholders in the majority rather than the minority. Further conclusions from the study leads to the conclusions that delegated management is mostly used by most companies for privatization used by most firms. This method of privatization has been used by other water utilities company of other developing countries such as Philippines and Tanzania. The delegated management can reduce the proportion of non-revenue water, while increasing revenue for water utilities, and providing higher quality service at more affordable prices.

Leasing contracts is the situation where assets are leased to the private operator who receive a share of revenues. Leasing contracts privatization method significantly affects performance companies, but is considered expensive and not commonly used by many firms for privatization. However, leasing contracts bear a higher commercial risk than under a management contract thus not a common method of privatization.

Corporatization from the results is among the great methods for privatization which many companies adopt. Corporatization promotes efficiency in service delivery, increases stock trading and improves labor productivity. Corporatization includes restructuring the internal governance system of the state owned enterprises according to that of a modern corporation. From the results it is evident to conclude that corporatization may enhance efficiency through prompt service delivery, increases in stock trading and improvement in labor productivity. Corporatization has a positive impact of firm's investment levels and that it improves profitability and efficiency.

5.4 Recommendations

The study provides recommendation to stakeholders that are the Ministry of Water and Irrigation in the Water Service Companies to understand the importance of privatization and practice the same in sectors where performance is seen as deteriorating. Additionally, other organizations or sectors planning to go under privatization need to have a good set of guidelines and monitoring strategies to ensure privatization goes as planned.

The water services companies also need to review and continuously follow up on the performance of the company after privation. This will help them in improving their weaknesses and maximizing on their opportunities for the success of the company. The company may also through the study assess their faults especially in financial capacities to know if privatization is of better assistance.

5.5 Areas for Further Studies

This study examined the effects of privatization on financial performance of the company, further area of study would include replica study in a different organization which has undergone

privatization such as Engen which is now partly owned by the government. The results of this study will be compared with those found in the current study. Additionally, further research could also include an assessment of leadership, competence in privatized companies on performance. The findings of this study will provide comparison on competence, leadership and management between privatized and state owned companies.

REFERENCES

- Aktan,C.C. (1995). An Introduction to the theory of privatization.*Journal of Social, Political and Economic Studies* 20 (2), 187-217.
- Anderson, J. H., Lee, Y., & Murrell, P. (2000). Competition and privatization amidst weak Institutions: Evidence from Mongolia. *Economic Inquiry*,38(4), 527-549.
- Bayliss, K. (2000). *The World Bank and privatisation: a flawed development tool*.Mimeo, London: University of Greenwich
- Bayliss, K. (2002). *Privatisation and poverty: The distributional impact of utility privatisation* (Centre on regulation and competition Paper no. 16).Manchester: University of Manchester
- Bennett, J. (2004, March). *Privatization methods and economic growth in transition economies* (Centre for Economic Policy Research Discussion Paper, No. 4291).
- Boycko, M., Shleifer, A., & Vishny,R.W.(1996, March). A theory of privatisation.*The Economic Journal*, 106(435), 309-319.
- Browns, V., & Jackson, P.M. (1990).*Public sector economy* (4th ed.). Oxford, Great Britain: Blackwell.
- Brubaker, E. (2001).*The promise of privatization*.Toronto: Energy Probe Research Foundation.
- Cardone, R., & Fonseca, C. (2003).*Financing and cost recovery* (Thematic Overview Paper No.7). IRC International Water and Sanitation Center Delft: Netherlands
- Coase, R. H.(1960).The problem of social cost. *Journal of Law and Economics*, 3 ,1-44.
- Coase, R. H. (1937). The nature of the firm.*Economica*, 4(16),386-405.
- Claessens, S., & Djankov, S. (1999). Ownership concentration and corporate performance in the Czech Republic, *Journal of Comparative Economics*, 27, 498-513.

- Clarke, R.G., & Wallsten, S.J. (2002). *Universal (ly bad) service: Providing infrastructure services to rural and poor urban consumers* (Policy Research Paper 2868). Washington DC. World Bank
- Comair, F. (2005). Private public partnership in the water sector-ESCWA Region. *Proceedings in Seminar on Water Governance: Role of Stakeholders*, Beirut.
- Davis, J. (2005). Private sector participation in the water and sanitation Sector. *30 Annual Review of Environment and Resources*, 145, 147.
- Demsetz, H. (1968). Why regulate utilities. *Journal of Law and Economics*, 11, 55-62.
- Easterly, W. (2001). *The elusive quest for growth*. Cambridge, Massachusetts: The MIT Press.
- Eckel, C., Eckel, D., & Singal, V. (1997). Privatization and efficiency: Industry effects of the sale of British Airways. *Journal of Financial Economics*, 43, 275-298.
- Estache, A., & Rossi, M. (2002). How different is the efficiency of public and private Water companies in Asia. *World Bank Economic Review*, 16(1), 139-148.
- Estache, A., & Kouassi, E. (2002). *Sector organization, governance, and the inefficiency of African water utilities* (Policy Research Working Paper 2890). World Bank.
- Eytan, S., & Lopez-Carva, L.F. (2003, March). *Economic Studies*, 49, 429-459. Munich: Harvard University IFI Institute of Economic Research.
- Fahad, S. M., Nouman, M., & Ashfaq, A. (2012). Does Privatization Affect Performance? *Journal of Managerial Science*, 6 (2).
- Galal, A., Jones, L., Pankaj T.P., & Vogelsang, I. (1992). *Welfare consequences of selling public enterprise*. Washington DC: World Bank
- Gatamah, K. (2005). *Governance and management: Where is the boundary?*. Nairobi: Centre for Corporate Governance.
- Government of Kenya. (2001). *Poverty reduction strategy for the period 2001-2004*. Nairobi: Government Printers.
- Government of Kenya. (2005). *Kenya vision 2030*. Nairobi: Government Printers.

- Hall, D. (1997). *Restructuring and privatisation in the public utilities - Europe* .ILO. Retrieved on 22 August, 2012, from <http://www.psir.org/reports/9707-WE-Eur-emp.doc>
- Hayek, F.A. (1994). *The Road to serfdom*. Chicago, IL: University of Chicago Press
- Hemming, R., & Mansoor, A. M. (1987). *Privatization and public enterprises* (Working Papers No. 87-9).IMF.
- International Conference on Water and the Environment. (1992). *The dublin statement and report of the conference*.(Development Issues for the 21st century.26- 31). Dublin: Author
- Johnston, N., & Wood, L. (2001).Introduction. In N. Johnstone& L. Wood (Eds.), *Private firms and public water: Realising social and environmental objectives in developing countries*. Cheltenham: Edward Elgar.
- K'Akumu, A.O. (2006).Privatization model for water enterprise in Kenya in *Water Policy* 8, 2006
- Kay, J.A., & Thompson, D.J. (1986).Privatisation: A policy in search of a rationale. *The Economic Journal*, 96 (381), 18-38.
- Kessides,I.N.(2004).*Reforming infrastructure:Privatisation, regulation and competition*. Washington, DC: World Bank.
- Komives,K., & Stalker (2001). *Cost recovery: Partnership framework for financially sustainable water and sanitation projects*, London: BPD.
- Kornai, J.(1986). *The soft budget constraint* 39(1), 3-30. Amsterdam, North Holland: Author
- Mankiw, N. G. (2001). *The essentials of economics*. (2nd ed.). United States.
- Medema, S. G. & Zerbe,R.O.(1999).The coase theorem. *Encyclopedia of Law and Economics*.839-892.
- Martin, S. & Parker, D. (1997).*The impact of privatization: ownership and corporate performance in the United Kingdom*. London: Routledge

- Meggison, W. L., Nash, R.C & M. van Randenborgh, (1994). The financial and operating performance of newly privatized firms: An international empirical analysis. *Journal of Finance*, 49 (12), 403-52.
- Meggison, W.L., & Netter, J. (2001). From state to market: A survey of empirical studies on privatization. *Journal of Economic Literature*, 39(2), 321-329.
- Meggison, W.L. (2005). *The financial economics of privatization*. Oxford: Oxford University Press.
- Ministry of Water and Irrigation, & Water and Sanitation Program Africa. (2005, February). *Handing over the water sector to new managers*. (Kisumu premier issue No.5). Author
- Ministry of Water and Irrigation. (2007). *National water services strategy 2007-2015*. Nairobi, Kenya: Author.
- Mugenda, O., and Mugenda, A. (1999). *Research methods: Quantitative and qualitative approaches*. Nairobi, Kenya: Acts Press
- Mumma, A. (2005, January). *Kenya's new water law: An analysis of the implications for the rural poor*. Paper prepared for the International Workshop on African Water Laws: Plural Legislative Frameworks for Rural Water Management in Africa, Johannesburg, South Africa.
- Nellis, J. (1994). *Is privatization necessary?* (Viewpoint No.7). World Bank.
- Ngigi, A., & Macharia, D. (2006). *Water sector policy overview paper*. East Africa: IT Power
- Nyangena, O.K. (2008). *Privatization of water and sanitation services in Kenya: Challenges and prospects*. Egerton University, Nakuru, Kenya.
- Nyangeri, E. (2003). *Nyeri and Tala-Kenya case study report (D11)*. Research Project, European Commission, Fifth Framework Programme. PRINWASS.
- Nyangeri, E., & Ombongi, K. (2007). History of water supply and sanitation in Kenya, 1895-2002. In Juuti, Katko and Vuorinen (Eds.), *Environmental history of water, section kenyan independence* (pp.271-305). IWA Publishing.
- Nyon'go, A. (2000). *The context of privatization in Kenya*. (ed.). Nairobi, Kenya: Academy Science Publishers.

- Ogada, O.(2005). *One of the key intents of water sector reforms in Kenya*. Nairobi.
- Okeyo, J. O. (2011). *Public Private Partnerships in the Privatization of Water Service Delivery in Kenya*. University of Nairobi, Kenya.
- Ombogo,P. L. (2009).*Improving governance and human rights to water*.(working paper). The Institution of Engineers of Kenya.
- Organization for Economic Cooperation and Development. (2000). *Global trends in urban water supply and waste water financing and management: Changing roles for the public and private sectors*. Paris: Author.
- Organization for Economic Cooperation and Development. (2003). *Water partnerships: Striking a balance*. Observer, Paris: Author.
- Organization for Economic Cooperation and Development (2006).*Evaluating the effectiveness and efficiency of partnerships involving governments from OECD member countries*. Paris: Author
- Poole, R. W. (1996). Privatization for economic development. In Terry L. A., & Peter J. H (Ed.), *The privatization process*. United States of America: Rowman& Littlefield Publishers.
- Prasad, N.(2006).Privatisation results: Private sector participation in water services after 15 years. *Development Policy Review* 24(6) ,669-6692.
- Price Waterhouse.(1989). *Privatization: Learning the lessons from the U.K. experience*. London:Author.
- Price Waterhouse. (1989). *Privatization: The Facts*. London: Author.
- Ramamurti, R.(1997). Testing the limits of privatization: Argentine railroads.*World Development* 25, 1973-1993.
- Ramamurti, R. (2000). A multilevel model of privatization in emerging economies. *Academy of Management Review* 25, 525-550.
- Rowthorn, B., &Chang,H.J. (1993).Public ownership and the theory of the State. In Clarke.T.,&Pitelis,C (Eds.), *The political economy ofprivatization*. London and New York: Routledge.
- Salzman, J.(2006). Thirst: A short history of drinking water. *YaleJournal of Law & the Humanities*, 17(3),94.
- Segerfeldt, F. (2003) .*Vatten Till Salu*, ElandersGotab: Stockholm

- Shapiro, C., & Willig, R. (1990). Economic rationales for the scope of privatization. In Suleiman, E.N., & J. Waterbury (Eds.), *The political economy of public sector reform and privatization*. Boulder: Westview Press.
- Shiva, V. (2002). *Water wars*. Cambridge: South End Press.
- Stiglitz, J. (1991). *Theoretical aspects of the privatization: Applications to Eastern Europe* (working paper). Institute of Policy Reforms
- Tubmun, O. (2007). *Commercialization and management of water supply and sanitation services in Kenya urban areas-A case of Mavoko Municipality*. Kenyatta University.
- UN-Habitat. (2003). *Water and Sanitation in the World's Cities: Local action for global goals*. Earthscan, London.
- United Nations Development Programme. (2006). *Beyond scarcity: Power, poverty and the global water crisis* (Human development report 2006). London: Palgrave MacMillan.
- United Nations Development Programme. (2007). *Improving water governance in Kenya through the human rights-based approach* (A Mapping and Baseline Report). Kenya: Author.
- Van de Walle, N. (1989). Privatization in developing countries: A review of the issues. *World Development*, 17(5), 601-615.
- Vickers, J., & Yarrow, G. (1988). *Privatisation: An economic analysis*. London: MIT
- Villalonga, B. (2000). Privatization and efficiency: Differentiating ownership effects from political, organizational, and dynamic effects. *Journal of Economic Behavior & Organization*, 42, 43-74.
- vonDach, S.W. (2007). *The process of reforming the water sector in Kenya*. InfoResources, Berne
- Wagah, G. G., Onyango, G.M., & Kibwage, J. K. (2010). Accessibility of water services in Kisumu municipality, Kenya. *Journal of Geography and Regional Planning*, 3(4) 114-115. Retrieved from <http://www.academicjournals.org/JGRP>
- Wambua, S. (2004, March). *Water privatisation in Kenya*. (Global Issue Papers No. 8). Heinrich Böll Foundation, Berlin, Germany. Retrieved 21 August 2011 from <http://www.boell.de/downloads/internationalepolitik/GIP8.pdf>
- Water Services Regulatory Board. (2012). *Impact Reports*. Retrieved from <http://www.wasreb.go.ke/> [Accessed 15 August 2013]