

**DETERMINANTS OF PUBLIC PROCUREMENT
CORRUPTION IN UGANDA:
A CONCEPTUAL FRAMEWORK**

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ABSTRACT

This paper examines the determinants of public procurement corruption in Uganda using factor analysis and multiple correlation analysis. In this study, the economic, political, organizational and social determinants were found to have a statistically significant relationship with public procurement corruption. However, the paper concludes that organizational determinants are the major factors, which account for the increasing trends of procurement corruption. Efforts at minimizing public procurement corruption must therefore target the identified organizational opportunities at both central and local government levels, which perpetuate the problem of corruption.

Key words: Corruption, Procurement, Procurement corruption and Service Delivery

INTRODUCTION

In one form or another, corruption exists in all societies, at all stages of development and under all types of politico-economic regimes (Blackburn, Bose, & Haque, 2005, Aidt, 2003). Corruption is equated to cancer which strikes almost all parts of the society; as it “eats” the cultural, political and economic fabric of society, and destroys the functioning of vital organs” (Amundsen, 1999). As an act where public office is used in a manner that contravenes the rules of the game (Jain, 2001); corruption in Africa has been blamed for the development challenges facing the continent (Basheka, 2009, Thai, 2008).

There is substantial empirical evidence on the detrimental effects of corruption whether in procurement or other government sectors (Seldadyo & de Haan, 2006; Treisman, 2000; Serra, 2004; Basheka, 2009). Corruption has ‘toxic’ effects on societies (Carino, 1986 and in developing countries; it acts like a tax adding to the cost of providing public services and conducting business (Olken, 2007).

Despite its prevalence and detrimental effects, doing research on corruption has been considered a scientific passion for knowing the unknown because to get correct information about the extent of corruption activities in the goods and labor market is difficult as individuals engaged in those activities wish not to be identified (Dreher & Schneider, 2006).

Public procurement corruption studies are more difficult to investigate and address than other crimes not physically but intellectually because of the variety of competing determinants, Procurement corruption is one of the most common and lucrative white-collar 'crimes' in government machinery in Uganda. Corruption is high in the public procurement domain because of the great 'opportunities' in the acquisition of government goods, services and works. Corruption takes place at any stage of the procurement process and may involve both internal and external stakeholders. To gather information about the extent of corruption is crucial for effective and efficient decision making although corruption lends itself to problems of measurement (Dreher & Schneider, 2006).

What is public Procurement corruption?

In most countries procurement of goods, services and works required by government departments consumes a considerable part of government resources. Corruption involves the behavior of officials in the public and private sectors to improperly and unlawfully enrich themselves and /or those close to them, or induce others to do so, by misusing the position for which they are placed (Asian Development Bank, 2003). When this unlawful and improper behavior is applied to the public acquisition process, it becomes public procurement corruption. It essentially entails deliberate failure to follow the expected minimum standard behavior in managing the acquisition process by government agencies and departments. Corruption takes place once the procurement laws and regulations are broken for the benefit of an individual or group of individuals against the public interest and need of internal customers. The World Bank extends the definition of procurement corruption to include the offering, giving, receiving or soliciting; directly or indirectly, of anything of value to influence the action of a public official in the procurement process or in contract execution (World Bank, 2004). A broad definition of public sector corruption is the abuse of authority by bureaucratic officials who exploit their powers of discretion, delegated to them by the government, to further their own interests by engaging in illegal, or unauthorized, rent-seeking activities (Blackburn, Bose, & Haque, 2005).

Public Procurement corruption can be classified to include (1) supplier induced corruption as a result of stringent

competition for government contracts (source), (2) Public official induced corruption through creating bureaucratic hurdles that would necessitate seeking faster services (source). It may also be (3) politically induced corruption where contractors with political connections receive favors for the fear of political persecution(source). In many less-developed countries, one of the prevalent forms of corruption is called "speed corruption" (Bose, 2004, and Marjit *et al*; 2000) . This involves the capacity to harass, delay or withhold decisions handed down by procurement officials unless a bribe is given. In Uganda's case, officials in the finance and accounts departments may delay or fail to process the payments for providers until a bribe is paid or promised. It may also involve the engineers, in case of construction projects failing to issue a certificate of completion or issuing them when the works have not been completed . The most common forms of procurement corruption in Uganda include violations of procurement procedures, the use of high-ranking officials to influence procurement decision making and bribery-induced violations of procurement procedures by government officials in collaboration with providers (Basheka, 2009).

The Uganda 3rd Integrity Survey Report, (2008) identifies new forms of corruption and prominent among them included "Syndicate corruption"; and "Management by Crisis". The former involves networks of strategically placed public officials who collude to embezzle public funds with impunity . Under management 'by crisis' syndrome, public officials deliberately delay to plan in time in order to create a crisis and stampede the procurement process. Demand for, and payment of, bribes has changed from covert to overt actions. Public officials are openly asking for bribes in exchange for services while the clients are openly paying without complaining. In this survey, it was revealed that in Uganda, there is now a shift in the *middle age crisis* from previous 40-45 years to 25-30 years. This has been due to peer pressure among the young generation who has succumbed to flamboyant lifestyles provided by the private sector. This has encouraged them to live beyond their means hence engaging in acts of corruption.

LITERATURE REVIEW

Public organizations serve the public interests through delivering desired services. This certainly makes it imperative to study problems associated with the public sector (Schiele, 2007) to find possible challenges of critical success factors in the delivery of efficient and effective services. Oliver de Saradan(1999) noted that in almost all African countries, corruption had become a common and routine element of the functioning of the administrative machinery .Public procurement plays a central role in governance

and anti-corruption efforts because of its impact on society (Prier & McCue, 2006). In Uganda, few subjects or topics currently attract 'hot' political, policy, societal and academic discussion than corruption in the process of procurement.

Corruption is such a pervasive and enduring fact in some societies that it has become an important aspect of the cultural norms and practices (Sandholtz, et al, 2000, Guhan, and Paul, 1997). Corruption comes from a Latin word 'corrumpere' which means to break something and during the action of corruption, the law, legal rule, a moral norm and in worse situations communities and human personalities are broken (Farida & Ahmadi-Esfahani, 2006). Corruption holds twofold meanings namely the narrow and broader perspectives. In a narrow perspective, it is used to mean those activities which stand for illegal practices in which the citizens or organizations bribe officials in charge for awarding permissions, contracts or escape punishment or fines for offenses they committed (Rose-Ackerman, 1999). In a broader perspective, it includes achieving several advances through personal networking, paying gratitude money or giving gifts for usual services (Kaufman, 1998) but in other cases, it is simply viewed as misuse of public office for unofficial gains.

Heidenheimer (1989) categorized corruption into three forms. Firstly, public-office centered corruption is behavior that deviates from the formal duties of a public role due to private-regarding pecuniary or status gains. The second form is market-centered corruption where a corrupt civil servant regards his/her public office as a separate business and seeks to maximize his/her income. Thirdly, is the public-centered corruption where its patterns can be said to exist whenever a power holder who is charged with doing certain things is by monetary or other rewards not legally provided for, induced to take actions, which favor whoever provides the rewards and thereby does damage to the public interests. The literature suggests many variables combining to explain the phenomenon of corruption in general and public procurement in particular. For example, Serra (2004) conducted a sensitivity analysis on the determinants of corruption involving 16 variables. In that study, 4 variables were economic, 5 were social economic, and 7 of the variables were political.

Corruption can arise because bad policies or inefficient institutions are put in place to collect bribes from individuals seeking to get around them (Djankov, LaPorta, Lopez-de-Silanes and Shleifer, 2003). Paldam (2002) posits that a skew in income distribution that discriminates against the majority may increase the temptation to make illicit gains". Economies with high human capital have low

levels of corruption as found by Ali and Isse, (2003). Meanwhile, Knack and Azfar (2003) found that in certain situations as population increases, corruption also rises. In similar attempts, Tavares (2003) reports that population negatively affects corruption. On the basis of the existing literature, it was hypothesized that -

H1 *Economic factors are significant determinants of Public Procurement corruption in Uganda*

Treisman (2000) has argued that economic variables explain corruption less than social-political variables because the economic variables are affected by non-economic structural variables in the long and short run. In a comparative analysis of the economic and political determinants of procurement corruption in Uganda, Basheka (2009) found that economic factors explained procurement corruption more than the political factors. One explanation to this was argued to be the traditional domination of corruption studies by economists whose economic measures of corruption have been tested overtime. But this could also be because, economically, corruption it contributes to unjust distribution of income, discourages investment and distorts economic growth and development especially in the long run and this will affect efficiency on the supply chain activities of many procured goods and services and at national level, it undermines both free and fair trade (Duasa, 2008).

In a study on the control of bureaucratic corruption in Honk Kong, India and Indonesia, Palmier identified three interdependent factors as important causes of corruption namely opportunities(which depended on the extent of involvement of civil servants in the administration or control of lucrative activities), salaries and policing(the probability of detection and punishment)(Palmier, 1985). In this logic, it was argued that at one extreme, with few opportunities, good salaries and effective policing, corruption will be minimal but on the other extreme, with many opportunities, poor salaries, and weak policing, corruption will be considerable. Corrupt practices are also associated with a set of structural and cultural factors (Rose-Ackerman, 1999) but structural factors have received the bulk of the attention in empirical work. The environment in which public servants and private actors operate is another cause of corruption (Farida& Ahmadi-Esfahani, 2006) particularly the bureaucratic and inefficient public administration systems in developing countries.

Developing countries are characterized by a number of complex, restrictive regulations coupled with inadequate controls; circumstances that offer a fertile ground for corruption. Gurgur & Shah (2005), and Brunetti & Weder (2003) concluded that that the

higher the quality of bureaucracy, the lower the probability for corruption to occur. Along with this finding, it is also interesting to see that the lack of meritocratic recruitment and promotion and the absence of professional training in the bureaucracy are also found to be associated with high corruption (Rauch & Evans, 1997). The following hypotheses can be formulated-

H2. *Economic factors are likely to be more significant determinants of public procurement corruption more than political factors in Uganda*

H3. *Organizational factors significantly determine public procurement corruption in Uganda*

The causes of corruption are rooted in the particular political and economic conditions of each country and the complexity of which makes remedial efforts difficult (World Bank, 1992). And that is why it is possible to find factors which change sign and or statistical significance from one study to another based on slightly different empirical specification (Serra, 2004). This scenario is also brought about by the challenges experienced in corruption measurement. Moral standards differ from society to society and it becomes difficult to select one moral behavior of one society or country and argue that others are not moral. Sometimes, the sequence of questions in a survey may substantially affect the respondents, as they tend to answer questions in line with their answers to previous questions. The time spent by respondents to scrutinize each question, scoring effects and other cognitive issues may all affect the answers (Bertrand & Mullainathan, 2001). Meanwhile, Donchev & Ujhelyi(2007) contend that what is believed by the respondents may not reflect what actually happens as far as corruption is concerned.

Shleifer, (1998) has argued that the biggest cause of corruption is undoubtedly the political leadership at the helm of affairs in a country. This observation suggests that political factors play a critical role in increasing corruption as the political leaders preside over a complex set of political structures. In a world in which governments do not always act in their citizens' best interest, corrupt politicians may be expected to spend more public resources on those items on which it is easier to levy large bribes and maintain them secret(Mauro,1998). Sometimes, corruption has increased because the politicians who have the mandate to fight it have handled corruption cases in a casual and clumsy manner (Stapenhurt, 1998)

H4. *Political commitment is a significant factor in the fight against public procurement corruption in Uganda*

The percentage of female population in work life is another determinant of corruption as indicated by Swamy et al. (2001) whose study found that higher female labor participation led to less corruption. The authors provide four arguments to explain this finding. First, “women may be brought up to be more honest or more risk averse than men, or even feel there is a greater probability of being caught.” Second, “women, who are typically more involved in raising children, may find they have to practice honesty in order to teach their children the appropriate values.” Third, “women may feel more than men -the physically stronger sex that laws exist to protect them and therefore be more willing to follow rules.” Lastly, “girls may be brought up to have higher levels of self-control than boys which affect their propensity to indulge in criminal behavior.”

Various theorists—as well as many popular accounts—attribute countries’ different rates of corruption to particular historical and cultural traditions. A surprising range of national cultures, spanning all continents, have been thought conducive to corruption (Treisman, 1998). Meanwhile, Myrdal (1970) observed that in underdeveloped countries “a bribe to a person holding a public position is not clearly differentiated from the ‘gifts,’ tributes, and other burdens sanctioned in traditional, pre-capitalist society or the special obligations attached to a favor given at any social level.” . This implies that in some societies, what may be regarded as corruption may actually be gift giving in other societies and heavily acceptable to society. However, this may be contrary to the moral expectations of other societies.

Individual motivation to engage in corrupt behavior could be explained by the social learning theory (Akers 1988) developed within sociology to explain deviant behavior. The theory is based on four interrelated concepts that operate to promote or undermine conformity: differential association, definitions, differential reinforcement and imitation. These concepts are overlapping and also mutually reinforcing. For example the basic mechanism of the social learning theory works as follows: behavior is acquired and sustained (1) through adopting definitions favorable to illegal behavior via differential association with one’s peers, (2) through imitating such behavior by peers, and (3) through the positive reinforcement provided by rewards for such a behavior (Akers, 1998).

H6. *Social factors significantly account for public procurement corruption in Uganda*

Bardhan (2006) argues that the impact of corruption must interact with the extent of regulations in the economy, and defines two types of corrupt behavior: on one hand, bureaucrats request bribes to do what they are supposed to do, empower by their status as gatekeepers.

On the other, they are bribed to do what they are not supposed to do, allowing firms to avoid regulations.

METHODOLOGY

Measurement of Procurement Corruption

Three widely used scientific measurements of corruption can largely apply to corruption in the procurement sector. According to Farida & Ahmadi-Esfahani, (2006, p.15), the general perception methodology, the incidence-based methodology and the transparency international expert evaluation methodology are the three methods which hold value in achieving the goal of estimating the spread and map of corruption. The first relies on the media coverage of corruption. Going by this measure, procurement corruption in Uganda is entrenched as all daily newspapers must have a headline related to alleged or actual corruption in the award of tenders in the country. The second methodology depends on asking the ones who potentially bribe and those whom bribes are offered and Manchin (2000) recommends this approach as the researcher is likely to get a good feedback on how frequent corruption is in different transactions. Data on corruption are usually expressed on some scale reflecting the perception of respondents. Therefore, most corruption indicators are not about the actual level of corruption, but about perceived corruption (Seldadyo & de Haan, 2006). This study used a likert scale to generate the perception of various study respondents on the magnitude of public procurement corruption in Uganda.

The model specification

Let public procurement corruption (PC) as the dependent variable be explained by four determinants namely (1) Economic Determinants(ED), (2) Political Determinates (PD), (3) Social determinants (SD) and (4) organizational determinants (OD). The economic determinants include three variables namely E1, E2, and E3. The political determinants include three variables named as P1, P2 and P3. Organizational determinants include six variables represented as O1, O2, O3, O4, O5 and O6 while the social determinants include three variables namely S1, S2, S3 and S4.

Let the above explanation be mathematically illustrated,
 $PC=f(EC\{E1,E2,E3\}+PD\{P1,P2,P3\}+OD\{O1,O2,O3,O4,O5,O6\}+SD\{S1,S2,S3,S4\})$

(1)

PC= Procurement corruption
EC=Economic determinants
PL=Political determinants

SD=Social Determinants
OD=organizational determinants

All these variables are inversely related to levels of procurement corruption in Uganda. For estimation, we use the following model

$$PC=\beta_0+\beta_1ED+\beta_2PD+\beta_3SD+\beta_4OD$$

(2)

In the economic determinants, we include a set of variables as $\sum \{E1, E2, E3, E4\}$ while in the political determinants we include $\sum \{P1, P2, P3\}$. On organizational determinants, we include $\sum \{O1, O2, O3, O4, O5, O6\}$ while in Social determinants we include $\sum \{S1, S2, S3, S4\}$

(3)

Procurement corruption in its various forms (Grand or petty) is inversely related to economic, political, organizational and social variables increase. The study used exploratory factor analysis to test the strength of the model. Emerging results were subjected to correlation and regression analysis to assess examines the strength of the determinants of public procurement corruption in Uganda. The emerging variables from factor analysis were first subjected to reliability analysis before correlation and regression analyses were examined.

RESULTS AND DISCUSSION

The study investigated the four major determinants of public procurement corruption in Uganda. These were the economic, political, social and organizational determinants. Each of these determinants were assessed using a set of variables and through factor analysis, the most critical measures of various determinants were identified. In this section, the extracted items for each of the determinants and the respective factor loadings are presented and discussed. The strength of each variable is assessed through factor loadings with low factor loadings representing a weak strength and those with high factor loadings as strong. is assessed through these factors is identified based on the factor loadings.

Table:4 Critical Economic Determinants of Procurement corruption

Variable	1	2	3
1 Size of an organization in terms of number of employees	.69		
2 Economic Liberalization of the economy	.66		
3 Size of an organization in terms of the budget	.62		
4 Foreign donations to public entities	.58		
5 The presence of many taxes	.52		
6 Low salaries of public servants		.80	
7 Levels of income of an individual		.75	
8 Supplier induced bribes to public officers			.78
9 Self-interest by public officers			.76
<i>%age variance</i>	23.9%	11.9%	9.6%

KMO .775(sig.000)

The questionnaire items that measured economic determinants were 13 . Results from exploratory factor analysis on the 13 variables of economic determinants confirmed retention of only nine variables which loaded on three principle components with a total variance of 53.3% (KMO=0.775, Sig.0.000). This implies the sampling adequacy for use of factor analysis was confirmed at a high degree of statistical confidence of 95%. All the retained components

were then subjected to reliability analysis using cronbach alpha methodology recommended for multi-point scaled items (Sekaran, 2003).The economic measures were all found to be above at 0.60. The first principle component had five items (with a total variance of 23.9% and internal coefficient of 0.68). The highest factor loading on this component was 0.69 and lowest was 0.52. The second component had a total variance of 11.9 % (alpha=0.58) . It had two items that loaded on it and the highest factor loading was 0.80 while the lowest was 0.75. The third component also had two items and these had a total variance of 7.9% as seen from the above table. In the analysis, there was a fourth component which had only one item with a factor loading of 0.81 but this was dropped from further statistical analyses concerning the economic determinants.

A comparative assessment of the entire factor loadings on the different components provides useful information on the critical economic determinants of procurement corruption in Uganda. From the analysis, it was confirmed that the major economic determinants of public procurement corruption in Uganda related to :-

- (1) Low salaries of public servants were found to be among the major variables explaining increasing trends in procurement corruption. With hardships generated by the global economic crisis, public officials were likely to engage in corrupt tendencies to catch up with 'inflationary' tendencies
- (2) Supplier induced bribes were found to be a major determinant of public procurement corruption in Uganda.
- (3) Self interest by public officers was also confirmed to be a significant economic variable that accounted most for public procurement corruption in uganda
- (4) Levels of income by public officials were found to be another economic variable that was confirmed as a major economic determinant of public procurement corruption in Uganda.

The interpretation of the results should consider the diversity of respondents and their opinions on a subject like public procurement corruption. This study included both male (296, 54%) and female (251, 45.8%) respondents. For example, when asked to comment whether the size of an organization in terms number of employees was likely to be a determinant of procurement corruption in Uganda, both male and female respondents answered in the affirmative. On whether low salaries were determinants of procurement corruption, more male respondents answered in the affirmative compared to the female respondents. Of the 116 respondents who indicated that they were employed in the central government, 49(42.2%) strongly agreed

that low salaries was a major determinant of procurement corruption in Uganda compared to 72(40.9%) of the 176 respondents who were employed in the local governments. The respondents from NGO and private sector organizations supported the findings on low salaries as determinants of procurement corruption.

Self –interest as a determinant of procurement corruption was cross-tabulated with gender and employment category of respondents where it was found that of 296 male respondents, 157(53%) strongly agreed 114(38.5%) agreed that self interest was a key determinant of procurement corruption in Uganda. Comparatively of the 251 female respondents, 133(52.9%) strongly agreed and 88(35%) agreed to the same opinion. This implies that both male and female respondents believed that that a number of cases of procurement corruption was explained by the self interest among public officers. A total of 108(93%) of the 116 respondents who were employed in the central government believed that procurement corruption in Uganda was a function of self interest as compared to an overall total of 161(91%) of the 176 respondents who were employed in the local government. Respondents in the various age categories as well as different religious affiliations further shared this same opinion. For example, 129(54%) of the 237 respondents who indicated belonged to the protestant religious affiliation believed that procurement corruption was a source of self-interest.

Determinants of procurement corruption in developing countries are complex. One single factor cannot therefore fully explain the phenomenon using one set of factors like the economic variables. In this study, we examined the contribution of political determinants of procurement corruption. It emerged from factor analysis that there were a total of ten key political variables as illustrated in table 2 that explained trends of procurement corruption in Uganda.

Table 2. Political determinants of procurement corruption

		1	2	3
1	Politicians getting to elective positions through bribes	.72		
2	Elective officers recouping investments in politics	.66		
3	Absence of political commitment to fight corruption	.56		
4	Presence of so many centers of political power	.56		
5	Lack of freedom of the press		.70	

6	A weak judiciary system		.65	
7	Lack of participation in decision – making		.63	
8	The opening up of political space in Uganda			.77
9.	Lack of political freedom due to party restrictions			.60
10	Selection of politicians through party ideologies			.56
	% age variance	20%	12%	10%

KMO=.719, Sig.0.000

The causes of corruption are rooted in the particular political and economic conditions of each country, the complexity of which makes remedial efforts difficult (World Bank, 1992). It is therefore possible to find factors which change sign and or statistical significance from one study to another, based on slightly different empirical specification (Serra, 2004). In table 2, the factor analysis results for a total of ten political determinants of procurement corruption in Uganda is presented. In this study, 15 variables had been used to measure the political determinants of procurement corruption, and through factor analysis 10 variables of them with a total variance of 42 % (KMO=.719, Sig.0.000) were extracted under three main principle comments. The first component had four items with a total variance of 20%, the second component had three items with a total variance of 11.4% and the third component with three items had a total variance of 10%. An examination of the factor loadings for the three components provides information on the most important political determinants of procurement corruption in Uganda. Based on the factor loadings, the most important political determinants of public procurement corruption in Uganda include:

- (1) Politicians who get to elective positions through offering bribes to voters have increased the occurrence of procurement corruption. In an attempt to recover the money spend on the now commercialized politics in the country, the elected leaders at both central and local government level influence the award of government contracts where they will get direct economic benefits
- (2) Lack of the freedom of the press in reporting procurement corruption for sensitive procurements involving ‘classified ‘ expenditures has increased corruption
- (3) The opening up of political space in Uganda contributed to increased levels of procurement corruption as most official hide under the protection of their political parties to evade justice.

The above findings are supportive of what other researchers on general issues of corruption have found. For example, Mauro,(1998) found that in a world in which governments do not always act in their citizens' best interest, corrupt politicians may be expected to spend more public resources on those items on which it is easier to levy large bribes and maintain them secret. Sometimes, corruption has increased because the politicians who have the mandate to fight it have handled corruption cases in a casual and clumsy manner (Stapenhurt, 1998) and this always encourages other to engage in similar acts. In Uganda, most cases of procurement corruption scandals have been championed by those officials with high political connections that perpetuate the process of influencing award of government tenders through well-orchestrated machinery in collaboration with government technical officials.

From 2003, the government of Uganda put in place a new legal and institutional framework through which public procurement was to be managed. This new system entrusted much of the contract award decisions to the institutions within the Procuring and Disposing Entities (PDEs). The Accounting officer, the contracts committee, the Procurement and disposal unit, user departments and evaluation committees are composed of highly technical people with 'capacity' to make rational procurement decisions. However, due to the rampant cases of procurement corruption and scandals the capacity of the technical people has been subjected to questions. This study examined a number of organizational related variables, which could explain the rampant cases of corruption despite the strong institutional frameworks.

Public organizations are designed to serve the public along with the imperative for public accountability; two expectations that make it imperative to study problems associated with the public sector (Schiele, 2007) but in a number of cases, organizational systems and procedures have not lived to this public expectation. In table 3, the organizational variables that determine procurement corruption are presented

Table 3. Organizational determinants of procurement corruption

Variables	1	2	3	4	5	6
1. Lack of transparency and accountability systems	.75					
2. Lack of effective systems of punishment	.68					
3. Organizational inefficiencies	.56					
4. Weaknesses in investigative structures	.51					
5. Lack of capacity among technical staff		.82				
6. Lack of capacity among contracts committee		.76				
7. Lack of capacity among the politicians		.64				
8. Decentralized systems of management			.63			
9. Organizational budgeting size			.61			
10. Long term employment of technical staff			.55			
11. Weaknesses in procurement procedures			.54			
12. Lack of effective supervision				.74		
13. Weak organizational institutions				.60		
14. Poor reporting systems in organizations				.58		
15. Lack of independent procurement departments					.63	
16. Absence of rotation for procurement staff					.62	
17. Lack of performance ratings for procurement staff					.57	
18. Lack of adequate facilities for staff						.75
19. Lack of clear systems of promotion of staff						.59
% age variance	22%	8%	6%	5%	5%	5%

KMO=.836, Sig.0.000

Table 3 indicates results on the 19 organizational variables, which were considered as key determinants of public procurement corruption in Uganda. Initially, the study had 24 variables/items which in the survey instrument measured the responses on the organizational determinants of procurement corruption in Uganda. Out of these, 19 variables with a total variance of 50% were retained (KMO=0.836, Sig. 0.000) were identified with factor analysis. These items were loading on six principle components as illustrated in the table. The retained items with their factor loadings offer useful insights into the organizational determinants of procurement corruption in Uganda. The results provide a sound basis upon which managerial and policy decisions on addressing procurement corruption can be based. It has emerged that the most important organizational determinants of procurement corruption in Uganda are:

- (1) Lack of transparency and accountability systems in the conduct of organizational functions which was a breeding ground for procurement corruption
- (2) Lack of capacity among technical staff of the different public organizations was another major organizational determinant of procurement corruption. This capacity was mainly in regard to procurement planning, writing of specifications, evaluation of bids and contract management
- (3) Lack of effective supervision within the organizations was found to be a major organizational determinant of procurement corruption in Uganda
- (4) Lack of adequate facilities for the procurement staff in organizations had created a conducive environment for procurement corruption

The above key findings compare well with existing local and international literature on general determinants of corruption. For example, It has long been held in the literature that corruption can arise because bad policies or inefficient institutions are put in place to collect bribes from individuals seeking to get around them (Djankov, LaPorta, Lopez-de-Silanes and Shleifer, 2003). In the context of public procurement, bad procurement policies or inefficient systems within an organization are created to ensure that those bidders of government contracts have no choice but to give bribes in order to get over procurement administrative hurdles.

Table 4. Social determinants of procurement corruption

1. Officials who are Protestants are more likely to be corrupt	.71			
2. Being far from major facilities	.68			
3. Distance of an organization from a major city	.68			
4. Number of tribal groupings in an organization	.65			
5. Giving in to traditional values by working officers		.78		
6. Traditional values in societies		.77		
7. The number of relatives to take care of by working official		.68		
8. Levels of education by officials			.87	
9. Lack of an educated society			.84	
10. Societal toleration of corrupt officials				.75
11. Lack of women involvement in key organizational activities				.69
% age variance				
KMO=0.728, Sig.0.000				

The results in table 4 are factor analysis results on the social determinants of procurement corruption in Uganda. The results loaded on four components and all had total items of 11 variables with a total variance of 56% (KMO=0.728, Sig.0.000). The highest factor loading was 0.71 and the lowest was 0.69. The first principle component a total variance of 23.5% had four items effectively loaded on it. The second principle component had a total variance of 14% had 3 items and the remaining two components with two items had a total variance of 10% and 8.6% respectively. A deeper analysis of the factor loadings reveals that the most critical social determinants of procurement corruption include:

- (1) Religious affiliations where officials with protestant affiliation are likely to be more corrupt than other religious affiliations
- (2) Public officials giving in to traditional values are one of the major causes of procurement corruption. The culture of gift giving for example is likely to increase the likely hood of public officials to engage in procurement corruption
- (3) The study found that there are a number of traditional values in our societies which are ingredients for the culture of corruption in public procurement

- (4) The Levels of education by officials is a cause of procurement corruption. This can be explained from two angles. Those with low qualifications may engage in mild corruption.
- (5) Lack of a vibrant and an educated society on the fundamental rights is a major determinants of procurement corruption in Uganda
- (6) Societal tolerance for corruption officials was also increasing the trends of corruption in public procurement in Uganda.

Table. 6. Correlation Analysis and Reliability analysis Results

Variables measure	R	Sig	Alpha	No. of items
Economic Determinants	0.182**	0.000	0.68	4 Items
Econ. 1	0.126**	0.003	0.58	3 items
Econ.2	0.020	0.641	0.50	2 items
Econ.3	0.309**	0.000		
Political Determinants	0.375**	0.000		
Polit.1	0.314**	0.000	0.55	5 items
Polit.2	0.319**	0.000	0.51	2 items
Polit.3	0.140**	0.001	0.43	2 items
Organizational Determinants	0.412**	0.000		
Org.1	0.390**	0.000	0.62	4 items
Org.2	0.121**	0.005	0.72	3 items
Org.3	0.317**	0.000	0.54	4 items
Org.4	0.239**	0.000	0.53	2 items
Org.5	0.289**	0.000	0.55	3 items
Org.6	0.234**	0.000	0.55	2 items
Social Determinants	0.243**	0.000		
Soc.1	0.063	0.143	0.50	4 items
Soc.2	0.101*	0.018	0.63	3 items
Soc.3	0.170**	0.000	0.74	2 items
Soc.4	0.246**	0.000	0.31	2 items

Table 6 indicates that all the conceptualized determinants of procurement corruption in Uganda are statistically significant except Econ.2, soc1 and soc.2. All the variables have a positive sign of the correlation coefficient indicating that increases in opportunities created by the various economic, political, organizational and social determinants will lead to increases in procurement corruption. Overall, economic determinants have a limited but statistically significant relationship with public procurement ($r=0.182^{**}$, sig.0.000). By examining the co-efficient of determination (r^2) the

results indicate that economic determinants account for only 3.3% in the variations of procurement corruption. Political determinants were also found to be positively related to procurement corruption at a confidence level of 99% since its $r=0.375^{**}$, sig.0.000); and this variable accounts for 14.1% of the variations in procurement corruption. Table 6 indicates that organizational determinants were positively related to procurement corruption($r=0.412^{**}$, sig.0.000). Its coefficient of determination would be 17% implying that it accounts for this percentage in the variations on procurement corruption. Finally, the social determinants were positively related to procurement corruption in Uganda($r=0.243^{**}$, sig.0.000) and this translated to a coefficient of determination of 5.9%.

CONCLUSION

It is documented in the literature that doing research on corruption is a scientific passion for knowing the unknown because to get correct information about the extent of corruption activities in the goods and labor market is difficult as individuals engaged in those activities wish not to be identified(Dreher & Schneider, 2006). Doing research on public procurement corruption is in itself a difficult task. Public procurement corruption studies are more difficult to investigate and address than other crimes because of the various determinants which account for its occurrence. It is increasingly becoming one of the most common and lucrative white-collar ‘crimes’ in government machinery in Uganda. It usually takes place at any of the stages of the procurement process and may involve both internal and external stakeholders. To gather information about the extent of corruption is crucial for effective and efficient decision making although corruption lends itself to problems of measurement (Dreher & Schneider, 2006). This paper has examined the determinants of public procurement corruption in Uganda with results confirming that organizational factors are its major determinants. Political factors, Social factors and economic factors follow in the same order of strength.. The study has confirmed that all the four major variables account for only 40.2% of the variations in procurement corruption which either suggests the existence of other determinants of the phenomenon or the challenges emanating from the measurement challenges .It is recommended that future studies should be conducted to explore some of these other determinants of procurement corruption.

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