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The impact of corruption on the Malawian construction industry

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Abstract

The background of corruption dates back to 2000 years ago. Corruption takes the form of bribery, extortion, cronyism, nepotism, graft, and embezzlement. The main medium of corruption is poorly functioning institutions, with policies that undermine free trade and competition.

The objectives of this article are as follows: first, to establish the impact of corruption regarding tender procurement; secondly, to evaluate corrupt practices which create dominance of particular contractors over others, and lastly, to examine corruption regarding the maintenance of the built environment.

The survey was limited to community development projects based in and around the Blantyre commercial district. The respondents were sampled for their knowledge, experience, education and expertise regarding community development projects.

The findings indicate that all tender board officials are imminently enticed into corrupt practices relating to their respective positions held in the organisation; oligopolism is the main factor in the dominance of contractors over others in the Malawian construction industry, and corruption leads to relatively lower fund allocation for the maintenance of the built environment.

The article concludes that corruption does impact on the Malawian construction industry in various ways. Recommendations to limit corruption include the implementation of the following corruption-mitigating measures: break the taboo against discussing corruption; demonstrate how corruption occurs; mobilise key constituencies, and implement anti-corruption policies.

Keywords: Corruption, bribery, tender, contractors

Abstrak

Die agtergrond van korrupsie dateer van 2000 jaar gelede. Korrupsie kom voor in die vorm van omkopery, afpersing, bevoordeling, voortrekkery, nepotisme, knoeiery en verduistering. Die hoofmedium van korrupsie is die swak funksionering van instellings, met beleide wat vrye handel (of bedryf) en kompetisie ondermyn.

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Die doelwit van hierdie artikel is eerstens, om die impak van korrupsie aangaande tenderbemiddeling te bepaal; tweedens, om korrupsie praktisering te evalueer, wat dominansie veroorsaak deur sekere kontrakteurs oor ander, en laastens, om korrupsie aangaande die onderhouding van beboude (of die bou-) omgewing te ondersoek.

Dié ondersoek is beperk tot gemeenskapsontwikkelingsprojekte, gebaseer in en rondom die Blantyre kommersieële distrik. Die respondente is getoets relatief tot hulle kennis, ondervinding, onderrig en kundigheid (of ervarenheid) aangaande gemeenskapsontwikkelingsprojekte.

Die bevindings sluit onder andere in dat daar 'n ontsettende versoeking is om korrupsie te pleeg onder tenderbestuursamptenare, relatief tot hulle posisies; oligopolie in die organisasie is die hooffaktor in die dominansie van kontrakteurs oor andere in die Malawie konstruksiebedryf, en korrupsie lei tot relatief verlaagde allokasie van fondse vir die onderhouding van die beboude omgewing.

Die artikel maak die gevolgtrekking dat korrupsie wel die Malawiese konstruksiebedryf op verskeie wyses beïnvloed. Aanbevelings om korrupsie te beperk sluit die implementering van die volgende korrupsie versagtende maatreëls in: breek die verbod om korrupsie te bespreek; demonstreer hoe korrupsie plaasvind; mobiliseer sleutel kiesafdelings, en implementeer antikorrupsiebeleide.

Sleutelwoorde: korrupsie, omkopery, tenders, kontrakteurs

1. Introduction

The construction industry in Malawi is ranked as the most corrupt industry relative to other sectors (Figure 1). Large payments are made to gain or alter contracts and circumvent regulations (Transparency International, 2005: 34).

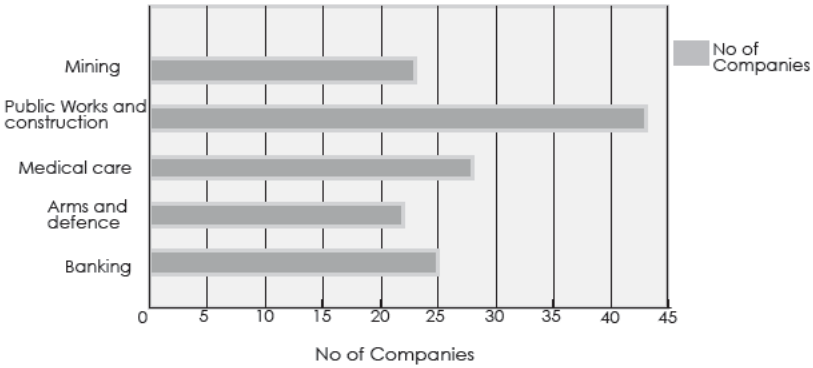

Figure 1: Corruption per industry in Malawi
Source: Transparency International 2005: 34

Kenny (2007: 49) corroborates that the impact of corruption goes beyond bribe payments to poor quality of constructed infrastructure with low economic returns, and low funding for maintenance.

In the Malawi construction industry, corruption plays a major role in tender awards, in terms of bribery. Guash (2005: 47) concurs that some contractors use bribery in order to be awarded contracts. These bribes may in fact be a percentage of the total contract sum, which is high relative to its profit margin. Gulati & Rao (2006: 132) argue that all forms of government are susceptible to corruption in the form of bribery, extortion, cronyism, nepotism, graft, and embezzlement.

Soreide (2006: 172) refers to oligopolistic tendencies as an art of corruption, in which large firms connive with other firms to dominate a specific market, usually infrastructure projects.

The main objective of this article is to present the impact of corruption with regard to the following: tender procurement; dominance of some contractors over others, and the maintenance of the built environment.

2. Literature review

2.1 Origins of corruption

Melnikov (2008: 2) elaborates, in the Centre for International Private Enterprise (CIPE), on the qualification of corrupt acts and broadly defines corruption as the abuse of entrusted power for personal gain. He (Melnikov, 2008: 2) states that three specific conditions must apply for an act to be considered corrupt:

- *The arm's-length principle is violated - the two parties in a transaction display bias for working with each other that is inconsistent with impartial treatment;*
- *The bias or conflict of interest must be intentional, and*
- *There must be some advantage for both parties to commit this violation. This advantage need not be monetary in nature; it could involve favouritism or non-monetary gifts.*

According to Broadman & Recanatini (2000: 76), corruption is rooted in poorly functioning institutions, as well as in policies that undermine free trade and competition.

The main parameters which drive corruption in the Malawian construction industry are greed, power, selfish desires, and success (Phiri, 2010: 1).

Melnikov (2008: 2) reiterates Broadman & Recanatini's (2000: 76) research findings that corruption has multiple roots, but can generally be attributed to the poor design of institutions. He (Melnikov 2008: 2-3) analyses the roots of corruption; the stages in mitigating corruption, and the measures to combat corruption.

Studies by Begovic (2005: 6) on mitigating corruption state that "the vested interest of corrupt politicians is unlikely to be abated by any study". However, Melnikov (2008: 5) lists essential mitigation measures as an ideal remedy.

Sullivan & Shkolnikov (2004: 234) argue that there are two measures to combat corruption: the demand side measures (public sector) and the supply side measures (private sector). Melnikov (2008: 6) concurs with Sullivan & Shkolnikov (2004: 234) and lists the demand side measures (public sector) which are likely to combat corruption.

2.2 Corruption in tender award

Phiri (2010: 93) corroborates that the Malawian construction industry has three commonly used forms of tender awards, namely client-nominated award; tender board award, and appointment by the project committee. These forms of tender awards are subject to corrupt practices, and their subsequent impact is now discussed.

2.2.1 Tender manipulation

Relative to the Malawian construction industry setting, opportunities to influence a tender by means of corruption are grouped into the following two categories:

- Hidden violations of procurement rules – no flaws in the procurement regulations are evident, and
- Misuse of legitimate deviations from procurement procedures – rules of exception and exemption are exploited (Ng'ong'ola, Mangisoni, Wiyo & Mzandu, 2001: 35).

The Malawian construction industry also displays two corruption-based categories, which are particularly relevant in tender manipulation of infrastructure projects as contended in the business survey (Transparency International, 2005: 26):

- Diplomatic and political pressure, and
- Lack of whistle-blower reactions against corruption.

Theoretically, the opportunities presented by the above four categories are present in all industries. Several surveys conducted by Transparency International indicate that infrastructure projects

are particularly prone to tender manipulation. Transparency Internationals' Bribe Payers Index is the result of a survey conducted in 14 emerging market economies (Transparency International, 2005: 79). During the survey, 835 business people were asked about the propensity of companies from 21 leading exporting countries to offer bribes. The sector most prone to corruption was 'construction/ public works.' Transparency International's Corruption Barometer (Transparency International, 2005: 81) and Price Waterhouse Coopers' Global Economic Crime Survey (Price Waterhouse Coopers, 2005: 212) support these results, and find corruption to be relatively more common in infrastructure industries.

It is important to formulate policies so that they do not exert pressure on firms to contravene laws and regulations in order to increase the competitiveness of their bid. Bid documents and contracts can specify costs and obligations related to regulatory compliance in areas such as health and safety as well as building codes and standards. By inserting compliance obligations in bid documents and contracts, regulatory compliance moves from a burden on a competitive bid to a service to be paid for and monitored during implementation.

Ng,ong'ola *et al.* (2001: 47) state that:

> *ensuring maximum competition in bidding should reduce the scope of collusion and therefore reduce prices. This involves not only ensuring competition within the process, but also rules banning direct negotiation with firms on the basis of unsolicited proposals and strict controls on renegotiation.*

Knack & Azfar (2003: 58) argue that:

> *Competitive bidding alone is clearly inadequate to ensure better outcomes. To support the bid design process, whatever the level of competition, there is a significant role for benchmarking prices to provide guidelines for output-based pricing and also to provide a 'red flag' for overbidding.*

2.2.2 Tender award methods and flaws

2.2.2.1 Client-nominated tender award

This form of tender award is ideal for selecting specialist subcontractors on a project.

Bloom *et al*. (2005: 42) explain this method of tender award as "when the client has the technical ability and knowhow of the project deliverables, he may nominate a specialist contractor to carry out the works as specified." The flaws in this method are that:

- Clients may take prejudiced decisions – with regard to state contracts, the clients representatives' chances of manipulating decisions regarding award of contracts may easily be influenced by corrupt encounters;
- Clients may repeatedly nominate a particular contractor based on previous experience on similar projects undertaken for them – the failure to justify corrupt endeavours leading to the monotonous use of a particular contractor, and
- Clients attain all decision-making powers – there are relatively fewer individuals to bribe in order to influence the tender awards decision as compared to Tender board appointments or Project committee appointments.

Irrespective of the form of tender award, the client has the final say regarding project award. In client-nominated tender awards, there is no other party to justify the selection. Prejudice is a common phenomenon in client-nominated projects.

Continuous selection of a specific contractor creates dominance in the industry. However, competitiveness in the nomination process may realise balance. Emerging contractors need to be competitive and should be afforded the opportunity to gain experience (Bloom *et al*., 2005: 45).

The prerogative to award a project rests with the client. Although the vested authority is paramount to the indispensability of the client, power may be used or abused according to the vested interest of the client.

2.2.2.2 Tender board award

The tender evaluation board is a tool that produces desired results in appointing main contractors on projects.

In a brief summary, the tender evaluation and assessment undergoes criteria, weighting, and tender submissions which are issued to the Tender Board Evaluation members (TBE), prior to the meeting, to allow for individual evaluations to be conducted. The tenderers comlete the score cards and the tender board members undertake the assessment. Ng'ong'ola et al. (2001: 31) list the following as the main areas of score card assessment:

- *Bill of Quantities (BOQ) tendered amount;*
- *Current capacity, capability and past performance;*
- *Occupation health and safety (OH&S) management systems;*

- *Task appreciation and methodology, and*
- *Environmental requirements.*

The TBEs finally meet and agree on the scores relative to the assessed score cards; a contractor is then selected and appointed relative to the score card outcome.

If the score card is designed with an opinionated affiliation, then the variation of the scores by the TBEs will be high; and the joint evaluation will be biased towards the most influential members (Knack & Azfar, 2003: 52).

Health and safety (H&S) management has recently been incorporated into bid documents. Levitt & Samelson (1993), cited in Smallwood & Haupt (2009), advocate that H&S should be included as a criterion for contractors and subcontractors to pre-qualify to bid on projects. They state that experience indicates that pre-qualifying and/or selecting contractors and subcontractors, in part or on their expected H&S performance, will help to decrease accidents.

2.2.2.3 Appointment by the project committee

Knack & Azfar (2003: 58) argue that the project committee appointments are favourable for selected subcontractors who eventually conduct works under the jurisdiction of the main contractor. This also constitutes smaller bid sums relative to the main contractor's contract price.

The project committee consists of representatives from the client, main contractor and the project managers. The performance of the selected contractor is the responsibility of the main contractor; his payments and bond are at the onus of the main contractor.

2.3 Corruption and market dominance

2.3.1 Oligopolism

Oligopolistic competition may elicit a wide range of different outcomes. In some situations, the firms may employ restrictive trade practices, for instance collusion, and market sharing, to raise prices and restrict production in much the same way as a monopoly. In a cartel there is a formal agreement for such collusion. A primary example of such a cartel is the Organisation of Petroleum Exporting Countries (OPEC) which has a profound influence on the international price of oil (Hammes & Wills, 2005: 504).

Firms often collude in an attempt to stabilise unstable markets in order to reduce the risks inherent in these markets for investment and product development. There are legal restrictions on such collusion in most countries. A formal agreement for collusion to take place is not necessary. For instance, in some industries, there may be an acknowledged market leader which informally sets prices to which other producers respond, known as price leadership (Soreide, 2006: 173).

2.3.2 Bribery

The construction industry in Malawi is ranked as one of the most corrupt industries (Figure 2).

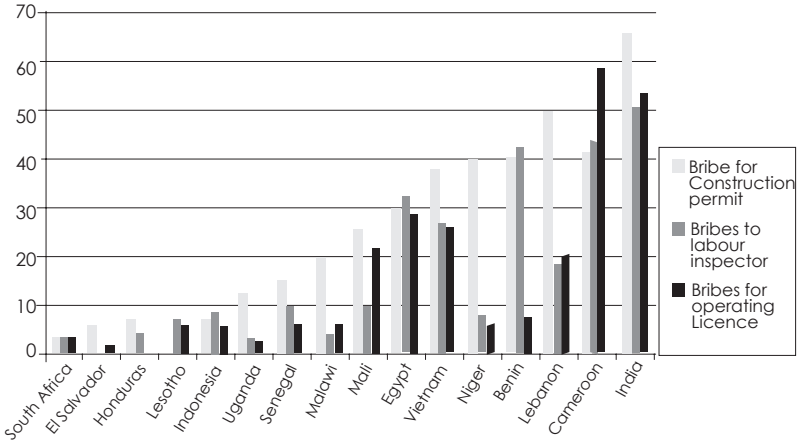

Figure 2: Comparison of bribery in construction in selected countries
Source: Business Enterprise and Environment Project Surveys (BEEPS) (2004: 6)

Large bribes are made to gain or alter contracts and circumvent regulations. Kenny (2007: 49) corroborates that the impact of corruption goes beyond bung payments to poor quality of constructed infrastructure with low economic returns, and low funding for maintenance.

Corruption plays a major role in the awarding of contracts in terms of bribery. Guash (2005: 47) concurs that some contractors use bribery in order to be awarded contracts. These bribes may in fact be a percentage of the total contract sum, which is higher accordingly. Moon (2002: 29) agrees that corruption poses a serious development threat. In the political realm, it undermines

democracy and good governance by flouting or even subverting formal processes. Corruption in elections and in legislative bodies reduces accountability and distorts representation in policymaking.

In an approach based on Transparency International business principles, it was agreed among piping companies in Colombia's water sector to reduce bribery. This resulted in significantly lower bid award prices for projects, with equality among the participating companies (Lee & Larnemark, 2007: 49).

OED (2006: 278) cited by Soreide (2006: 167) confirm the following examples of scandals in infrastructure procurement, including:

- The Lesotho highlands water project, where the project's chief executive was found guilty of receiving bribes from multinationals to secure contracts, and
- The telecom case in Haiti, where the President allegedly received kickbacks from US telecom companies to provide them with benefits on infrastructure contracts.

Corruption can have a particularly invasive effect if it skews incentives such that the impact of corrupt payments is felt far beyond the project itself. It appears that corruption is a factor behind the pressure to overspend on new construction rather than to maintain existing infrastructure (Kenny, 2007: 16).

Considering the competitive nature of the sector, there is little justification for state ownership of construction firms, and removing the government as an owner will also help to simplify the political economy of contract award and, in particular, monitoring for quality. What is known about corruption in the construction sector in Eastern Europe and Central Asia suggests that a private sector-dominated industry may be less prone to corruption. Evidence from BEEPS' (2004: 7) surveys suggests that state-owned firms are more likely to bung for government contracts and licenses.

2.4 Quality and maintenance of structures

Bloom, Chilowa, Chirwa, Lucas, Mvula, Schou & Tsoka (2005: 28) reiterate Datta's (2000: 355) view that in the Malawian setting of district-based community development, MASAF was designed to disburse USD 56 Million over a five-year period. Unfortunately, due to the governments' determination to accelerate implementation; the credit was fully committed to over a two-year period. A second loan was launched in 1998, and a third in 2002. The capital disbursed in all loan phases had no allocation for maintenance.

Maintenance of the structures was entrusted to the communities. However, communities have very little understanding of maintenance specifications and technical expertise relative to structures. The capital for maintenance was not structured due to the belief that the built environment was to cater for the community and the community was to be responsible for the misuse, and therefore also liable for the maintenance.

A study conducted by Ng'ong'ola *et al.* (2001, and cited by Bloom *et al.,* 2005: 28) relating to the maintenance of classroom blocks, boreholes and bridges constructed under MASAF reported that the majority of the communities were aware that they had to maintain the assets. Some formed maintenance committees and maintenance funds and requested training for their committees. However, they expected government to help with major repairs. There was uncertainty in the role of relevant Ministry departments in financing and carrying out repairs. The general impression was that maintenance issues had not been resolved.

3. Research methodology

3.1 Sample stratum

The sample stratum consisted of three stakeholders in the form of 14 contractors, 13 tender board officials, and 9 consulting engineers. A total of 36 respondents were included in the sample stratum; 23 responses were received and included in the analysis of the data, which equates to a response rate of 63.9%. The 23 responses received included:

- 10 from contractors;
- 8 from tender board officials, and
- 5 from consulting engineers.

3.2 Case study

The projects referred to regarding this research were all community-based development projects. Knowledge, experience and expertise from community-based development project officials provided the background of the study.

3.3 Admissibility of the data

The data was collected from individuals, who either:

- Had been in the community based development industry for not less than 5 years;
- Had a tertiary Diploma/Degree with respect to their field of work, or
- Had strong knowledge and expertise in their field of work.

4. Results and findings

A number of questions in the questionnaire entailed responses to a five-point Likert scale. The differences between the lower and upper ends of the five-point continuum are: 1 – Very rarely; 2 – Rarely; 3 – Sometimes; 4 – Often, and 5 – Very often.

However, the extent of ranges was determined by dividing the number of continuums, which is 4.00, by the 5 relative points. Therefore the ranges between the relative points equates to 0.80.

The mean score (MS) was calculated for all data and the value was compared to suit the relative range. The ranges relative to the MS are defined as follows:

> 4.20 ≤ 5.00 (often to very often/very often);

> 3.40 ≤ 4.20 (sometimes to often/often);

> 2.60 ≤ 3.40 (rarely to sometimes/sometimes);

> 1.80 ≤ 2.60 (very rarely to rarely/rarely), and

> 1.00 ≤ 1.80 (very rarely to rarely).

4.1 Likelihood of corrupt activities relative to contractor registration

The questionnaire survey explored the probability of corrupt activities with regard to contractor registration relative to National Construction Industry Council (NCIC) functions. The functions include NCIC officers, NCIC inspectors, NCIC management, registration referees, and NCIC board members.

The responses to the likelihood of corrupt activities relative to the registration of contractors are summarised in Table 1.

Table 1: Likelihood of bribery of NCIC functions

Activity	*Response (%)*						*MS*	*Rank*
	Unsure	*Very rarely……..Very often*						
		1	*2*	*3*	*4*	*5*		
Bribing the NCIC officers	4.3	12.0	16.3	4.3	35.9	31.5	3.59	1
Bribing the inspectors	12.0	10.9	20.6	12.0	33.7	22.8	3.37	2
Bribing the NCIC management	7.6	27.2	37.0	7.6	19.5	8.7	2.46	3
Bribing the referees	2.2	45.6	22.8	2.2	19.6	9.8	2.25	4
Bribing the NCIC Board	10.9	51.1	28.2	10.9	7.6	2.2	1.82	5

The responses indicate that there is a likelihood of bribery relative to all functions. However, MSs > 3.00 indicate that the likelihood is often, as opposed to rarely in the case of MSs ≤ 3.00.

A MS of 1.82, which is > 1.80 ≤ 2.60 (very rarely to rarely/rarely), indicates that NCIC board members (1.82) are the least likely individuals to be bunged, followed by referees (2.25) who arbitrate the registration of companies, and then the NCIC management (2.46).

A MS of 3.59, which is > 3.40 ≤ 4.20 (sometimes to often/often), indicates that the most likely individuals to be susceptible to bribery are the NCIC officers, followed by the inspectors involved in the registration of contractors. 64.2% (27.2%+37.0%) of the 92 respondents indicated that NCIC managers are very rarely and rarely susceptible to bribery.

It can be deduced relative to bung-related findings that NCIC officers and the inspectors are the two most likely functions to be bunged. NCIC officers and inspectors have a similar entrance qualification grade, which is at technician band level. The salary range of this band is not as competitive; thus the likelihood of bung victimisation.

The board members and NCIC managers have the same minimum grade of qualification and professional registration status. This criterion enhances the construction etiquette and work ethics among this band of employees; thus making them a lower potential target for bribery.

4.2 Likelihood of individuals being reprimanded

The questionnaire survey investigated the likelihood of reprimand to be imposed on registration officers, inspectors, managers, and board members. This enquiry also reiterates the point that for an individual to be reprimanded a corrupt activity should have occurred. This confirms the fact that corruption does exist in the NCIC department.

In addition, this enquiry provides insight regarding the higher risk individuals into corruption in this department of the Malawian construction industry.

The responses to the frequency at which individuals are reprimanded or disciplined on grounds of corruption are presented in Table 2.

Table 2: Frequency of functions being reprimanded

Function	*Response (%)*						*MS*	*Rank*
	Unsure	*Very rarely……..……..Very often*						
		1	*2*	*3*	*4*	*5*		
Registration officer	1.1	9.8	21.7	1.1	31 5	35.9	3.62	2
Inspector	3.2	8.7	18.5	3.2	25 0	44.6	3.78	1
Manager	1.1	40.2	30.4	1.1	18 5	9.8	2.27	3
Board member	0.0	53.3	33.7	0.0	8.7	4.3	1.77	4

A MS of 3.78, which is > 3.40 ≤ 4.20 (sometimes to often/often), confirms that inspector is the most reprimanded function on the grounds of corruption, followed by registration officer, with a MS within the range > 3.40 ≤ 4.20: between sometimes to often/often. 69.6% (25%+44.6%) of the 92 respondents indicated that the most reprimanded function was inspector, followed closely by 67.4% (31.5%+35.9%) relative to registration officer.

Conversely, the results deduced that the least reprimanded function is board member, with a MS of 1.77, which is > 1.00 ≤ 1.80 (very rarely to rarely); superseded by managers (2.27). 87% (53.3%+33.7%) of the respondents indicated that board member is the least reprimanded function, while 70.6% (40.2%+30.4%) indicated that manager is the least reprimanded function.

The results indicate that there is more emphasis on the pointer to the least reprimanded than there is for the most reprimanded.

The statistics relative to board members and managers are influenced by the power and authority vested in them over the fear by subordinates of victimisation. Senior employees are disciplined and reprimanded in confidence while middle management and technicians are reprimanded more openly. There is therefore more publicity regarding a junior being reprimanded than a senior being reprimanded.

The results confirm the previous results, namely that the most likely bribery source is the most reprimanded, and conversely, the most unlikely bribery source is the least reprimanded. The results confirm that the arm of the law does extend to senior employees who possess power and influence, thereby acknowledging that governance on corruption mitigation is applied to all.

3.2% of the respondents were unsure; the question concerned the frequency at which inspectors are reprimanded on the grounds of corruption. A similar version of the question was presented in Table 2, which attracted 12.0% of the response, indicating that respondents did not understand either the question or the function of the individual. In conclusion, the question was clear, but the understanding of the inspectors' roles and responsibilities was not clear.

4.3 Likelihood of contract award due to corrupt endeavours

The objective of this section of the questionnaire was to determine the likelihood of corrupt endeavours influencing contract award relative to the different forms of project contracts in the Malawian construction industry. The types of project contracts addressed include public project contract, parastatal project contract, private project contract, and grant-aided project contracts.

The results of the likelihood of project contracts being award due to corrupt endeavours are presented in Table 3.

Table 3: Likelihood of contract award due to corrupt endeavours

Project type	*Response (%)*						*MS*	*Rank*
	Unsure	*Very rarely……..……..Very often*						
		1	*2*	*3*	*4*	*5*		
Public	0.0	9.8	12.0	0.0	38.0	40.2	3.87	1
Parastatal	3.3	16.3	22.8	3.3	31.5	26.1	3.28	2
Private	16.3	22.9	31.5	16.3	14.1	15.2	2.67	3
Grant-aided	2.2	33.6	45.6	2.2	10.9	7.6	2.10	4

The findings indicate that 78.2% (38.0%+40.2%) of the 92 interviewees contended that public contract awards are influenced by corrupt endeavours, while 79.2% (33.6%+45.6%) of the sample stated that grant-aided project awards, with a MS of 2.13, which is > 1.80 ≤ 260 (rarely to neutral/rarely) are very rarely and rarely affected by corrupt endeavours.

Relative to parastatal project awards, 57.6% (31.5%+26.1%) of the respondents contended that corrupt activities often and very often influence contract awards, whereas 39.1% (16.3%+22.8%) of the respondents declared that parastatal projects are very rarely and rarely influenced by corrupt activities. 3.3% of the respondents were not sure what the question entailed, or lacked the knowledge regarding parastatal projects. 18.5% (10.9%+7.6%) of the respondents contended that corrupt activities influence contract awards on grant-aided projects. Alternatively, the MS of 3.28, which is > 2.60 ≤ 3.40, indicates that the influence can be between rarely to sometimes/sometimes.

54.4% (22.9%+31.5%) of the respondents stated that private contract awards are very rarely and rarely influenced by corrupt activities, whereas 29.3% (14.1%+15.2%) responded that private contract awards are often and very often influenced by corrupt activities. The MS of 2.67, which is > 2.60 ≤ 3.40, indicates that the influence is between rarely to sometimes/sometimes.

In essence, corrupt activities do occur in the awarding of contracts relative to the four project types. The difference lies in the extent to which it occurs.

4.4 Efficiency of common corruption mitigation measures

The responses clarified the efficiency of corruption mitigation measures on a five-point Likert scale, the continuum spanning from 1 - Completely ineffective; 2 - Nearly ineffective; 3 - Neutral; 4 - Effective, and 5 - Very effective.

The responses relative to the efficiency of common corruption mitigation measures are presented in Table 4.

Table 4 indicates that 86.9% (52.2%+38.8%) of the 92 respondents identified dismissals as the most effective measure of mitigating corruption, with a MS > 3.40 ≤ 4.20 (neutral to effective/effective); whereas the least effective method of mitigating corruption was the publishing of names (2.00).

The second most effective corruption mitigating measure with a MS of 3.89, which is > 3.40 ≤ 4.20 (neutral to effective effective) as denoted from this survey was civil action, with 76.1% (42.4%+33.7%) of the sample noting that civil action is effective and very effective in mitigating corruption.

Thirdly, the MS of suspensions falls within the range > 3.40 ≤ 4.20: between neutral to effective/effective.

Table 4: Degree of effectiveness of mitigation measures

Mitigation measure	*Response (%)*						*MS*	*Rank*
	Unsure	*Completely ineffective……..Very effective*						
		1	*2*	*3*	*4*	*5*		
Dismissals	2.1	2.2	8.7	2.1	52.2	34.8	4.09	1
Civil action	3.3	0	20.6	3.3	42.4	33.7	3.89	2
Suspensions	2.2	7.6	17.4	2.2	45.6	27.2	3.67	3
Training	8.7	6.5	18.5	8.7	48.9	17.4	3.52	4
Poster awareness	6.5	0.0	37.0	6.5	33.7	22.8	3.42	5
Increase in salaries	1.1	22.8	28.3	1.1	27.2	20.6	2.95	6
Publishing of names	0.0	42.4	30.4	0.0	19.5	7.6	2.00	7

Finally, these results suggest that there is a degree of confidence with regard to measures used to mitigating corruption.

5. Conclusion

Corruption is relatively rampant in the Malawian construction industry. Mitigation measures, as listed in Melnikov (2008: 4) relative to the NCIC, confirm the results that reprimanding of corrupt individuals does occur, and that measures to combat corrupt activities are in place, but their implementation is questionable.

Tender award is the epitome of corruption in the Malawian construction industry. As indicated in the results, tender board members are crucial in making or breaking a contractor in terms of contract award. The findings in the literature review concur that corruption plays a major role in the awarding of contracts in terms of bribery. Guash (2005: 47) reiterates that some contractors use bribery in order to be awarded contracts.

The bribes may in fact be a percentage of the total contract sum, which is on higher accordingly. In the review of related literature,

however, Moon (2002: 29) agrees that corruption poses a serious threat to development. In the political realm, corruption undermines democracy and good governance by flouting, or even subverting formal processes. Corruption in elections and in legislative bodies reduces accountability and distorts representation in policymaking.

The research indicates that all active personnel in tender awards have experienced relative pressure to indulge in corrupt practices.

Regarding dominance of certain contractors over others, the research findings indicate that contracts are more likely to be awarded to contractors who bribe and influence contract decisions due to corrupt practices. One form of this corrupt practice in the Malawian construction industry is oligopolism.

Firms often collude in an attempt to stabilise unstable markets, in order to reduce the risks inherent in these markets for investment and product development. Although there are legal restrictions relative to such collusion in most countries, a formal agreement is not necessary for collusion to take place (Soreide, 2006: 173).

Finally, regarding maintenance of structures, a study conducted by Ng'ong'ola *et al.* (2001, and cited by Bloom *et al.,* 2004: 28), relating to the maintenance of classroom blocks, boreholes and bridges constructed under MASAF, reported that the majority of the communities were aware that they had to maintain the assets. Some formed maintenance committees, established maintenance funds, and requested training for their committees. However, they expected government to help with major repairs. There was uncertainty as to the role of the relevant Ministry departments financing and carrying out repairs. The general impression was that maintenance issues had not been resolved.

In conclusion, this article presented the adverse effects and impact of corruption in the Malawian construction industry with regard to tender procurement, dominance of certain contractors over others, and below par quality, and the maintenance of the built environment.

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