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**ECONOMIC AND POLITICAL DETERMINANTS OF PUBLIC
PROCUREMENT CORRUPTION IN DEVELOPING COUNTRIES: AN
EMPIRICAL STUDY FROM UGANDA**

Benon C. Basheka*

ABSTRACT. This paper examines the economic and political determinants of public procurement corruption in Uganda. Using data from 548 respondents in the public, private and NGO sectors of Uganda, the paper identifies critical economic and political determinants of public procurement corruption in Uganda. All over the world, the attention of policy makers, academics, development partners, the general public, civil society organizations and politicians has been drawn to the negative effects of corruption on development and the delivery of effective services. Corruption; a phenomenon as old as man himself (Shabbir & Anwar, 2007) has recently risen to the top of the development agenda, particularly in the developing economies. It is this recognition that leads to investigation of why corruption exists and what makes it so differently widespread among countries (Serra, 2004). Unlike in the past where corruption research was the preserve of economists and political scientists, today other disciplines like public procurement have significant interest. This paper compares the emergent results with local and international literature. It presents a number of theoretical and managerial implications for addressing the “disastrous monster” of procurement corruption in the context of the developing world.

INTRODUCTION

Corruption, a phenomenon as old as man himself (Shabbir & Anwar, 2007), has recently risen to the top of the development agenda, particularly in developing economies. Although interest in

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corruption as a factor affecting development has a long history (Ampratwum, 2008; Thai, 2008; Kaufman, 1997), concern about the negative social and economic impacts of corruption has recently grown rapidly in both emerging economies and advanced democracies (Akai, Horiuchi & Sakata, 2005) due to the growing evidence of its detrimental impact to development (World Bank, 2004). However existing empirical research on the subject is usually hampered by the lack of detailed and comparative data on the problem. No region and hardly any country have been immune from corruption (Glynn, Patrick, Stephen, Kobrin & Naim, 1997). Like cancer, corruption strikes almost all parts of society and eats the cultural, political and economic fabric of society and destroys the functioning of the vital organs (Amundsen, 1999).

Economic crime and corruption have become major issues in a number of countries (Salifu, 2008). Government procurement in a number of developing countries is equally receiving increasing interest. The interest in public procurement corruption in Uganda develops from a number of factors like the following: (a) the amount of government expenditure on acquisition processes, coupled with its increasing misuse and declining professionalism; (b) the number of procurement scandals nationally and globally; (c) the desire by donors to minimize the risk of foreign aid being contaminated by corruption (Andvig & Fjeldstad, 2000); (d) serious deficiencies in efficient and effective public services due to poor performance of state institutions; (e) the demand for good corporate governance given its undisputed breeding ground for corruption (Wu, 2005); (f) the demand for transparency and accountability from the electorates; (g) the increasing public sector reforms and the desire to identify cost cutting areas; (h) increasing role of the media and civil society organizations in citizen awareness and exposure of unethical acts by government (Robinson, 2004); and finally (j) "growing" interest by political leaders both in government and opposition to improve service delivery as a way of getting electoral support from the masses. Efforts to improve service delivery usually force the authorities to address corruption and its causes (Shah, 2006).

Public procurement is a function of government that is most prone to corruption, particularly in developing countries, where there is insufficient transparency and competition (Thai, 2008). Procurement is one of the fundamental links in the supply chain of

any organization. If this link is not managed efficiently and effectively, serious downstream challenges abound. Kaufman (2004) estimated that more than US\$1,000 billion is paid annually in bribes, and the volume of bribes exchanging hands for public sector procurement alone amounts to roughly 200 billion dollars per year.

From the early stages of procurement planning to contract implementation, the procurement process is rife with opportunities for corruption with anecdotal evidence suggesting that in environments characterized by a lack of transparency and high monitoring costs, bribery plays a critical role in determining which firms win public contracts. Bribery kickbacks often represent a sizeable proportion of the total contract value; estimates by the OECD group on corruption suggest that bribes can represent 10-25% of total contract value, which may be considerable in defense or infrastructure projects (Kuaffman, 2007). The OECD (2004) reported that public procurement was a central area of spending where corruption stakes were high. Worldwide, the report noted that public procurement represented over 80% of the world's merchandise and commercial services (OECD, 2002).

Many studies have looked at the macroeconomic, cultural, and institutional determinants of corruption (Clarke & Colin Xu, 2002). This paper builds on these arguments to examine the economic and political determinants of public procurement corruption. Due to the negative consequences of corruption, academics from various social science disciplines have spent reasonable time and resources in exploring its determinants. While the group of researchers belonging to political science have their interests on the political forces and power relations of corruption, sociologists are concerned with the social structure and social class of people involved in corruption. Economists on their part will be concerned with the effects of corruption on the production, distribution and consumption. The economic researchers have focused on the corruption problem in a broader sense to find out the level of corruption across various countries and its reasons or determinants (Anywar & Shabbir, 2007). Psychologists would be interested on whether the behavior of people engaged in corruption is a function of genetic factors or the environmental influences-the nurture and nature debate. Indeed, each of these and other disciplines has its contribution to understanding procurement corruption.

A study on the political and economic determinants of public procurement corruption is pertinent given that corruption has both political and economic consequences. Politically, it threatens democracy, political systems and the country's image particularly in the case of African countries among development partners. Economically, it contributes to unjust distribution of income, discourages investment and distorts economic growth and development especially in the long run. In addition, corruption has social consequences: social stability is affected, taxpayers are burdened, society develops a negative perspective waste of expertise and knowledge occurs. At a national level, serious corruption will undermine both free and fair trade, which should be based on price, quality and service; and hinder national, international and multi-national companies from operating legally and ethically (Duasa, 2008). This paper examines the economic and political variables that account for the increasing perceptions of public procurement corruption in Uganda and draws implications for both the developed and developing countries.

LITERATURE REVIEW

The academics, the policy makers, the donors and the broad masses now unanimously agree with minor variations that the public sector in developing countries has not been efficient and effective in delivering public services (Ngowi, 2007). Corruption is always labeled as a top suspect of the factors responsible for the disappointing state of the capacity of African governments to deliver effective services to the impoverished masses. It has been suggested that the chances are high that corruption will enter the discussion in talks with a citizen of any developing country about what is responsible for holding his country's economy back. Stories of uneven application of laws, a ruling class enriching itself through its political power, and of restricted occupational possibilities will manifest themselves in such a discussion (Ahlin, 2001). Consequently, "efforts" to improve service delivery usually force the authorities to address corruption and its causes (Shah, 2006).

Although Africa is now rated among the most corrupt continents; this was not always the case. According to Collier (2000), one of the main factors which caused the slide into corruption was a massive rise in opportunities for corruption which came about through four

routes: over-regulation of private activity, expanded public sector employment, expanded public procurement and weakened scrutiny. Earlier Mbaku (1997) contended that bureaucratic corruption in Africa was a result of the weaknesses of the state, characterized by incumbent regimes shaping their policies to cater for the needs of small business elite at the expense of the masses and inefficiency and incompetence among civil servants. It has become fashionable to assume that public procurement and corruption go hand in hand as if corrupt practices were the inevitable consequence of the procurement function within government (Butterworth, 1997). Public sector corruption, as a symptom of failed good governance, depends on a multitude of factors such as the quality of public sector management, the nature of accountability relations between the government and citizens, the legal framework and the degree to which public sector processes are accompanied by transparency and dissemination of information (Shah, 2006).

Corruption is an outcome of a country's legal, economic, cultural and political institutions and can be a response to either beneficial or harmful rules. For example, corruption appears in response to benevolent rules when individuals pay bribes to avoid penalties for harmful conduct or when monitoring of rules is incomplete—as in the case of theft. Conversely, corruption can also 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 & Shleifer, 2003).

According to Transparency International, the losses associated with public procurement bribery are estimated to exceed \$400 billion per year worldwide. This large magnitude points to the gravity of the situation –public procurement bribery is believed to be one of the most prevalent forms of corruption. Public officials with low or stagnant salaries may have strong incentives to turn to graft when allocating large sums of money. Similarly, firms may also have strong incentives to bribe, especially when contracts represent profitable, long-term arrangements. Clarke and Xu (2002) reported that much literature that has appeared on the determinants of corruption found that corruption is lower in countries that are more open to foreign trade, countries with protestant traditions, and that were formerly British colonies; countries with long exposure to democracy, countries that are more democratic, countries with greater political stability and

greater freedom of the press, and countries with parliamentary systems.

Although such studies may have been conducted following scientific procedures and were found to be highly reliable, other studies in other countries may not necessarily support such findings. This is because of the complex nature of corruption. Corruption is a complex and multi-faceted phenomenon and this complexity makes it difficult to establish causal links (Razafindrakoto & Rouband, 2007). Corruption takes on various forms and functions in different contexts. The phenomenon ranges from a single act of a payment contradicted by law to an endemic malfunction of a political and economic system and its problem is seen as either a structural problem of politics or economics, or as a cultural and individual moral problem (Andvig & Fjeldstad, 2000).

Corruption can be defined as any and all of the following; the misuse of entrusted authority for private benefit (Seldadyo & de Haan, 2006); the dishonest or illegal behavior especially of people in authority; the act or effect of making somebody change from moral to immoral standards of behavior (*Oxford Advanced Learners Dictionary*, 2000); an immoral and unethical phenomenon that contains a set of moral aberrations from moral standards of society, causing loss of respect for and confidence in duly constituted authority (Gould, 1991). Such corruption has attracted attention in the academic arena; not only in economics, but also in management, sociology, political science, law, education, project management, and now procurement among other disciplines. Andvig (1991, p.58) asserted that “corruption is a meeting place for research from the various disciplines of the social science and history”. Corruption has long been perceived by firms in Uganda to be one of the most serious impediments to conducting business, although little is known about corruption’s incidence and its costs (Svensson, 2000).

Procurement corruption like any other sector corruption takes various forms. It has been argued that corruption is not manifested in one single form, and according to Shah (2006, p.4) it typically takes at least four broad forms, namely:

- Petty, administrative or bureaucratic corruption. Many corrupt acts are isolated transactions by individual public officials who abuse their office, for example by demanding bribes and

kickbacks, diverting public funds, or awarding favors in return for personal considerations. Such acts are often referred to as petty corruption even though in the aggregate, a substantial amount of public resources may be involved;

- Grand corruption. The theft or misuse of public resources by state officials-usually members of, or associated with the political or administrative elite-constitute grand corruption;
- State or regulatory capture and influence peddling. Collusion by private actors with public officials or politicians for their mutual, private benefit is referred to as state capture. That is the private sector 'captures' the state legislature, executive and judicial apparatus for its own purposes. State captures coexists with the conventional (and opposite) view of corruption, in which public officials extort or otherwise exploit the private sector for private gain and
- Patronage/paternalism and being a 'team player'. Using official position to provide assistance to clients having the same geographic, ethnic, and cultural origin so that they receive preferential treatment in their dealings with the public sector including public sector employment is a common form of this corruption. Also providing the same assistance on a quid pro quo basis to colleagues belonging to an informal network of friends or allies signifies this form of corruption.

Public procurement corruption may include the payment of kickbacks for securing public contracts (Hellman, Jones, & Kaufmann, 2000) and to address it, Van Rieckeghem and Weder (1997), recommended that high government wages help reduce corruption at the macro level and this is also possible at the micro level as argued by DiTella and Shargrotsky (2000). Corruption in public procurement takes place at each stage of the procurement process. In the context of Uganda however, it is likely to be more at procurement planning, bid evaluation, contract award and contract management stages of the procurement process. This may be precipitated by a combination of both internal and external factors. Externally, the bidders and their backers influence procurement personnel or those involved through offering bribes and internally, the specifications are drawn in a way that will make certain bidders have an unfair advantage over their competitors. The specifications may be

specifically made restrictive to favor certain suppliers. Internally, those doing the bid evaluation, contract award and contract management may be involved in a syndicate arrangement to award and favor certain bidders who have given favors and bribes to the internal stakeholders.

DATA AND METHODOLOGY

Measurement of Variables

Corruption measurements have proliferated, generating a vast array of indicators and sources, although this has not curtailed debate about how to effectively assess corruption. In such a scenario, the issue of error has posed several problems for corruption measurement and it is one of the most challenging areas of debate (Urra, 2007). There are three widely used methods in the evaluation of corruption, namely measuring general or target group perception concerning corruption, measuring incidences of corruption activities and using expert estimates about the level of corruption. But in any study, there cannot be a 100% degree of perfection given the hidden nature of the corruption. Different researchers therefore have measured corruption differently. The independent variables in this study were economic and political factors while the dependent variable was public procurement corruption in the form of grand and petty corruption.

The Construction of the Instrument

The data was collected using a 5-Likert scale instrument where 5 = strongly agree, 4 = agree, 3 = undecided; 2 = disagree and 1 = strongly disagree for both dependent and independent items. Economic determinants had a total of 13 items ($\alpha = 0.723$), political determinants had 15 items ($\alpha = 0.619$) and procurement corruption had 14 items ($\alpha = 0.812$), suggesting that all measures of the three variables were highly reliable. The economic determinants of corruption included salaries, levels of income, size of an organization, Size of an organization in terms of employees, presence of many taxes, economic liberalization, inflation, foreign donations, bribery- induced awards, improved technology, self-interest and proximity to revenue.

The above indicators were formulated through a comprehensive review of the literature on the economic determinants of corruption. On the other hand, the political determinants obtained from political science literature included political leadership, elective political positions, presence of so many centers of power, absence of political commitment, freedom of association, lack of political civil education and political freedom, opening up of political space, political freedom, freedom of the press, selection of politicians through party lines, a weak judiciary, influence of the electorate and lack of participation by the community in decision making. The measures of procurement corruption under petty and grand were also obtained through reviewing of previous studies.

Sample Characteristics

The study included a total of 296 (54.4%) male compared to 251 (45.8%) female respondents, suggesting a male -dominated study population. In terms of highest qualification, the majority of the study respondents (298 [54.4%]) had bachelor's degrees; 130 (23.3%) had postgraduate diploma qualifications while 74 (13.6%) had master's degrees with 28 (5.1%) having ordinary diploma programme and 18 (3.3%) shared other educational qualifications. This implies that the study population was an elite one with adequate capacity to understand the survey instrument questions and their responses reflect their considered opinion on the study variables. The study was conducted among respondents who had different employment statuses. The results revealed that 116 (21.2%) were employed in the central government, 176 (32.1%) employed in the local government, 121 (22.1%), 78 (14.2%) employed in the NGO sector and 57 (10.4%) unemployed. This implies that the majority of respondents were employed in central government and there was an equal representation of private and NGO sector participants who would improve the validity of the results as comments came from all sectors of the Ugandan society. Since corruption affects any sector and part of society, this population was necessary to the study.

The respondents were also distributed within the four traditional regions of Uganda. For example, the study had the majority of respondents, 250 (45.5%), from the central region reflecting the fact that the country's business and administrative activity is in the central part of the country. From the western region of the country

were 129 (23.5%), and 112 (20.4%) were from the eastern region while only 57 (10.4%) were from the northern region. This study was also distinguished among the majority respondents that 342 (62.4%) were married and 196 (35.8%) were single. The majority of the study respondents of 235 (42.9%) were in the age bracket of 31-40 years, with 222 (40.5%) between 21-30 years and only 86 (15.7%) over 30 years of age. It has been suggested that corruption is more likely to be among young people as compared to the aged

RESULTS AND DISCUSSION

In this study, the political and economic determinants of public procurement corruption in Uganda were examined. The obtained data was first subjected to an exploratory factor analysis. To have a feel for the data, descriptive statistics were then computed and analyzed separately for political determinants, economic determinants and for measures or forms of public procurement corruption. For the economic determinants, of the total 13 items ($\alpha = 0.723$), 9 items with a total variance of 65% were extracted and retained under four principal components [$KMO = .675$, $Batlet = 560.988$ ($df = 36$, $sig.0.000$)]; suggesting the adequacy of the survey data for further statistical analyses. For political determinants, the survey instrument had a total of 15 items ($\alpha = 0.619$) and of these, 12 items with a total variance of 60% were retained and the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) = .682, Bartlett's Test of Sphericity = 587.079 ($df = 66$, $sig. = 0.000$). The dependent variable of public procurement corruption had a total of 14 items ($\alpha = 0.812$) in the survey instrument and of these, 6 items loading under two principle components with a total variance of 52% were retained [$KMO = .786$, Bartlett's Test of Sphericity = 830.867 ($df = 28$, $sig. = 0.000$)]. The descriptive and relational results in the rest of this paper are presented on the basis of the above factor analysis results. In Table 1, the descriptive statistics for the economic determinants are summarized.

Table 1 presents the descriptive results for the economic determinants of public procurement corruption in Uganda. A comparative analysis of the items in the table reveals important information concerning the strength of the items as well as areas of concern that need attention by institutions fighting public

TABLE 1
Means, Standard Deviation and Population for Economic
Determinants (N = 548)

Items	Means	Standard Deviation
Low salaries of public servants are a key determinant of procumbent corruption	3.91	1.203
Those who earn huge salaries are rarely punished even when they are corrupt	4.18	1.107
The levels of income determine public procurement corruption in Uganda	3.40	1.246
The size of an organization in terms of budget is a major determinant of corruption	3.05	1.229
The size of an organization in terms of number of employees determines corruption	2.53	1.125
Economic liberalization of the economy is a major determinant of corruption	2.93	1.133
Corruption leads to contracts being awarded to best bribers not to best firms	4.42	.900
Self-interest is one of the major determinants of procurement corruption	4.37	.825
Foreign donations are also major causes of procurement corruption	2.92	1.268

Note: Scales: 5 = strongly agree; 4 = agree; 3 = undecided; 2 = disagree; 1 = strongly disagree.

procurement corruption. Generally, participants in the study believed that the above economic variables were all significant determinants of public procurement corruption. The means for all items were above average on the 5-Likert scale that was used in the study, thus suggesting the importance the study respondents attached to the economic determinants of public procurement corruption. For example, asked to indicate their opinions on the extent to which low salaries were determinants of public procurement corruption, of the total 548 respondents, the majority of respondents, namely 222 (40.3%) and 182 (33.2%) strongly agreed, and agreed respectively that indeed low salaries were a major determinant of public procurement corruption in Uganda. This was disaggregated with gender where it was found that of the 296 male respondents, 113

(38.1%) strongly agreed and an almost equal number of 108 (36.5%) agreed suggesting that the majority of male respondents believed that low salaries were a major determinant of procurement corruption. This was compared to the views of 251 female respondents that participated in the study; of these, 107 (42.6%) strongly agreed while only 74 (29.5%) agreed that low salaries were a key economic determinant. Overall, the study found that both male and female respondents generally agreed that low salaries were a key economic determinant of procurement corruption in Uganda.

The above findings support the existing local and international literature. For example, Armstrong (2001, p. 158) a recognized expert of human resources management and motivation has remarked “money, in the form of pay or other sort of remuneration, is the most obvious extrinsic reward and money provides the carrot that most people want.” In Uganda, this could be supported by the assertions of Svensson (2000) who in a study on the cost of doing business in Uganda reported that firms typically have to first pay bribes when dealing with public officials whose actions directly affect the firm’s operations and those of Van Rieckeghem and Weder (1997), who contend that high government wages help reduce corruption at the macro level, although this may be possible at the micro level as argued by DiTella and Shargrotsky (2000). Respondents were also requested to indicate their level of agreement on whether those who earn huge salaries and are rarely punished even when they are corrupt could influence other people to be corrupt. The analysis found that 145 (26.5%) agreed and 293 (53.5%) strongly agreed, suggesting that the majority of respondents believed that procurement corruption had increased in Uganda because of lack of serious punitive measures for the corrupt and this impunity was encouraging other people to be corrupt. Of the total 293 respondents who strongly agreed, 131 (44.7%) were relatively young people in the age bracket of 21-30 years while 117 (39.9%) were between 31-40 years and only 45 (16.7%) were over 40 years. These results therefore also work to confirm that the majority of the corrupt people in Uganda are relatively young people. These findings compare well with those of Mocan (2004) who, using micro data to show an effect of age on corruption, found that individuals between the age 20 and 54 years are less more susceptible to bribery than the younger group (less than 20 years). Also, level of education has an effect on corruption (Hauk & Saez-Marti, 2002; Miller, 2005).

In regard to whether level of income was a determinant of public procurement corruption in Uganda, this study found that of the 548 study respondents, 183 (33.4%) agreed while 118 (21.3%) strongly agreed compared to a total of 112 (20.4%) and 43 (7.8%) who disagreed and strongly disagreed respectively and the remaining 92 (16.8%) who were undecided on the question. This therefore suggests that in Uganda, the majority of respondents believed that the levels of income were important economic determinants of public procurement corruption. At a macro level, popular belief suggests that corruption and poverty are closely related in developing countries and that corruption in the public sector is often viewed as exacerbating conditions of poverty in countries already struggling with the strains of economic growth and democratic transition. Alternatively, countries experiencing chronic poverty are seen as natural breeding grounds for systemic corruption due to social and income inequalities and perverse economic incentives (Chetwynd, Chetwynd & Spector, 2003).

The fourth economic variable that was emphasized by the respondents as determining public procurement corruption was the size of an organization in terms of budget. It was found that of the total 548 study respondents, 58 (10.6%) strongly disagreed but 156 (28.5%) strongly agreed, while 108 (19.7%) were undecided and 155 (28.8%) and 71 (13.0%) agreed and strongly agreed respectively that the size of the budget was a major determinant of public procurement corruption. This was probably a difficult question to answer given the large number of respondents that were undecided. Related to this question, the fifth economic variable that was retained from factor analysis as a determinant of procurement corruption was the size of an organization in terms of number of employees. The descriptive analysis results indicate that the majority of respondents of 222 (40.4%) disagreed and 95 (17.3%) strongly disagreed compared to a substantial number of 108 (19.7%) who were undecided, and 93 (17.0%) and 30 (5.5%) who agreed and strongly agreed respectively that the size of the organization in terms of employees was a key determinant of public procurement corruption in Uganda.

Results summarized in Table 2 indicate that four principal components were extracted from responses to the items administered to establish the economic determinants of public procurement corruption in Uganda. These were labeled as

organizational size, salaries and remuneration, collusion and conflict of interest and lack of sanctions for the corrupt. The total cumulative percentage of variance indicates that the four components explained up to 65% of the variations in public procurement corruption in Uganda. The alpha values for the first and second components were greater than 0.5, implying that the two components were reliable measures of economic determinants in Uganda. The other two components had their reliability below 0.5, implying that they were not reliable measures of economic determinants of public

TABLE 2
Rotated Component Matrix for Economic Determinants

Items measures for economic determinants	Four principal components that were extracted from factor analysis			
	1	2	3	4
The size of an organization in terms of number of employees determines corruption.	.731	.232		-.104
Economic liberalization of the economy is a major determinant of corruption	.688			.148
The size of an organization in terms of budget is a major determinant of corruption	.672	.253	.233	-.237
Foreign donations are also major causes of procurement corruption	.658			.356
Low salaries of public servants are a key determinant of procurement corruption		.824	-.118	.166
The levels of income determine public procurement corruption in Uganda	.177	.803	.102	
Self-interest is one of the major determinants of procurement corruption		-.111	.808	
Corruption leads to contracts being awarded to best bribers, not to best firms		.102	.792	.110
Those who earn huge salaries are rarely punished even when they are corrupt		.144	.111	.897
Total variance	25.4%	15.0%	13.5%	11.1%

Notes: KMO = .675; Batlet = 560.988 (df = 36, sig. = 0.000).

procurement corruption. Organizational size was the most reliable indicator, which also explained the largest variation in public procurement corruption (alpha = 0.647, variance = 25.4%). Salary and remuneration were the second reliable indicators and accounted for the second largest variation in procurement corruption (alpha = 0.581, variance = 15.0%). Collusion and conflict of interest were less reliable (alpha = 0.486, variance = 13.5%) and lack of sanctions had two items loading on it and the smallest item with a low rating was dropped although this component still had a variance of 11.1% and its alpha could not be computed.

Factor loadings as presented in Table 2 indicate that to most of the respondents, the best indicator of organizational size was the number of employees (Factor loading=0.731), the one for salary and remuneration was low salaries of public servants (Factor loading=0.823) and level of income (Factor loading=0.803). The best indicator for collusion and conflict of interest was self interest (Factor loading=0.808). The last component had one strong indicator that corruption had increased because those who earn huge salaries and are corrupt are rarely punished (Factor Loading=0.897). In general, these results suggest that public procurement corruption would be minimized if policy addressed the following:

- Improving the salary of public servants and consideration of the levels of income
- Providing mechanisms of controlling self-interest among public servants and establishment of stringent ethical codes of conduct for all levels of public officers,
- Government instituting of punitive measures and sanctions for those public officers who have unexplained levels of income and severe punishments to those who are found to be corrupt,

Other than the economic determinants of public procurement corruption in Uganda, this paper presents results on the political determinants. The political factors that were considered most important as reflected by the descriptive statistical results of the respondents are summarized in Table 3.

Twelve variables were extracted as important measures of political determinants of public procurement corruption. A comparative analysis of the items reveals important information

concerning the strength of political determinants of public procurement corruption in Uganda and this offers useful insights on critical political areas that need attention in addressing corruption challenges. The respondents in this study were generally convinced that all the 12 variables were important determinants of corruption. The issues identified in the above table that need urgent attention as

TABLE 3
Means, Standard Deviations and Population for the Political Determinants (N = 548)

Items	Means	Standard Deviation
In my opinion procurement corruption is caused by political leadership of organizations.	3.97	1.073
Politicians who get to elective positions through bribes encourage corruption.	4.40	.839
Elected leaders who assume offices may use their positions to influence award of tenders	4.41	.719
The presence of so many centers of political power encourages procurement corruption	3.77	1.037
Freedom of association is likely to determine procurement corruption	2.63	1.037
Lack of political civil education is a cause of procurement corruption in Uganda	3.12	1.170
The opening of political space is likely to be a determinant of procurement corruption	2.55	1.118
Political freedom creates incentives for politicians to be clean and discourages misconduct	3.14	1.263
Freedom of the press is one of the factors that can reduce corruption.	4.13	1.007
A weak judicial system is a fertile ground for procurement corruption.	4.21	1.013
Lack of participation by the community in decision-making is a cause of corruption.	3.69	1.218
The closer a public official is to the electorate, the more corrupt he/she is likely to be	2.79	1.253

Notes: 5 = strongly agree; 4 = agree; 3 = undecided, 2 = disagree; 1 = strongly disagree.

a way of minimizing corruption included election of political leaders to offices who then use those offices to influence the award of public tenders and politicians who get to elective positions through bribes. A weak judicial system is another variable that contributes to public procurement corruption. In Uganda, the selection of most judicial officers has of recent taken a political nature and this experience could have influenced the respondents' opinions. The other variable is the encouragement of "political freedom" of the press as it is one of the effective tools in reducing the incidences of corruption.

Table 4 shows that five principal components were extracted from the responses to the items administered to study respondents to establish the political determinants of public procurement corruption in Uganda. These were labeled elected leadership, political stakeholders, political awareness and freedom, political openness and political power. The total cumulative percentage of variance indicates that all the components explained 60% of the variations in public procurement corruption in Uganda. The alpha values for four components were above 0.5, implying that the components were reliable measures of political determinants of corruption. The role and behavior of elected political leaders was not only the most reliable indicator but also explained the largest variation in corruption at 19.8 % (alpha = 0.53). This was followed by political stakeholder involvement at 11.5 % (alpha = 0.51), political awareness at 10.9 % (alpha = 0.50), political openness at 8.9 % (0.40) and political power at 8.5 % (0.078).

A close analysis of factor loadings indicates that to most respondents, the best indicators of the first principal component in politicians who get elective positions through bribes being the most important political determinant of corruption (factor loading = 0.750) and political leadership of organizations being the major determinant of corruption (Factor Loading = 0.701). A political environment characterized by tyranny can be a breeding ground for corruption because tyranny in itself is corruption. Since tyranny is so difficult to challenge, corruption may then appear the only means the average individual has to overcome the restrictions imposed by tyranny. It can also be argued that corruption within the ruling elite will lend corruption a measure of validity it does not merit. As long as the political elite is not prepared to punish those who are corrupt within

TABLE 4
Rotated Component Matrix for Political Determinants

Items measures for political determinants	Five principal components which were extracted from factor analysis				
	1	2	3	4	5
Politicians who get to elective positions through bribes encourage corruption	.750		.149		.131
In my opinion procurement corruption is caused by political leadership of organizations	.701			.323	-.234
Elected leaders who assume offices may use their positions to influence award of tenders	.666	.185			.194
Lack of participation by the community in decision-making is a cause of corruption		.705		.181	
Freedom of the press is one of the factors that can reduce corruption	.168	.699			-.255
A weak judicial system is a fertile ground for procurement corruption	.115	.684	.111		.126
Lack of political civil education is a cause of procurement corruption in Uganda		.109	.754		
Freedom of association is likely to determine procurement corruption			.722	.315	.110
The opening of political space is likely to be a determinant of procurement corruption			.110	.808	-.141
The closer a public official is to the electorate, the more corrupt he/she will be				.626	.416
The presence of so many centers of political power encourages procurement corruption	.280	.173	.305		.668
Political freedom creates incentives for politicians to be clean and discourages misconduct		.217	.462	-.108	.559
Total variance	19.8%	11.5%	10.9%	8.9%	8.5%

Notes: KMO and Bartlett's Test = .682 and 587.079), (sig. = 0.000)

its own group, corruption will spread. The foregoing clearly tends to suggest that genuine demonstration of political will to fight corruption should start from the top cascading downwards (www.fightcorruption.gov.zw/anti-watch/causes.htm).

Regarding political stakeholders, most respondents showed that encouraging participation by the community in decision-making could reduce levels of corruption in Uganda (Factor loading = .705). On political awareness and freedom, the majority of respondents believed that political civil education was the most important indicator (Factor loading = .754). Finally in regard to political openness, the most important indicator according to the majority of respondents was that the opening of political space in Uganda was a key determinant of procurement corruption (Factor = .808) while the presence of so many centers of power (factor loading = .668) was the significant indicator of political power that most respondents believed contributed to public procurement corruption in Uganda. In general terms, the majority of respondents believed that public procurement corruption in Uganda would be minimized if the following occur:

- Punishment of politicians who get elective positions through bribes
- Political leadership of organizations is seriously strengthened through adequate training and exposure on best procurement practices and moral principles,
- Community participation in decision making is encouraged and implemented.
- Deliberate efforts are put in place to engage in political civil education and to strengthen the political leadership of organizations.

The descriptive results for the forms of procurement corruption were examined. This section of the paper now discusses, interprets and analyses the results summarized in Table 5.

The analysis pertaining to the variables measuring the forms of public procurement corruption in Uganda involved a total of 7 items as presented in Table 5. Overall, the items depict the respondent's understanding and views of public procurement corruption in Uganda. All items had a very high mean score suggesting important areas that

TABLE 5
Means, Standard Deviation and Population for Public Procurement
Corruption (N = 548)

Items	Means	Standard Deviation
I believe violation of procurement procedures is a common feature in Uganda.	4.18	.903
Bribery-induced violations of procurement procedures are done in many ways.	4.09	.805
Corruption may induce legitimate deviations from procurement procedures.	3.72	.873
Nepotism is an increasing form of corruption in procurement transactions.	3.97	.952
Officials design the tender so that particular qualifications are presented.	3.64	.990
It is easy to use confidential information for arranging a bribe.	3.85	.965
Corruption is likely to be high during contract variations of original prices.	3.81	.934

Notes: 5 = strongly agree; 4 = agree; 3 = undecided, 2 = disagree; 1 = strongly disagree.

managers and policy makers should consider if they are to address the problem of procurement corruption. Using a five-Likert scale, the respondents were asked to comment on whether violation of procurement procedures was a common feature in Uganda. Of the 548 respondents, 238 (43.4%) strongly agreed and 205 (37.4%) agreed suggesting that 80.8% of the study respondents believed that violation of procurement procedures were a common form of procurement corruption in Uganda. As to whether bribery-induced violations of procurement procedures are carried out in very many ways, 181 (33.0%) strongly agreed and 257 (46.9%) agreed as compared to only 16 (2.7%) who disagreed. Asked to comment on whether corruption may induce legitimate deviations from procurement procedures, of the study respondents, 234 (42.7%) agreed, 101 (18.4%) strongly agreed and a substantial number of 179 (32.7%) were undecided while only 9 (1.6%) and 25 (4.6%) strongly disagreed and disagreed respectively, suggesting that the

majority of the study respondents agreed that corruption may induce legitimate deviations. It was also found that another form of procurement corruption in Uganda was that officials design the tenders so that particular qualifications are presented to favor their own bidders. Of the study respondents, 242 (44.2%) agreed and only 98 (17.9%) strongly disagreed and 139 (25.4%) were undecided. This situation could be attributed to the secretive nature of procurement corruption. It was also found that it is easy to use confidential information for setting up a bribe; a view that was supported by 273 (49.8%) and 108 (19.7%) who agreed and strongly agreed, respectively.

Table 6 shows that two principle components were extracted from the responses to the items administered to establish the forms of public procurement corruption in Uganda. These were identified as bureaucratic corruption and grand corruption. The total cumulative

TABLE 6
Rotated Component Matrix for the Forms of Public Procurement Corruption in Uganda

Items	Two Principal Components	
	1	2
Officials design the tender so that particular qualifications are presented.	.724	
Corruption is likely to be high during contract variations of original prices.	.664	.169
Limiting the number of competitors is one way of procurement corruption.	.655	
It is easy to use confidential information for arranging a bribe	.651	.279
Nepotism is an increasing form of corruption in procurement transactions	.621	.273
I believe violation of procurement procedures is a common feature in Uganda	.124	.800
Bribery-induced violations of procurement procedures occur in very many ways	.246	.769
Corruption may induce legitimate deviations from procurement procedures		.681

percentage of variance indicates that all the components explained 52% of the variations in corruption trends. The alpha values for the two components were above 0.5, implying that the components were reliable measures of the forms of public procurement. Bureaucratic corruption was not only the most prevalent form but also explained the largest variation of 36.5% (alpha = 0.708). Grand corruption was the second major form of public procurement corruption in Uganda and had a total variance of 23.5% (alpha = 0.656). Factor loadings indicate that the most common form of bureaucratic procurement corruption is the officials' designing tender documents so that particular qualifications are presented (0.724) while violation of procurement procedures is one of the most common forms of grand corruption in Uganda (0.808). These findings support the views of Shah (2006) who opines that corruption is not manifested in one single form as it takes on different forms.

Having examined the descriptive results and the factor analysis results, I now examine the extent to which economic and political variables are related to public procurement corruption. The correlation and regression analysis results are presented.

Results in Table 7 indicate the relationship between measures of economic and political determinants and public procurement corruption in Uganda. Overall the results indicate a statistically significant positive relationship between economic determinants as a single variable and public procurement corruption ($r = 0.351^{**}$, sig. = 0.000) as well as for political determinants ($r = 0.207^{**}$, sig. = 0.000). This suggests that public procurement corruption in Uganda is positively correlated with the economic and political factors examined in the study. Table 7 also indicates that the role of elected leaders and public procurement corruption are positively correlated with public procurement corruption ($r = 0.218^{**}$, sig. = 0.000), Participation of community in decision-making ($r = 0.319^{**}$, sig. = 0.000), political awareness and freedom ($r = 0.129^{**}$, sig. = 0.002), and political openness ($r = 0.117^{**}$, sig. = 0.000). No statistically significant relationship was confirmed with political power. Concerning economic determinants, the results indicate a positive but weak relationship between organizational size and public procurement corruption ($r = 0.207^{**}$, sig. = 0.000), salaries and remuneration ($r = 0.138^{**}$, sig. = 0.001), and collusion and conflict of interest ($r = 0.309^{**}$, sig. = 0.000).

TABLE 7
Correlation Results between Economic and Political Variables with Procurement Corruption

	1	2	3	4	5	6	7	8	9	10
Political Determinants										
Pearson Correlation	1									
Sig. (2-tailed)	.									
Elected leaders										
Pearson Correlation	.597 ^a									
Sig. (2-tailed)	.000									
Political stakeholders										
Pearson Correlation	.644 ^a	.225 ^a								
Sig. (2-tailed)	.000	.000	.							
Political awareness and freedom										
Pearson Correlation	.592 ^a	.159 ^a	.153 ^a	1						
Sig. (2-tailed)	.000	.000	.000	.						
Political 'openness'										
Pearson Correlation	.527 ^a	.161 ^a	.103 ^b	.225 ^a	1					
Sig. (2-tailed)	.000	.000	.016	.000	.					
Political power and freedom										
Pearson Correlation	.019	.124 ^a	-.019	.008	.102 ^a	1				
Sig. (2-tailed)	.660	.004	.650	.855	.017	.				

TABLE 7 (Continued)

	1	2	3	4	5	6	7	8	9	10	
Economic determinants	Pearson Correlation	.431 ^a	.308 ^a	.245 ^a	.282 ^a	.210 ^a	.065	1			
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.131	.			
Organizational size	Pearson Correlation	.380 ^a	.198 ^a	.191 ^a	.324 ^a	.220 ^a	.018	.827 ^a	1		
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.674	.000	.		
Salaries	Pearson Correlation	.183 ^a	.133 ^a	.108 ^b	.126 ^a	.093 ^b	.028	.607 ^a	.235 ^a	1	
	Sig. (2-tailed)	.000	.002	.011	.003	.030	.520	.000	.000	.	
Collusion and self interest	Pearson Correlation	.285 ^a	.305 ^a	.243 ^a	.024	.067	.087 ^b	.401 ^a	.133 ^a	.020	1
	Sig. (2-tailed)	.000	.000	.000	.582	.118	.043	.000	.002	.639	.
Public Procurement corruption forms	Pearson Correlation	.351 ^a	.218 ^a	.319 ^a	.129 ^a	.117 ^a	.084	.207 ^a	.138 ^a	.020	.309 ^a
	Sig. (2-tailed)	.000	.000	.000	.002	.006	.050	.000	.001	.641	.000

Notes: ^a Correlation is significant at the 0.01 level (2-tailed); ^b Correlation is significant at the 0.05 level (2-tailed).

While the correlations for most of the variables are statistically significant as presented above, Fink (1995) contends that other than for values of +1, 0 and -1 correlations are not easy to interpret and to make sense out of it, one must use a coefficient of determination or r^2 which tells the proportion of variations in the dependent variable that is associated with change or changes in the independent variable. For example, for the political determinants whose correlation coefficient was 0.207**, the r^2 would be $0.207^2 = 0.0428$ or 4.28% that can be interpreted now that political factors account for only 4.28% of the variations in public procurement corruption in Uganda. For economic factors, the 0.305 correlation would now be 9.3% signifying that economic factors are stronger than political factors in accounting for a variation in public procurement corruption in Uganda

CONCLUSION AND IMPLICATIONS

Public procurement corruption is a difficult area to comprehensively study and understand given that most of the corrupt practices are hidden from the public scene. In this study, the political and economic determinants of public procurement corruption were examined and from the emerging results, it was concluded that economic factors are more significant determinants of public procurement corruption in Uganda than political determinants but their combined contribution is still low suggesting that there are other determinants of public procurement corruption in Uganda. On the basis of the study's results, all efforts intended to address public procurement corruption must focus on the critical economic and political determinants identified in this study. The fight against public procurement corruption must be elevated to another level and more commitment and resources are needed if this challenging task is to be realized. Meanwhile, academic research has to continue in the area of determinants of public procurement corruption and also of the effects of the damaging disease to good governance and poverty reduction. The paper presents original results from a developing country's context and point to the unique challenges in addressing public procurement corruption. The results contribute to the growing body of literature on public procurement and the findings appeal to both local and international audiences. The results form a firm foundation for further scholarly works and offer practical insights to managers of the procurement functions on critical aspects needed in effectively making the procurement function play its strategic role.

REFERENCES

- Ahlin, R. C. (2001). "Corruption: Political Determinants and Macroeconomic Effects." (Working Paper No. 01-W26), Department of Economics, Vanderbilt University. [Online]. Available at www.vanderbilt.edu/econ. [Accessed November 18, 2008].
- Anywar, M. & Shabbir, G. (2007). "Determinants of Corruption in Developing Countries." (Research Paper 2-11). Hamburg, Germany: Hamburg Institute of International Economics (HWWI)
- Armstrong, M. (2001). *A Handbook of Human Resource Management Practice* (8th ed.). London: Kogan Page.
- Clarke, G.R. G. & Colin Xu, L. (2002). *Ownership, Competition, and Corruption: Bribe Takers Versus Bribe Payers* (Policy Research Working Paper 2783). Washington, DC: The World Bank Development Research Group, Regulation and Competition Policy.
- DiTella, R. & Shargrotsky, E. (2000). "The Role of Wages and Auditing during a Crackdown on Corruption in the City of Buenos Aires." (Mimeo). Cambridge, MA: Harvard Business School
- Djankov, S, Glaeser, E., Porta, R.I L., Lopez-de-Silanes, F. & Shleifer, A. (2003). "The New Comparative Economics." *Journal of Comparative Economics*, 31 (4): 595-619.
- Duasa, J. (2008). "Tendency of Corruption and its Determinants among Public Servants: A Study on Malaysia." [Online]. Available at <http://mpra.ub.uni-muenchen.de/11562>.
- Chetwynd, E.; Chetwynd, F. & Spector, B. (2003). *Corruption and Poverty: A Review of Recent Literature: Final Report*. [Online]. Available at http://pdf.usaid.gov/pdf_docs/PNACW645.pdf. [Accessed November 19, 2008].
- Fink, A. (1995). *How to Analyze Survey Data*. London, UK: Sage Publications.
- Glynn, P. Stephen, J. K. & Naim, M. (1997). "The Globalization of Corruption." In K. Elliot (Ed.), *Corruption and the Global Economy* (pp 7-27). Washington, DC: Peterson Institute for International Economics.

- Gould, D. J. (1991). "Administrative Corruption: Incidence, Causes and Remedial strategies." In A. Farazmand (Ed.). *Handbook of Comparative and Development Public Administration* (pp. 467-480). New York: Marcel Dekker Inc.
- Hauk, E. & Saez-Marti, M. (2002), "On Cultural Transmission of Corruption." *Journal of Economic Theory*, 107: 311-335.
- Hellman, J. S., Jones, G., & Kaufmann, D. (2000). "Seize the State, Seize the Day: An Empirical Analysis of State Capture and Corruption in Transition Economies." Paper Presented at the ABCDE 2000 Conference, April, 18-20, Washington, DC.
- Kauffman, D. (2007). *Firms and Public Contracting: Who Bribes and Why*. Washington, DC: The World Bank, World Bank Institute.
- Kaufmann, D. (1999). "Are We Being 'Good' or Smart in the Fight against Corruption?" Paper Presented at the VIII International Anti-corruption Conference, September. Lima, Peru
- Miller, W. L. (2005). "Corruption and Corruptibility." *World Development*, 20 (10): 1-10.
- Mocan, N.(2004). "What Determines Corruption? International Evidence from Micro Data." (NBER Working Paper Series, Number 10460). [Online]. Available at www.nber.org/papers/w10460.
- Serra, D. (2004). "Empirical Determinants of Corruption: A sensitivity Analysis." (Report No. GPRG-WPS-012). [Online]. Available at <http://www.gprg.org/pubs/workingpapers/pdfs/gprg-wps-012.pdf>. [Accessed November 19, 2008].
- Shah, A. (2006). *Corruption and Decentralized public governance*, World Bank Policy Working Paper 3824, [Available online at <http://econ.worldbank.org>. [Accessed on October 16, 2008].
- Thai, K. V. (2008). "Measuring Losses to Public Procurement Corruption: The Uganda Case." *The 3rd International Public Procurement Conference Proceedings*, August 28-30. [Online]. Available at www.ippa.ws.
- Urra, J. F. (2007). *Assessing Corruption: An Analytical Review of Corruption Measurement and its Problems: Perception, Error and Utility*. Washington, DC: Georgetown University, Edmund A. Walsh School of Foreign Service.

Van Rieckeghem, C. & Weder, B. (1997). "Corruption and the Rate of Temptation: Do Lower Wages in the Civil Service Cause Corruption?" (IMF Working paper 97/73). Washington D.C: International Monetary Fund.