

Does Corruption Affect Construction?

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Abstract

The global construction market is worth around US \$3,200 billion per year. This market represents 5–7 per cent of GDP in developed countries and around 2–3 per cent of GDP in lower-income developing countries (Rodriguez, Waite & Wolfe, 2005). The construction industry has a world wide reputation for incidences of corruption. Transparency International's Bribe Payers Index repeatedly reveals corruption to be greater in construction than in any other sector of the economy. Corruption is the misuse of entrusted power for personal gain either at one's own instigation or in response to inducements. Corruption costs the construction sector millions of dollars every year; for example the American Society of Civil Engineers claim that corruption accounts for an estimated \$340 billion of worldwide construction costs each year. Corruption siphons off scarce monetary resources and diminishes a country's prospects for providing infrastructure for all. This issue is particularly topical at the moment, with respect the challenge of meeting the Millennium Development Goals. Corruption in the construction sector takes many forms: the allocation of lucrative monopolies, fraud (such as over-charging for construction), poor construction (due to the use of cheaper, sub-standard materials). These practices differ in scale but contribute to the same results—weak operational and financial performance and, for the poor in particular, declining service quality or reduced chances of ever accessing network services. This paper will examine how corruption affects the construction sector.

Keywords Construction, corruption, infrastructure

Introduction

The World Bank has estimated the cost of corruption to the global economy at US\$1.5 trillion a year. A general definition of corruption is the violation of established rules for personal profit and gain. Corruption includes:

- Bribery: payments to gain advantage, or to avoid a disadvantage
- Fraud: theft through misrepresentation
- Embezzlement: misappropriation of corporate or public funds
- Kickbacks: sweeteners or rewards for favourable decisions

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The American Society of Civil Engineers (2004) claim that corruption accounts for an estimated \$340 billion of worldwide construction costs each year. Construction industries are particularly susceptible to corruption in licensing, taxation and obtaining government contracts. Estimates regarding the cost of corruption in infrastructure suggest that five to twenty percent of construction costs are being lost to bribe payments. Transparency International estimates that at least \$400B is lost to corruption in public procurement, adding 20% - 25% to costs.

The characteristics of the construction sector make it particularly prone to corruption: complex technical requirements of projects; competition for 'make or break' contracts; the large number of contractors, providers of goods and services; the numerous levels of official approvals and permits; the uniqueness of many projects; complex contractual and project implementation structures; the opportunities for delays and overruns; and the simple fact that the quality of much work is rapidly concealed as it is covered over by concrete, plaster and cladding (Stansbury, 2005).

According to a survey by the Chartered Institute of Building (CIOB, 2006) 51% of UK construction professionals felt that corruption is commonplace within the UK construction industry. 76% of respondent's regarded the employment of illegal workers as widespread in UK construction; 60% felt that fraud within the industry was prevalent and 41% had been personally offered a bribe.

Consequences of Corruption

Evidence from cross-country research suggests that generally corruption lowers investment and growth, lowers foreign direct investment, and leads to an under-investment in education and over-investment in public infrastructure. Data from the Global Competitiveness Report (of the World Economic Forum) suggests that the frequency with which firms have to make undocumented extra payments or bribes to gain public contracts is, on average, negatively correlated with the income of the countries. These responses suggest that the poorer a country is, the bigger the corruption problem in infrastructure.

Given the opportunities for corruption in the sector outlined in the table below, it is not uncommon for corrupt officials to direct resources towards large capital-intensive infrastructure projects rather than operations and maintenance; corruption can also create the incentive to build sub-standard infrastructure in the wrong place and to operate it poorly. Corruption in the construction sector typically results in

- unnecessary, unsuitable, defective or dangerous infrastructure: Corruption was one of the reasons for the collapse of Karachi's Northern Bypass Bridge just 26 days after its inauguration, which claimed 10 lives (September 2007).
- lower access rates and quality of public service delivery: Estache, Goicoechea and Trujillo (2006) find that corruption hurts access rates and quality in electricity and telecoms affordability for residential users, has no statistically significant

- effect on water access rates and on water and electricity affordability but favours access rates and quality in telecoms
- higher than expected costs: corruption in the construction of water and sanitary projects estimated to inflate the value of winning bids by at least 15% in South Asia; when the use of substandard materials is factored cost inflation rises to almost 20%.
- corruption as an obstacle to doing business: Firm survey data tends to suggest that companies that face more red tape and/or spend more time dealing with government pay more in bribes (Renikka and Svensson, 2006). Whereas other data on Eastern Europe and the former Soviet Union indicate that the larger the share of firms that bribe public officials, the greater the proportion of senior managers' time spent dealing with public officials (Fries, Lysenko, and Polanec 2003: 16-17) i.e. corrupt firms usually spend more, not less, time dealing with authorities.
- reduced effectiveness of social spending (particularly in developing countries)

One example, taken from our research, is corruption in the housing sector in Indonesia. In the capital Jakarta, population has grown faster than the local government's capacity to provide housing and other services for residents. Corruption in the delivery of housing services is particularly damaging to poor people. Land prices in Jakarta have risen and housing has become unaffordable for the majority of people who work in the capital. A state-owned property development company – Perum Perumnas – is responsible for providing affordable housing for low income groups. There are also regulations to ensure that every new property development includes some low cost homes. However, deeply rooted corruption in Jakarta has undermined these initiatives. There is bribery and corruption related to granting business licenses. This discourages private sector participation in providing affordable housing. Corruption has led to the over-development of luxury homes and a lack of affordable housing in Jakarta. One consequence of this is environmental damage and increased flooding risk.

Examples of Corrupt Practices

There is the potential for corrupt practices at every phase in construction projects (Stansbury, 2005; Sohail & Cavill, 2007). For example, our research on corruption in construction in Pakistan describes the forms of corruption as:

- 1- Land acquisition: land-titling arrangements land mafia or acquiring the land in illegal ways. corrupt officials within the various departments to maintain haphazard records of land and no serious effort in maintaining computerised records has been made
- 2- Excavation e.g. bribes to police to allow heavy machinery to execute the job
- 3- Dumping of material – bribes to dump the excavated soil
- 4- Illegal water connection: Water is the foremost requirements for the construction. bribe paid for water tankers or by water connections e.g. to lineman of Water and Sewerage Board
- 5- Illegal electricity connection: In the local language the illegal electricity connection is called “Kunda”. This is pretty obvious and could be detected

easily. In order for the area inspector of electricity department to turn a blind eye a bribe is paid through a middleman or agent.

- 6- *Storage of material* at site: The storing of materials on site or by the roadside causes an obstruction to traffic so it is often necessary to bribe the traffic police or city government inspector.

The following table describes corrupt practices in construction projects in more detail.

Table 1: Corrupt practices in construction projects

Stage	Example
Planning and design	Politicians influence choice of contract/ contractors; improper favouring of one bidder over another; unofficial payments to public officials to gain government contracts; bribing a local official in order to obtain approval or planning permission; advertising limited to certain types of print media
Pre-qualification and tendering phase	Potentially corrupt practices include collusion, bid-rigging, kickbacks, low balling, bid rotation schemes, inadequately advertised tenders, cover pricing/bidding etc. which ensures a particular contractor secures the contract or raises contract prices. Leaking of information such as the tender assessment procedure; collusion between suppliers of materials in order to keep prices high; gifts (ranging from free pens to all expenses paid holidays disguised as a site visit); tailoring the contract to favour a preferred bidder
Project execution phase	Contractors change design to minimize their costs and increase their profit; inflated bill of quantities to make sure that the contractor has enough for bribes; fraudulent timesheets, daywork sheets or invoices; theft of materials from sites; refusal to consider more than one sub contractor for work; “ghost” infrastructure or deliveries; the employment of illegal labour to allow contractors to undercut prices or to make a profit; contracts specifications altered after contract award; the use of agents' commissions to pay bribes
Inspection	Kickbacks are given to persuade inspectors to turn a blind eye to unfulfilled contract requirements; contractors’ final payment held back for a fee – so called “queuing”; bribes offered to the works inspector for approving defective work; payments to avoid environmental regulation
Maintenance and management	Bribes paid to win operation or maintenance contracts; inflated costs due to monopoly over operation and maintenance

Actions to eliminate corruption

Corruption delays and reduces expenditure on infrastructure investment; reduces the growth generated by a given expenditure on infrastructure investment; raises the operating cost of providing a given level of infrastructure services; reduces the quality of infrastructure services and limits access, especially for the poor. World Bank Institute research shows that countries that tackle corruption and improve their rule of law can increase their national income by as much as four times in the long term, and child mortality can fall as much as 75 per cent. The IMF calculated that the investment rate in a country increased by 4% and GDP by 0.5% per annum for each 2 point improvement in the Transparency International Corruption Index.

Efforts at international and national levels are being made to curb corruption in construction and to promote transparent public contracting processes. In most major construction projects, the state is involved as the owner of utilities, as implementing agency and through regulation; the private sector designs, implements and often operates the projects. Broad reform approaches to reduce the extent and impact of corruption include transparency, participation, competition, reduced discretionary powers, removal of unnecessary regulation, improved financial management and extended auditing (Cavill and Sohail, 2007). Tools for a broad approach to improved governance in the sector highlight improved and more transparent processes for budgeting, project selection and implementation processes, oversight, including community-driven approaches.

Private sector anti-corruption initiatives have been implemented: The *Business Principles for the Construction Sector* endorsed key principles for countering bribery in the construction sector under the auspices of the 2004 World Economic Forum in Davos by 19 leading international construction firms with annual revenues in excess of \$70 bln. The companies have committed to fundamental principles, such as zero tolerance policy on bribery and development of practical and effective programmes of internal systems and controls for implementing that policy. The role of those that provide financing to such major projects has received less attention, nevertheless, funders have begun to take measures to ensure integrity and transparency in funding activities. The World Bank, for example, has started to blacklist companies known to be corrupt.

To date there has been little direct anti-corruption activity in the sector however recent initiatives include:

Adequate site supervision and physical audits: Consultants and companies have instituted a number of measures at both the sectoral and project level to ensure due diligence in the supervision and execution of their projects including monitoring physical inputs and costs, surveying labour inputs and costs, and instituting clear sanctions for non-compliance and, most importantly, effective enforcement procedures. In particular, independently verified physical audits of outputs have been used to combat corruption. For example, in the Philippines, physical audits combined with a GIS system are being used to determine if roads and bridges actually exist and what state they are in.

Community-based public auditing has also been used in developing country contexts; however Olken (2005) reports that increasing grass-roots monitoring has little impact in reducing corruption associated with road expenditure in Indonesia. He shows that top-down monitoring may be a better solution, even in a highly corrupt environment.

Procurement procedures: A number of reforms to the procurement process have been made to reduce the potential for corruption: such as appointing the evaluation panel after submission of tenders, allowing tenders to be submitted to multiple locations simultaneously, benchmarking construction prices to detect overbidding¹, instituting independent monitoring procedures, civic engagement, contract design based on output-based payments and so forth. Procurement reforms have been designed that make use of the internet and reduce the discretion of staff. Such reform saved South Korea over \$2.5 billion in recent years at a budgetary cost of \$26 million. In Mexico the government estimated that every dollar invested in an internet procurement system earned a social return of 4 dollars (Rose Ackerman, 2007).

Integrity Pacts: These are agreements signed by all parties (both the public and private sectors) during the bidding process, in which they undertake not to engage in corrupt activities, accept that their financial and other records will be subject to independent external scrutiny, and subscribe to an arrangement whereby they can be punished for breaching the conditions of the pact. Mechanisms are established to enable any party to report any suspicions or evidence of corrupt activities TI UK has designed three integrity pacts for use specifically in the construction and engineering sectors at the various stages of contracting. Another initiative of TI is the PACS (Project Anti-Corruption Systems) a system designed by TI to prevent corruption on construction projects. It incorporates a series of anti-corruption measures which impact on all major project participants throughout the project cycle.

Conclusion

“Corruption in large-scale public projects is a daunting obstacle to sustainable development.....when the size of a bribe takes precedence over value for money the results are shoddy construction and poor infrastructure management....corruption wastes money, bankrupts countries, and costs lives.” *Peter Eigen, Chairman of Transparency International (TI), 2005.*

The evidence suggests that a degree of corruption exists in many areas of the international construction industry. Corruption determines the incentives for ‘what is built, where and by whom’. Corruption in the construction sector has a number of impacts for

¹ Corruption in large construction projects is difficult to detect because projects cannot be compared well. Different locations, different technical requirements, sizes etc. render a definite comparison of prices particularly difficult.

infrastructure services; it can increase the costs of delivering a particular service or else mean that sub-standard infrastructure is built and then operated badly.

However, for one company to unilaterally combat corruption is, perhaps, commercially impossible. Successful reforms to combat corruption in the construction sector must combine top-down government monitoring with private sector motivation and grassroots oversight. All stakeholders have a role in combating corruption:

- The government: Corruption cannot be overcome without political will. The government has a key role in preventing and detecting corruption in construction projects and regulation of services in their role as owners of utilities and implementing agencies.
- Staff: Training, both of consultants and staff of construction companies, would contribute to raising awareness of what practices are normal business acts and which are corrupt practices and thus constitute criminal offences. This training should stress the potential loss of credibility, compromising of professional standards and the risks to the individuals (and company) reputation, of condoning corruption and include the actions to be taken by the construction company to ensure that their business partners (e.g. agents, consortium and joint venture partners, and major sub-contractors) do not engage in corrupt activities.
- The private sector: preventing corruption in the design, operation and management of contracts. Business and customer surveys can play an important role in uncovering and measuring corruption.
- Professional trade bodies could foster a zero tolerance approach to corruption by raising awareness of the problems amongst their members and in the wider industry. For example, the British Consultants & Contractors Bureau (BCCB) is working with the Institute of Civil Engineers, the Association for Consultancy and Engineering, the Institution for Structural Engineers and Transparency International as part of the Anti-Corruption Forum with the aim of promoting industry led action to eliminate corruption.
- Civil society organizations by monitoring their actions to check that they keep their promises and hold them to account, supporting consumer voice and engaging in advocacy for transparency (i.e. public expenditure tracking surveys that track the flow of resources, physical auditing of the status of built services).
- Donors: Implementing adequate accountability arrangements, research and diagnosis

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