



## **EFFECT OF RESERVED TENDERING ON PROCUREMENT PERFORMANCE IN STATE CORPORATIONS IN KENYA**

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### **Abstract**

With the introduction of AGPO program in Kenya 30% of the public procurement is reserved for the disadvantaged groups. The uptake of reserved tendering in state corporations has an impact on procurement performance. Therefore the study sought to determine and investigate the effects of reserved tendering on procurement performance in state corporations in Kenya. The study intended to obtain an in depth understanding of effects of reserved tendering on procurement performance in state corporations. The study intended to determine and identify how the effect of preparing tender documents, invitation to tender, evaluation of bids, selection and contract award during reserved tendering impacts on procurement performance in relation to quality of supplies and materials, cost factor and lead time. The study was guided by four objectives and research questions. The study was guided by the agency theory, duPont model and systems theory. The study was a descriptive research that adopted a survey research design. The target population was 210 state corporations. The survey was done at 21 state corporations. The target population was 236 employees and a sample size of 76 employees being censuses of those working in the procurement departments at headquarters offices. Questionnaires were used in the study as the main tool of data collection. Questionnaires were administered to procurement staff. Cronbach's Alpha was used to test the reliability of data collection instruments. Data collected was coded and entered into the computer for analysis using the Statistical Package for Social Sciences (SPSS). The study employed both quantitative and qualitative research in its data analysis. Data was presented using tables, pie charts and bar graphs. This aided in description and explanation of the study findings. Inferential statistics included correlation and multiple regression analysis. From the findings all the variables that is preparing tender documents, invitation to tender, and evaluation of bids, selection and contract award were found to have a statistically significant effect on the procurement performance of state corporations in Kenya. The study recommended that the state should allocate enough resources to ensure that the reserved tendering process is smooth in public corporations. The state should also utilize the state machinery to eliminate any corruption in the system.

*Keywords: Evaluation of tenders, Invitation to tender and opening, Preparation of tender document, Procurement performance*

## 1.0 Introduction

Procurement plays a vital role in the economic growth and development of any country if well managed. The procurement department is one of the key departments in any organization. The problems arising at the department will affect the performance of the organization. Procurement being an act of obtaining or buying goods and services, it often involves: purchase planning, standards determination, specification development, supplier research and selection, value analysis, financing, price negotiation, making the purchase, supply contract administration, inventory control and stores and disposals and other related functions. According to (Hughes, 2005) procurement as a process spans from identification of needs through to the end of a services contract or the end of the useful life of an asset. It includes the design and delivery of those works, products or services, the assessment of their quality, and the evaluations and reviews that will lead to further procurement.

The major function of the procurement department is to procure all necessary materials needed for the daily operation in an organization. The procurement department also is charged with continuously evaluating whether it is receiving these materials at the best possible price in order to maximize profitability. According to (Mangan, 2008) it is favorable that the goods/services are appropriate and that they are procured at the best possible cost to meet the needs of the purchaser in terms of quality and quantity, time, and location.

There are various procedures used by the procuring entity to acquire goods, services and works. They include use of tenders, request for quotation and request for proposals among others. According to (John, 2003) tendering is a purchasing procedure whereby potential suppliers are invited to make a firm and unequivocal offer of the price. Tendering is a call for tenders or merely 'Invitation to treat'. Tendering is a formal and legal procedure of soliciting tender offers in order to select the most suitable service provider or supplier (Tasmania, 2006).

The tendering process involves suppliers preparing tender documents after company has issued an invitation to tender. Such invitations are normally done through public advertisements in specified timeliness to allow as many qualified individuals as possible to bid. Once bidders have submitted their bids, companies do their evaluation of these bids. Selection is made and contractors awarded to qualified suppliers.

In a global view of the procurement and tendering process, a system of granting of preferences is permitted in the Botswana tendering system. The main aim of the Botswana procurement policy is to ensure that the system is not corrupt. As race is downplayed as a factor in Botswana society, such preferences do not depend on race, disability or gender (Jodie, 2004).

A preferential procurement policy promotes objectives additional to those associated with the immediate objective of the procurement itself. The procurement of supplies, services and engineering and construction works has been used internationally to support a number of socioeconomic or political (secondary) objectives including: the stimulation of economic activity; the protection of national industry against foreign competition; improving the competitiveness of certain industrial sectors; remedying regional disparities; and achieving certain more directly social policy functions such as the fostering of the creation of jobs, the promotion of fair labour conditions and the use of local labour, the prohibition of discrimination against minority groups, the improvement of environmental quality, the encouragement of equality of opportunity between men and women, and the promotion of the increased utilization of the disabled in employment(CIBD, 2004).

In Botswana the system of preference is based on whether the consultancy or contracting company is owned by Botswana citizens. Only in the case of disasters or calamities are certain other preferences permitted: Section 66 of the Act makes provision for preferences to be made to "specific, disadvantaged women's communities and regions and areas subject to occasional calamities. "The Botswana government draws a distinction between contractors and consultants. In order to qualify for the preferences, consultants and contractors are required to register on separate service provider databases, and to obtain a registration number (World Bank, 2008).

The public procurement tendering system in Kenya has evolved from a crude system with no regulations to an orderly legally regulated procurement system. The government's procurement system was originally contained in the supplies manual of 1978, which was supplemented by circulars that were issued from time to time by the treasury. A review of the country's public procurement tendering systems was undertaken in 1999 and established that: there was no uniform procurement tendering system for the public sector as a whole, it did not have sanctions or penalties against persons who breached the regulations in the supplies manual, other than internal disciplinary action. Consequently application of the rules was not strict and many of the norms were not followed, the supplies manual did not cover procurement of works, the dispute settlement mechanisms relating to the award procedures as set out in the manual were weak and unreliable for ensuring fairness and transparency, Records of procurement transactions in many cases were found to be inaccurate or incomplete or absent, which led to suspicions of dishonest dealings at the tender boards. The manual created various tender boards for adjudication of tenders and their awards. The authority (PPOA) shall issue guidelines on the format of

procurement documents to be adopted for approvals and the documentation of the procurement procedure.

The public procurement and disposal (Preference and reservations regulations), 2011 were gazetted on 8<sup>th</sup> June, 2011. The regulations shall apply to procurements by public entities when soliciting tenders from the following target groups: disadvantaged groups, small enterprises, micro enterprises, citizen contractors, local contractors and citizen contractors in joint-venture or sub-contracting arrangements with foreign suppliers.

## **1.2 Statement of the problem**

Procurement performance is the backbone of an organization success since it contributes to competitive purchase and acquisition of quality goods that puts the organization products or services in the competitive edge in the market (Haron, 2014). The quality of materials and supplies affects organization performance and should therefore be improved (Sanewu Esther Nasidai, 2013).

The procurement function usually takes large amounts of organization's revenue (Gebauer and Segev, 1998). In the year 2013/14, the GOK expected to spend about 70% of the 1.6 Trillion shillings budget on procurement of goods and services. The procurement function is becoming an expensive undertaking for many organizations and if not properly done it can lead to significant regret. It is thus important to measure the performance of the procurement function.

Performance measurement provides a basis for assessing progress. Procurement performance has benefits on organization performance (Batenburg, 2006). Cost, quality and time however affects the companies procurement performance (Billow, 2013).

Purchasing process of any organization is costly. Numerous costs are incurred during the tendering process. Administrative cost such as cost of preparing tender documents, inviting of tenders, opening of tenders, costs for evaluation of tenders and verifying the documents should be reduced. This will aid in improving the procurement performance (Khain, 2012). If tendering is not well managed a company will incur numerous costs. Tendering has to be performed correctly in order to maximize effectiveness and minimize costs. The duration taken in tendering significantly influences the effectiveness of tendering (Ayoti, 2013).

Tender application procedures, tender advertisement procedures, tender evaluation procedures and qualification requirement have an impact on quality. According to (Kimutai, 2013) tendering procedures have an impact on quality of rural access roads. With the introduction of AGPO program in Kenya 30% of the public procurement is reserved for the disadvantaged groups. Tender adjudication is one of the ways of implementing the public procurement preference

policy (CIBD, 2004).The Government of Kenya has adopted the use of reserved tendering in implementing the AGPO program.

According to (PPOA, 2014) Annual Report, poor procurement practices like non-compliance to PPDA regulations have been identified as a challenge to the procurement process. At times, record keeping in procurement files is incomplete and fragmented so that crucial procurement information is spread across numerous files. Most recently the reserved tendering has not been successfully attended as it were proposed. The tendering has been faced with a lot of delays, poor quality, among other irregularities of procurements which hinders the effectiveness of the whole process. Such situations are often compounded by the failure to integrate procurement reforms to traditional practices of procurement. There is need to study whether state corporations observe all the pertinent controls and procedures in line with the PPDA (2005), PPDR (2006), the PPDGM, the circulars & directives issued by PPOA especially reserved tendering and other generally accepted principles of good practice.

This therefore calls for the a study to analyze the effect of preparing tender documents during reserved tendering on procurement performance in state corporations; to examine the effect of invitation to tender and opening of tenders during reserved tendering on procurement performance of such corporations; to assess the effect of evaluation of bids during reserved tendering on procurement performance and to identify the effect of selection and contract award during reserved tendering on procurement performance in state corporations.

### **1.3 General objective**

The general objective of the study was to ascertain the effect of reserved tendering on procurement performance in state corporations in Kenya.

#### **1.3.1 Specific objectives**

The specific objective of the study was:

- i. To analyze the effect of documents preparation for reserved tendering on procurement performance in state corporations.
- ii. To examine the effect of invitation to tender and opening of tenders during reserved tendering on procurement performance in state corporations.
- iii. To assess the effect of evaluation of bids during reserved tendering on procurement performance in state corporations.
- iv. To identify the effect of selection and contract award during reserved tendering on procurement performance in state corporations.

## **2.1 Theoretical framework**

The study adopted three theories to discuss on reserved tendering and procurement process. These theories include; agency theory, Du pond model and systems theory

### **2.1.1 Agency theory**

Agency theory describes the relationship between one party called the principal and other called the agent. According to (Jensen, 1976) an agency relationship is “a contract under which one or more persons (principals) engage another person (the agent) to perform some service on their behalf which involves delegating some decision-making authority to the agent.” When executing the tasks within the principal-agent relationship, the agent must choose actions that have consequences for both the principal and the agent. Since these outcomes can be either negative or positive for each of the actors; the chosen action of the agent affects the welfare of both. Agency theory in economics has long been concerned with the issues of control that arise as a result of information asymmetries between agents delegated to maximize the welfare of the principals who contracted with them (see especially (Ross, 1973) and (Jensen, 1976). In general, all principal-agent relationships are plagued by uncertainty not only in the level of an agent’s knowledge, skills and abilities, but also in both the way the agent’s action gets transformed into the output and whether or not the agent is acting in the principal’s best interest.

The theory has been successfully applied to a myriad disciplines including accounting, economics, politics, finance, marketing and sociology (Nikkinen, 2004). Agency theory is a fruitful method for modeling cooperative public purchasing is that it helps to identify the various incentives of the stakeholders. By clarifying the opportunities and constraints they face, hope is engendered that efficiency, effectiveness, and accountability will be increased. The agency theory is widely used in procurement, Cliff Mc cue and Eric Prier did a study on using agency theory to model cooperative public purchasing.

### **2.1.2 Du Pont model**

Du Pont model measures the financial impact of procurement on the organization’s finances. The model was developed in the 1920s. The model was originally developed to calculate the return on net assets which is one of the most used parameters for measuring the profitability of the organization. The model is still considered to be an efficient measure of company performance (Duncan, 2006).

DuPont analysis can be applied to demonstrate the effects of purchasing savings on the companies’ performance and profitability (Illoranta, 2012).The model also highlights the issues that affect the profit margin that need to be considered when developing the procurement

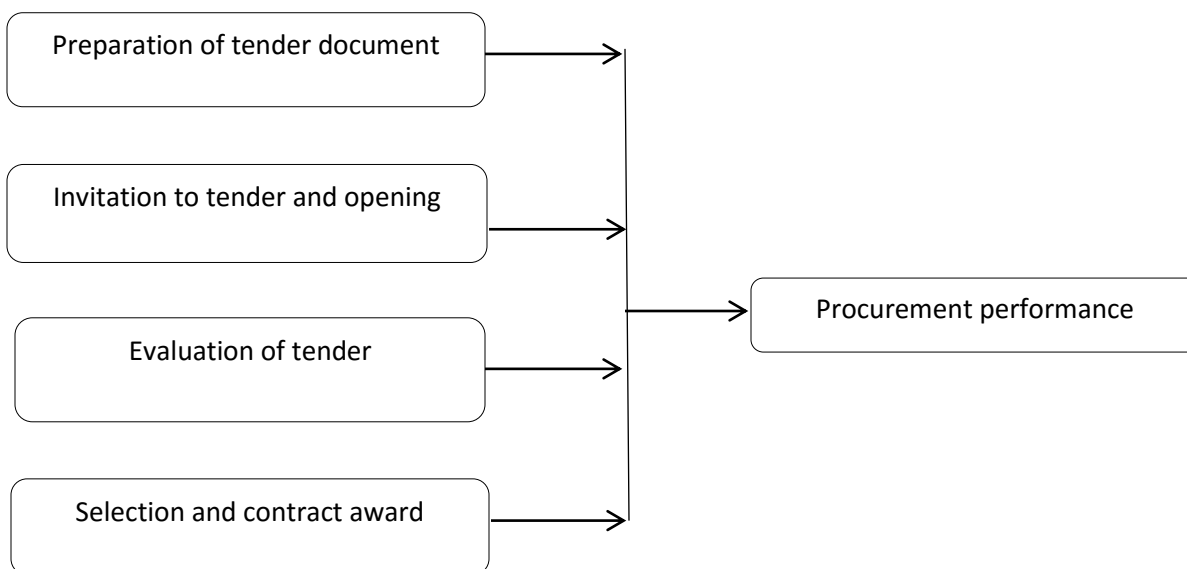
function. These issues include things like lack of procurement policies or uncontrolled supplier or price management (Zima, 2007).

According to (Van Weele,2010) Du Pont analysis demonstrates in three ways how purchasing can be used to improve the company's RONA. First way is through reduction of all direct material cost. This will improve company's gross margin which further improves RONA. Second way is through improving the company's revenue generating potential, collaborating with suppliers to develop processes and new innovations to generate more customer values and as a result improve gross margin. Third way is through a reduction of the working capital employed by the company. This will positively affect equity turnover.

### 2.1.3 Systems theory

Systems theory explains how and why people form groups, each of which is a system as well as part of a larger system. Its focus is on the whole system rather than on its parts, and how these parts interact to affect the whole system. An organization is a system with many sections that are interrelated. These sections are affected in their operations by factors that are either internal, external or both. Systems can either be closed or open. Most if not all organizations are open systems meaning that they are dependent on the external environmental factors for survival (Drucker, 1988).The theory is relevant to the study because all organizations interact with outside world as they are often systems. Sections of organizations interact amongst themselves in exchange of key information and materials.

## 2.2 Conceptual framework



### **2.3 Reserved tendering**

Reserved tendering refers to setting aside tenders, especially for the disadvantaged groups. According to (Watermeyer, 2003), only the enterprises with specific characteristics required by the procuring entity are allowed to compete for contracts reserved for their exclusive execution. Countries such as South Africa, Botswana, Kenya and many other have put in place preservation and reservation regulations and policies. The policies and regulations allow the public institutions to reserve certain procurements to disadvantaged groups.

There are certain procurements in Kenya that are usually a preserve for the disadvantaged groups. For instance, the supply and delivery of common office items such as flowers, newspapers, and cleaning services in most government and private offices are usually given to the youths, women and persons with disabilities. Even though the privately owned entities are not bound by any law in Kenya, they find it necessary to grant such groups the opportunity to do business with them.

One major challenge that Kenya has been facing since independence is the creation of adequate and sustainable employment opportunities, especially for its youths. The introduction of the AGPO program means that the government can now register and pre-qualify youth, women and persons with disabilities owned enterprises so that they can access government tenders and contracts. Participation of the disadvantaged groups in procurement is designed to create employment, wealth and enhance economic growth for the country in line with its vision 2030. The disadvantaged groups are also encouraged to compete with other stakeholders for the rest of the remaining 70 percent of procurement opportunities offered by the government.

### **2.4 Preparation of tender documents**

A tender process contains various phases and this is one of the most important because it determines the terms that are included in the tender as well as the overall execution of the contract. They may include invitation to tender, instructions to tenders, general conditions of the contract, special conditions of contract, schedule of requirement, technical specification, tender form and price schedule, tender security form and bank guarantee for advance payment form (PPOA).

Clarity is an important aspect of preparing tender documents, for instance, instructions to disadvantaged groups should notify interested applicants to submit the mandatory documentations such as certificate of registration/certificate of incorporation, identity card/passport, PIN/VAT certificate, tax compliance certificate, partnership deeds for partnership



business, memorandum/articles of association and CR12 ( which is received after filing statutory returns) mandatory for registered companies. Such instruction will make them know the requirements they need to qualify (preference and reservations regulations, 2013).

Alongside clarity, tender documents should have specific schedules. Some of the major procurements problems that have been noted in various countries including the United Kingdom include poor specification writing, disparities between bill of quantities and drawings and specifications, constituting poorly prepared tender documents (Brook, 2004).

There are challenges that are involved in preparing tender documents. According to (Dalrymple, 2006) costs are incurred in this phase for any tendering process. Purchasers incur costs associated with the preparation of documents. These include specifications and instructions to the item being purchased. They also incur costs to assemble a list of prospective tenderers to whom tender documents will be sent. These documents may be posted to tenderers, but more complicated purchasers may require face-to-face meetings with individual tenderers or collective briefings for all interested applicants to attend. (Khain, 2012) adds that administrative costs such as cost of preparing a tender document are also incurred. Costs of preparing a tender include stationery, printing and binding costs. He opines that the administrative costs should be reduced so as to improve purchasing performance.

## **2.5 Invitation to tender and opening of tenders**

In the tendering process, the purchaser places an advertisement that invites the suppliers to participate in a sealed bid process to offer to supply goods and services. In Kenya, advertisement may be done through the local dailies or other media such as the local radio and TV stations that can widen the scope of the targeted disadvantaged groups. In the tendering process, there is significant administrative cost, like cost of advertisement in the newspaper (Khain, 2012).

When placing an advertisement inviting bidders to express interests to tenders, it is imperative that the advertisement includes adequate and elaborate description of the tender to allow the prospective tenderers to decide whether they wish to prepare a tender, or link to the location where this information is available, the location where the tender documents may be obtained, including the name, telephone numbers and email of the contact officer, a tender reference number where tenders are to be lodged and the closing date and time, and any other important dates and deadlines.

Potential suppliers are invited to submit their offers by completing the available tender documents (Pauw, 2002). The sets of documents are issued to bidders and a record is kept of the

potential vendors that collect documents. Sometimes there is a deposit payable that is refunded if a bid is submitted or documents are returned (Steyn, 2010).

Official opening procedures should be prescribed to avoid any irregularities. Tenders should be opened in public and in the presence of all the competing suppliers. In addition, particulars of each of the tender should be announced in public and entered into an official tender register that should be kept for auditing purposes (Gildenhuys, 2002).

The procuring entity will open all tenders in the presence of the tenderers or their representatives who choose to attend, at (time, day and date of closing) and in the location that is specified in the invitation to tender. The tenderers' representatives who are present shall all sign a register evidencing their attendance. The tenderers' names, tender modifications or withdrawals, tender prices, discounts and the presence or absence of requisite tender security and such other details will be announced at the opening (PPOA).

## **2.6 Selection and Contract award**

According to Van Bon (2005), responses from suppliers is used to select the most suitable supplier. Lysons (2005), noted that selection of suppliers is based on a number of factors such as price, quality, availability, and reliability. When a supplier fails to meet the quality, delivery, and reliability requirements, additional costs are incurred by the buying organization. These excess costs, direct overhead, and the consequential loss have an immediate impact on the firm's available resources.

Upon coming to a decision on the tender that offers the best overall value for money after taking into account the quality, price, timing, costs that is in use where necessary, the evaluation team can then embark on making the decision about the award of the contract. Most state corporations in Kenya have established procedures that are prepared in compliance with the public procurement oversight authority (PPOA). Such procedures define the financial limit basis, under which the team can make decisions reading the award of the contract.

Clear established process for selecting suppliers and extending the existing suppliers has been observed to be very important while selecting suppliers to ensure procurement performance. Ghodsypour (2001) points out that supplier selection is one of the most important decision-making problems, since selecting the right suppliers significantly reduces the purchasing costs and improves corporate competitiveness. Choice of tender supplier selection criteria influence lead time of tendered goods and services in public institutions (Venn, 2015)

The awarding of contracts to suppliers is an important phase of the procurement process (Maurer, 2004). Tenders may, however, be awarded to contractors who cannot deliver on time and to the required quality either in terms of policy objectives or due to imposed constraints relating to socio-economic objectives (Gildenhuis, 2002). Meaning the post-tender negotiations has to iron out and clarify any issues that may delay the procurement process.

Some of the areas that the winning bidder and the purchasing corporation can negotiate and agree upon may include discounts, whether it will be negotiated or hidden, prompt payments, and bulk purchases, monthly, annual or biannual order. Another point may be on the terms of payment whereby the two parties can agree on the timing, mode of payment, and any other details. When the final agreement has been reached relating to the bid, the purchaser can then write and sign an agreement with the winning bidder on the terms and conditions of the contract

## **2.7 Procurement Performance**

Measuring procurement performance is important as the purchasing department plays an ever increasingly important role in the supply chain in an economic downturn (Vonderrembse, 1999). Procurement excellence is increasingly becoming an important factor in delivering efficient operations within successful companies. During a downturn, when companies must consider every avenue for cutting costs in order to simply survive, the procurement department plays an increasingly important role in achieving this strategic goal (McCue, 2006).

For any organization to change its focus and become more competitive (Amaratunga, 2002) suggests that performance is a key driver to improving the quality of services while its absence or use of inappropriate means can act as a barrier to change and may lead to deterioration of the purchasing function. Organizations that do not have performance means in their processes, procedures, and plans experience lower performance and higher customer dissatisfaction as well as employee turnover (Artley, 2001), (Amaratunga, 2002) and (CIPS, 2005).

According to (Bloomberg, 2006), in order to measure and control the procurement process so as to improve it, it has to be mapped properly. A suitable way to govern purchasing is through target setting and measuring. This could be done through key performance indicators (KPI). KPI is divided into seven categories, namely: price-related KPI, quantity-related, delivery-related, inventory-related, saving-related KPI, activity-related KPI, and many others. An obvious performance measure of the success of any purchasing department is the amount of money saved by the company (Nyeko, 2004).

## **2.8 Summary of research gaps**

From the foregoing studies a lot has been studied on tendering and procurement performance which has given the study a good basis for information, for example a study by (Khain, 2012) on administrative costs in open tendering identified that administrative costs such as cost of preparing tender documents, inviting tenders, costs for evaluation of tender and costs of verifying the documents of the bidders incurred during tendering affect purchasing performance. According to (Kimutai, 2013) tendering procedures have an impact on quality. The study on factors influencing effectiveness in tendering process in public sector by (Ayoti, 2013) identified that the duration taken in tendering significantly influence the effectiveness of tendering. Billow (2013), identified that quality, cost and time affects procurement performance. These studies have helped understand the procurement domain in this country and also at an international scope. However, all the above studies have failed to highlight fundamental issues within the reserved tendering process. Some of these issues border on how companies have restructured their tendering practices to comply and the effects this has had on them.

For example, there has not been any analysis done on the impact of these new procurement laws as outlined by the PPOA on the traditional service providers and in particular of how companies respond to the new challenges triggered by such models and describe their strategies to meet the expectations of these policies. This is an important aspect that needs to be highlighted to boost ethical procurement practice in Kenya.

There has also not been any documented assessment of how companies are active within the scope of the regulatory framework applicable to procurement as well and if and to what extent these companies are active also outside the scope of the regulatory framework when providing tendering contracts. This study seeks to address some of these gaps and to bring to the fore some of these issues.

## **3.0 Research methodology**

This study was a descriptive research and therefore conducted a survey. The approach provides ways of discerning, examining, comparing, contrasting and interpreting meaningful data in order to elicit rich, detailed material that can be used in analysis (Kothari, 2007).

The study target population included all the state corporations in Kenya. According to (Boraya, 2013) there are two hundred and ten state corporations. The survey was conducted in twenty one state corporations. The selected state corporations formed the strata. The staff at the procurement offices was randomly selected. The sample size comprised of 76 respondents from a population of 236 which represents 32.20% of the target population. This was above the minimum threshold

sample suggested by (Patron, 2002) who recommended 30% of target population as an adequate sample size in a descriptive case study Survey, this is supported by (Neuman.W.L., 2000). The study relied on primary and secondary data sources. Primary data was obtained using a questionnaire for employees from the procurement and stores departments. Secondary data refers to data which already exists. Therefore the researcher reviewed records related to the study which enabled him to compile and analyze the data from text books, journals and reports. Data collected was coded and entered into the computer for analysis using the Statistical Package for Social Sciences (SPSS). Descriptive statistics was used. Descriptive statistics enables the researcher to describe the aggregation of raw data in numerical terms. Neuman, (2000) noted that descriptive statistics by use of standard deviation, percentages and frequency distribution was used to analyze data. The results of data analysis were presented in frequency distribution tables, bar graphs and pie charts. Correlation and multiple regression was used to analyze the degree of relationship between the variables in the study.

## RESEARCH FINDINGS AND DISCUSSION

**Table 1. Correlation**

		Evaluation of Bids	Invitation to Tender and Opening	Preparation of Tender Documents.	Selection and Contract Award
Procurement Performance	Pearson Correlation	.596**	.614**	.366**	.431**
	Sig. (2-tailed)	.000	.000	.006	.001
	N	55	55	55	55

\*\* . Correlation is significant at the 0.01 level (2-tailed).

From table 1. it can be observed that the correlation between the independent variables and the dependent variable was high. The main reason for testing for correlation is that, a very high correlation between the independent variables causes a problem in estimation of the regression coefficients. This problem is popularly referred to as multicollinearity. According to Brook (2002) multicollinearity is the problem that occurs when the explanatory variables are very highly correlated with each other. If there is no relationship between the explanatory variables, they would be said to be orthogonal to one another. If the explanatory variables were orthogonal to none another, adding or removing a variable from a regression equation would not cause the values of the coefficients on the other variables to change.

On the other hand however a very high correlation between the independent and the dependent variable is termed as good since it shows the explanatory power of the individual independent

variable. From table 1. it is noted that the correlation between procurement performance and the various independent variables was above 30%, which was a good indicator of the explanatory power of the independent variables on the variations of the dependent variable.

#### 4.0 Analysis and Discussions

Table 2 Regression Results

Model	Coefficients			
	B	Std. Error	t	Sig.
(Intercept)	.332	.094	3.518	.001
Preparation of Tender Documents	.257	.105	2.440	.018
Invitation to Tender and Opening	.361	.110	3.270	.002
Evaluation of Bids	.324	.115	2.817	.007
Selection and contract award	.227	.099	2.288	.026

a. Dependent Variable: Procurement Performance.

The model becomes

$$Y = 0.332 + 0.257X_1 + 0.361X_2 + 0.324X_3 + 0.22X_4 + \varepsilon$$

Where:

Y= Procurement Performance,

$\beta_0$ = Regression intercept,  $\beta_1$ - $\beta_4$ = Regression coefficient,  $x_1$ = Preparing tender documents,  $x_2$ = Invitation to tender and opening of tenders,  $x_3$ = Evaluation of bids,  $x_4$ = Selection and contract award,  $\varepsilon$ =Error,

From table 2, the regression coefficient of preparation of tender documents was found to be 0.257. This value shows that holding other variables in the model constant, an increase in preparation of tender documents by one unit causes the procurement performance to increase by 0.257 units. The value of the coefficient is also positive. The positive effect shows that there is a positive relationship between preparation of tender documents by the state corporations and their procurement performance. The coefficient is not just positive but also statistically significant with a t-statistic value of 2.440. In social sciences, a t-statistic value of 2 and above is normally accepted to be significant for inference analysis. The standard error was found to be 0.105 and the p-value was found to be 0.018. The variable was also found to be the third most influential variable on the procurement performance of state corporations in Kenya. These findings supports (Njiraini and moyi, 2006), Uher and Davenport (2002) and Brook (2004) who found that preparation of tender documents had effect on procurement performance.

The regression coefficient of Invitation to Tender and Opening was found to be 0.361. This value shows that holding other variables in the model constant, an increase in Invitation to Tender and Opening by one unit causes the procurement performance to increase by 0.361 units. The value of the coefficient is also positive. The positive effect shows that there is a positive relationship between Invitation to Tender and Opening by the state corporations and their procurement performance. The coefficient is not just positive but also statistically significant with a t-statistic value of 3.270. In social sciences, a t-statistic value of 2 and above is normally accepted to be significant for inference analysis. The standard error was found to be 0.110 and the p-value was found to be 0.002. The variable was also found to be the most influential variable on the procurement performance of state corporations in Kenya. These findings supports (Khain, 2012), Pauw (2002), Steyn (2010) and Gildenhuis (2002) who found that invitation to tender and opening had effect on procurement performance.

The regression coefficient of Evaluation of Bids was found to be 0.324. This value shows that holding other variables in the model constant, an increase in Evaluation of Bids by one unit causes the procurement performance to increase by 0.324 units. The value of the coefficient is also positive. The positive effect shows that there is a positive relationship between Evaluation of Bids by the state corporations and their procurement performance. The coefficient is not just positive but also statistically significant with a t-statistic value of 2.817. In social sciences, a t-statistic value of 2 and above is normally accepted to be significant for inference analysis. The standard error was found to be 0.115 and the p-value was found to be 0.007. The variable was also found to be the second most influential variable on the procurement performance of state corporations in Kenya. These findings supports those of visser ( 2007), Van Bon (2005), Douh (2009), Atlas (1993) and Thai (2011) who found that evaluation of bids had effect on procurement performance.

The regression coefficient of Selection and contract award was found to be 0.227. This value shows that holding other variables in the model constant, an increase in Selection and contract award by one unit causes the procurement performance to increase by 0.227 units. The value of the coefficient is also positive. The positive effect shows that there is a positive relationship between Selection and contract award by the state corporations and their procurement performance. The coefficient is not just positive but also statistically significant with a t-statistic value of 2.288. In social sciences, a t-statistic value of 2 and above is normally accepted to be

significant for inference analysis. The standard error was found to be 0.099 and the p-value was found to be 0.026. The variable was also found to be the least influential variable on the procurement performance of state corporations in Kenya. These findings supports those of Lysons (2005) Venn (2015), Christopher (2008), Billow (2015) and Telegen (2016) who found that selection and contract award had effect on procurement performance.

Table 3 Test statistics

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
	.737 <sup>a</sup>	.543	.506	.70037

a. Predictors: (Constant), Preparation of Tender Documents, Invitation to Tender and Opening, Evaluation of Bids, Selection and contract award

b. Dependent Variable: Procurement Performance

From table 3 the value of the adjusted R square was 0.50. This value clearly suggests that after adjusting for the degrees of freedom there is a strong relationship between Preparation of Tender Documents, Invitation to Tender and Opening, Evaluation of Bids, Selection and contract award and Procurement Performance. This indicates that Preparation of Tender Documents, Invitation to Tender and Opening, Evaluation of Bids, Selection and contract award causes a variation of 51 % on Procurement Performance.

Table 4 Analysis of variance (ANOVA)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	29.146	4	7.286	14.855	.000 <sup>b</sup>
Residual	24.526	50	.491		
Total	53.671	54			

a. Dependent Variable: Procurement Performance.

b. Predictors: (Constant), Preparation of Tender Documents, Invitation to Tender and Opening, Evaluation of Bids, Selection and contract award

Table 4 presents the analysis of variance statistics. The ANOVA table indicates that the overall model was a good fit since the value of F-statistic was found to be 14.855 and its p-value was found to be 0.000 which is less than the critical value of 0.05. This further indicates that all the variables in combination have some explanatory power on the procurement performance in the state corporation in Kenya.



## **5.0 SUMMARY, CONCLUSION AND RECOMMENDATIONS**

The study explored the effect of reserved tendering on procurement performance. Based on the findings, respondents indicated that reserved tendering affects procurement performance. Respondents agreed that preparation of tender documents during reserved tendering, invitation to tender and opening of reserved tender, evaluation of bids during reserved tendering and that selection and contract award during reserved tendering affect the procurement performance. The regression analysis also revealed that the effect of each of these variables was statistically significant. The regression model was found to explain 51% of the variation in the procurement performance. The findings were in agreement with those of (Krusden, 1999) who argued that there is a link between procurement process and performance.

### **5.1 Conclusion**

The study concludes that preparing tender documents had a statistically significant influence on reserved tendering. All the constructs were found to be efficient measures of preparing tender documents variable. Based on the findings, it was concluded that huge costs are incurred due to the numerous suppliers that participate in reserved tendering. Specification on the tender documents was found to have an impact on the quality to be supplied through reserved tendering. Late preparation of tender documents by procurement officers during reserved tendering was found to affect tendering process and thus performance.

On the basis of Invitation to Tender and Opening of Tenders, it can be concluded that reserved tendering results to increase in transaction and administrative costs, Invitation to tenders through newspapers reach a larger section of the disadvantaged groups during reserved tendering, Public opening of tenders received during reserved tendering improves the credibility of the procurement process, Submission of bids during reserved tendering by one bidder in a different party's name will deter competition and thus affect performance and that advertising is namely through newspapers during reserved tendering and the Cost of advertisement is usually high.

The study further on the basis of evaluation of bids concluded delays by the evaluation panel in completing the evaluation of tenders are due to many bidders taking part in reserved tendering. It takes too long to review and identify the winning bid due to the numerous bidders taking part in reserved tendering.

On the basis of selection and contract award, It was concluded that numerous costs are incurred in the analysis and selection of suppliers from the numerous tenders obtained during reserved tendering. The quality of items supplied through reserved tendering is not per the contract. Selection process during reserved tendering doesn't produce best results. More often tenders are

awarded to suppliers who cannot deliver during reserved tendering. Supplier selection criteria during reserved tendering influences lead time of goods to be received.

## **5.2 Recommendations**

Since this variable was found to have a statistically significant effect on procurement performance, managers should be keen on its effect. The management of state corporations should ensure that preparation of tender documents is done in a cost effective manner, specifications are done correctly and late preparation of tender documents should be avoided.

Further the study recommends the management of state corporations should ensure invitation to tenders through newspaper is encouraged to reach a large section of the disadvantaged groups during reserved tendering. Public opening of tenders should be facilitated in order to improve the credibility of the procurement process.

The management of state corporations should ensure that delays by the evaluation panels is avoided to facilitate quick tendering.

## **5.3 Recommendation for further research**

The research therefore recommends that Public Procurement and Oversight Authority (PPOA) should formulate policies and procedures that will enhance reserved tendering and procurement performance. Reserved tendering is vital in Kenya since it creates jobs to the disadvantaged groups. It however affects the procurement performance thus further research should be done on other factors that affect procurement performance during reserved tendering. Future researchers, should include other variables such as competitive bidding, professionalism among others. The explanatory variables included explained only 51% of the variation in procurement performance, more research should be undertaken to improve this model.

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