

Publishing Construction Contracts and Outcome Details

Charles Kenny

The World Bank
Sustainable Development Department
Finance, Economics and Urban Division
March 2010



Abstract

Construction governance failures can lead to the construction of the wrong infrastructure, poor quality construction, and excessively high prices for work. There is some evidence from both other sectors and the construction sector itself that improved transparency, especially when combined with oversight, can improve development outcomes through its impact on the

quality of governance. This paper reviews that evidence, discusses costs and benefits of greater transparency in particular with regard to the contracting and delivery process in construction, and briefly discusses an initiative to improve governance in public construction—the Construction Sector Transparency Initiative.

This paper—a product of the Finance, Economics and Urban Division in the Sustainable Development Department—is part of a larger effort in the department to understand and combat corruption and poor governance in construction. Policy Research Working Papers are also posted on the Web at <http://econ.worldbank.org>. The author may be contacted at ckenny@worldbank.org.

The Policy Research Working Paper Series disseminates the findings of work in progress to encourage the exchange of ideas about development issues. An objective of the series is to get the findings out quickly, even if the presentations are less than fully polished. The papers carry the names of the authors and should be cited accordingly. The findings, interpretations, and conclusions expressed in this paper are entirely those of the authors. They do not necessarily represent the views of the International Bank for Reconstruction and Development/World Bank and its affiliated organizations, or those of the Executive Directors of the World Bank or the governments they represent.

Publishing Construction Contracts and Outcome Details

Charles Kenny¹

¹ Senior Economist, the World Bank. Thanks to Marisela Montoliu Munoz, Hartwig Schafer, Chrik Poortman, David Satola, Clive Harris, Mark Moseley, Jeffrey Delmon, Peter Smith and Maria Vagliasindi for helpful comments and advice.

Introduction

Poor governance in public construction is a considerable development issue. Construction is a major sector, responsible for the development of infrastructure capital that is central to growth and improved quality of life. Governance failures can lead to the construction of the wrong infrastructure, poor quality construction and excessively high prices for work. There is some evidence from both other sectors and the construction sector itself that improved transparency, especially when combined with oversight, can improve development outcomes through its impact on the quality of governance. This paper reviews that evidence, discusses costs and benefits of greater transparency in particular with regard to the contracting and delivery process in construction, and briefly discusses an initiative to improve governance in public construction –the Construction Sector Transparency Initiative.

Mismanagement, Corruption and Development Outcomes in Construction

A justification for greater transparency and oversight in publicly-financed construction should start with an elaboration of the problem to be addressed. This problem is one of poor outcomes in a large sector that is central to development. Construction is a \$1.7 trillion industry worldwide, much of which is linked to publicly financed projects. Government investment in road transport alone can account for between 2-3.5% of GDP.

Outcomes from this financing are frequently sub-optimal. In India, for example, nearly half of all roads projects see cost overruns greater than 25 percent, and more than half see delays adding 50 percent or more to completion times (see Figure One).² The quality of infrastructure constructed can also leave much to be desired. Press reports suggest that an Indian government survey of a recent rural roads project found one fifth of completed roads to be unsatisfactory.³

Similar statistics can be found around the world – for example, a global survey suggests that “substantial cost escalation is the rule rather than the exception” in infrastructure projects estimating that for rail projects, average cost escalation is 45%, for fixed links (tunnels and bridges) it is 34% and for roads, 20%.⁴

Some of this cost and time escalation, as well as poor quality, are linked to weak governance and corruption, which are endemic in the sector. Construction ranks as the most corrupt industry in global surveys. Construction firms represented in the Business Environment and Enterprise Performance Survey of Eastern Europe and Central Asia have significantly larger ‘bribe budgets’ than the average firm, and they bribe more often. Of their total bribe budget, a larger percentage goes to gain government contracts –an average of 23 percent for construction compared to 15 percent for all firms in the sample.

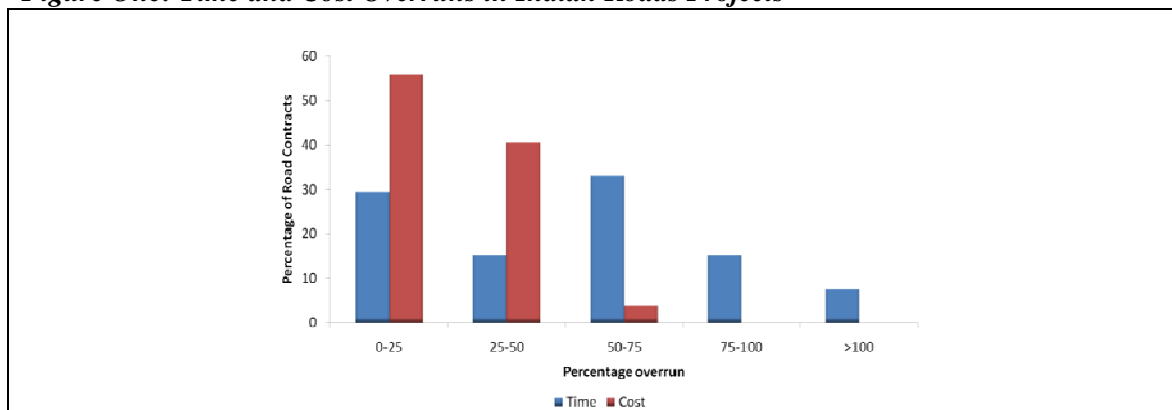
² World Bank, 2007.

³ <http://www.igovernment.in/site/condition-of-indias-rural-roads-found-unsatisfactory/>

⁴ Flyvbjerg, Holm and Buhl, 2003.

Construction firms in Eastern Europe believe that a typical payoff made for securing a government contract in their industry is around 7 percent of the contract value.⁵

Figure One: Time and Cost Overruns in Indian Roads Projects



We have evidence that governance failure may be one factor behind high costs. Using data on roads projects, we can analyze the average costs per meter squared for a standard road reconstruction assignment.⁶ The average cost across the 28 countries for which we have data was around \$33.2 per square meter. For those countries with below average costs, the Transparency International Construction Perceptions Index averaged 3.6, compared to 2.4 in countries with above average costs (where a low CPI is evidence of perceived widespread corruption). A regression analysis suggests that lower perceived corruption is significantly associated with lower costs in this sample, a result weakly robust to the inclusion of GDP per capita.⁷

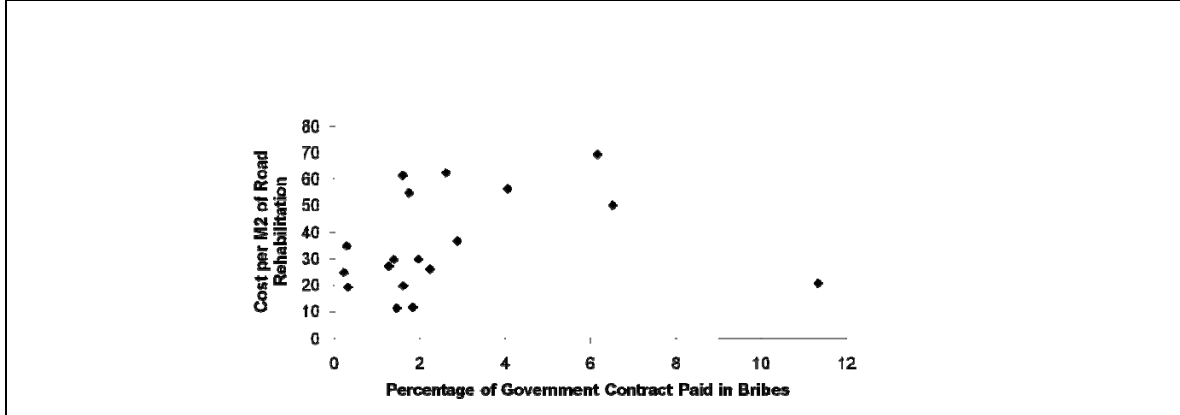
Similarly, lower reported bribes payments are associated with lower costs, as is clear from the graph below. Costs for road rehabilitation are higher in countries where the average bribe paid for government contracts is larger. The average cost paid per square meter for rehabilitation of a two lane highway across eighteen countries for which we have good data on both bribes and costs was \$36. In countries where the average bribe for a government contract was reported to be below 2 percent of the contract value, this cost was \$30. For countries where bribes for government contracts were reported to be larger than 2 percent of their value, average costs were \$46 (Figure Two).

⁵ Kenny, 2009.

⁶ This for a two-lane road between 6-8 meters wide with a bituminous surface, for countries where we have four or more estimates based on individual project data Data from the ROCKs database http://www.worldbank.org/transport/roads/rd_tools/rocks_main.htm

⁷ The results suggest that an increase in the CPI (reflecting reduced corruption) from Pakistan's score to Ghana's would be associated with a drop in Pakistan's road construction prices of around 20 percent. The equation is $\text{Cost} = 51.9 - 5.9 \times (\text{CPI})$, with the constant and CPI entering at one percent, $R=0.23$, $N=28$. Including GDP per capita reduces the coefficient on CPI to 4.5 and the significance to ten percent (GDP per capita does not enter significantly). For a range of World Bank financed infrastructure goods and works contracts, Kenny and Musatova (2009) find that aid dependency and weak institutions lead to fewer bidders and a higher risk of price escalations.

Figure Two: Cost of Road Rehabilitation and Bribes



Corruption and mismanagement have been repeatedly linked to reduced construction quality, as firms skimp on work and materials while bribing officials to look the other way. Examples uncovered in investigations of corruption in World Bank Group projects include roads built to lower standards or narrower width, buildings constructed with inadequate reinforcing or honeycombed concrete –and buildings not built at all.

The World Bank Integrity Department’s Detailed Implementation Review of Bank projects in India’s health sector provides further cases. In the case of the Orissa Health Systems Development Project, the DIR, aided by a civil engineer, visited 55 project hospitals; at 93 percent of them, it observed problems like uninitiated or incomplete work, severely leaking roofs, crumbling ceilings, molding walls, and non-functional water, sewage, and/or electrical systems. Yet the construction management consultants who supervised the work certified 38 of these hospitals to be complete to project specifications, and in February 2006 the Orissa Department of Health and Family Welfare reported that work at 45 of them was complete. Again, while the World Bank financed Kecamatan Development Project in Indonesia delivered some impressive outcomes, one estimate is that about 24 percent of expenditures in road construction under the project were ‘lost.’⁸

Low quality construction related to corruption can also dramatically reduce infrastructure life spans –by one-half or more. One estimate is that a dollar’s worth of materials skimmed in road projects to finance corrupt payments reduces the economic benefit of the road by \$3.41 as a result of its impact on quality and lifespan.⁹ Significant social costs can also be involved. In 1999, more than half of all buildings in Turkey failed to comply with construction regulations, even though 98 percent of the country’s population lives in earthquake-prone zones.¹⁰ One result of this evasion was a considerable number of avoidable fatalities in the 1999 earthquake –11,000 people died. Allegations regarding a

⁸ Olken, 2007.

⁹ Olken, 2007.

¹⁰ This according to the Turkish Architects and Engineers Association, Celestine Bohlen Turkish Earthquake Survivors Blame Corruption *New York Times* - 8/20/99

school collapse related to corruption have also emerged in the aftermath of the 2008 Sichuan earthquake in China.

The Role for Greater Transparency and Oversight

The current procurement and oversight systems of governments and donor partners are, of course, designed to reduce the impact of governance failure. That some of the examples of failure above were drawn from donor-financed government projects is evidence that existing procurement and oversight regimes may not always be enough to deter corruption. As further evidence, a recent survey of firms that bid on international contracts found that only 15 percent of respondents thought that tender rules were an obstacle to corruption.¹¹

Furthermore, procurement systems alone can never be enough to ensure quality delivery. The most competitive procurement based on the strongest designs can offer little defense against the lowest bidder skimping on delivery and bribing to cover up shoddy work. Indeed, Gresham's law can apply to lowest-cost procurement outcomes when we cannot or do not measure quality.¹² Good contractors bid a reasonable price. Bad contractors can bid low despite the fact that work cannot be completed to standard at that price.¹³ If we fail to monitor outcomes, such firms can get away with delivering poor quality.

And shoddy implementation may be a considerably larger problem from the point of view of development impact than is collusion or corruption that increases initial bid prices. Imagine a road project that costs \$1 million to build but generates \$320,000 in economic returns each year after construction for ten years. The project's overall economic rate of return is about 30 percent (the average rate of return for World Bank transport projects exiting FY97-02). If the project had suffered from collusive bidding, and this had raised the price of construction by 20 percent, to \$1.2 million, the project's ERR would drop to 26 percent.¹⁴ This is a significant decline, but it still leaves the project at more than double the 'hurdle rate' of a 10 percent ERR.¹⁵

Imagine instead that the bidder agreed a contract price of \$1 million, but used insufficient and substandard materials to build the road, spending only \$800,000 on construction and pocketing the remaining \$200,000. This reduces the road's traffic capacity so that yearly economic returns fall by a quarter. It also shortens the useful life of the road to five years. This would reduce the overall ERR to 15 percent. The same financial level of corruption has a considerably larger economic impact in this case, reducing the ERR by

¹¹ Soreide, 2006. Regarding the World Bank, there is some evidence that Bank-financed procurements are sometimes being won by those firms with the greatest comparative advantage in bribery rather than leading global firms which can deliver the best product at the lowest price (Kenny and Musatova, 2009).

¹² Thanks to Giovanni Casartelli for this observation.

¹³ Manelli and Vincent 1995.

¹⁴ This (and subsequent calculations) view the corrupt payment as a transfer but accounts for a (high) marginal cost of government funds lost to corruption of 1.50 (a fifty percent deadweight loss).

¹⁵ This is approximately the economic impact of poor road construction suggested by Olken (2007).

15 percent rather than 4 percent. Such incentives may help to explain cross-country evidence suggesting an impact of weak institutions and high corruption out of all proportion to a 10 or 20 percent mark-up in the costs of investments.¹⁶

Related to this, the evidence from a large sample of World Bank projects is that, in general, the bigger challenge to achieving results in investment lending is not procurement risk, but delivery risk. Pohl and Mihaljeck found that factors such as cost overruns and delays in delivery are comparatively minor in determining the gap between appraised and re-appraised economic rates of return on Bank projects. It was factors before and after the procurement process which made the largest difference.¹⁷

There is considerable evidence that (additional) transparency and oversight are potentially powerful tools to reduce the development impact of corruption. Not least, this is strongly suggested by World Bank experience working in environments where transparency and oversight are allowed to work. Linked to the literature that suggests strong institutions deliver better aid outcomes,¹⁸ World Bank projects in countries with the strongest protection of civil rights generate economic rates of return 8-22 percentage points higher than projects in countries with the weakest civil rights (the mean rate of return in their sample is 16 percent). There is suggestive evidence that the route for this impact is from civil liberties through citizen voice and government accountability to greater efficiency in government service provision.¹⁹

Specific to construction, evidence on road costs and political rights suggests greater ability to effect change on government contracts can improve outcomes. Kaufmann and Kraay's 'Voice and accountability' indicator measures the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media. Data from World Bank financed roads contracts in 28 countries suggests that those countries which see above average voice and accountability pay \$30 per square meter for rehabilitation of a two lane highway compared to \$37 in countries with low voice and accountability.²⁰ Separate data on cost overruns from 130 World Bank financed road projects in 24 countries suggests that countries with voice and accountability scores below the global average see average cost overruns of 46%. This compares to countries with above average voice and accountability, which see cost overruns of only 18% (See Figure Three).²¹

¹⁶ Kenny, 2009.

¹⁷ Pohl and Mihaljeck, 1992.

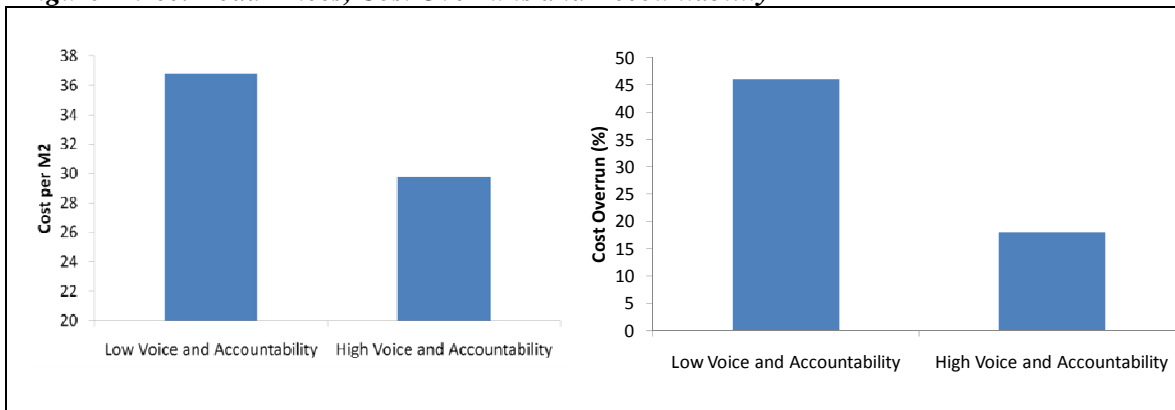
¹⁸ Wright, 2006, Burnside and Dollar, 1998 –although note these results may be fragile. A re-analysis suggests institutions do not have a robust impact on aid effectiveness (Rajan and Subramanian, 2005b)

¹⁹ Isham et. al., 1997. Beneficiary participation was also found to improve project performance in a sample of 121 World Bank rural water supply and sanitation projects (Isham et. al., 1994). Similarly, Dollar and Levin (2005) find that a property rights/rule of law measure is strongly correlated with World Bank investment lending outcomes.

²⁰ It should be noted that there is no statistically significant difference between outcomes when GDP per capita is controlled for in a regression analysis.

²¹ Voice and accountability measures from <http://info.worldbank.org/governance/wgi/index.asp>, road project data from http://www.worldbank.org/transport/roads/rd_tools/rocks_main.htm

Figure Three: Road Prices, Cost Overruns and Accountability



Project-level experience provides further evidence in support of the impact of transparency and oversight on project outcomes. Despite considerable evidence of losses to corruption described above, the Indonesia Kecamatan Development Project involved close local (beneficiary) oversight produced savings of between 25 to 56 percent over conventional infrastructure projects.²² In Bangladesh, a study of community oversight of infrastructure projects suggested that costs and completion times were more than 25 percent lower while asset life was four times longer on such projects compared to standard approaches.²³

Regarding post-procurement oversight of projects in particular, work by the Concerned Citizens of Abra for Good Governance in the Philippines performing quality checks on public procurement projects has, inter alia, led to a remove and replace order for portions of a highway project and seen the conviction of eleven employees of the Department of Public Works and Highways. Again, as part of the Bali Urban Infrastructure Project, financed by the World Bank, a range of measures were put in place to strengthen contractor competition including engaging the association of contractors and civil society in a process of reform that increased transparency, established an effective complaints handling mechanism, and extended random checks and technical audits. Complaints received increased from fewer than ten per year prior to the project to greater than 200 in the project's first full year. Prices charged for works and inputs under the project (concrete, excavation and road works) fell over the first three years, compared to considerable price increases for the same inputs and works in non-project contracts. Savings amounted to 21 percent of estimated costs.²⁴

Limits to Transparency and Oversight

Although there is clear micro evidence of the advantages to transparency and oversight mechanisms, we should also accept their limitations. A case from education in India suggested that despite considerable de jure powers of oversight by village education

²² Wong and Guggenheim, 2005.

²³ GHK et. al. 2004.

²⁴ Soraya, 2009b.

committees in Uttar Pradesh and efforts to increase interest in and awareness of schooling quality and the role of village education committees, outcomes remain poor and village education committees are dysfunctional.²⁵ The authors of the education study conclude that large-scale oversight mechanisms work best when stakeholders can directly and easily observe problems. This may suggest the more appropriate oversight focus for any direct community oversight role. In road construction, for example, this might be to spot problems such as the lack of a road where one should be, one lane where there should be two, or potholes where there should be repairs.

A second feature worth noting is the considerable costs that can be associated with active transparency and oversight. The Indonesia Urban Poverty Program, financed by the World Bank, disburses about \$100m a year to over 8,000 villages across Indonesia and provides one example of both benefits and costs. As part of the oversight mechanism, 100,000 elected volunteers serve as project overseers. In addition, a website records project details including individual project details, implementation status, full consultant contracts, consultant invoices, status of disbursement and details on travel expenses related to the project and a complaint handling mechanism.²⁶ The project website is visited more than 2,000 times a day, and recorded 6,423 complaints in 2007. 84 of these complaints involved mis-use of funds totaling \$80,000. As a result of the complaints a court action has been launched and \$32,000 in funds has been returned to date.

At the same time, the total cost of capacity building and oversight mechanisms is estimated at 13 percent of project costs, or a little over \$24m out of a \$186m project. These costs are lower than the benefits frequently associated with oversight and transparency in community projects, and many are one-off expenditures associated with benefits that will far outlast the life of the project –but they are still considerable.

This suggests the possibility that measures to improve governance, much like other regulation designed to minimize market or government failure, can carry higher costs than the economic benefit of the reduced corruption that they are associated with. Ben Olken's examination of anti-corruption interventions in community-driven road projects in Indonesia suggested that sending out invitations to village meetings to discuss projects might fall into that category, for example.²⁷

Publishing Contracts and Implementation Details

With that caveat, one comparatively cheap and potentially powerful tool to improve outcomes in public procurement is the regular publication of contract and implementation details. In particular, the publication of government contracts would improve transparency (and so hopefully reduce corruption). There is a clear public interest in access to such documents as they involve distribution of public funds or publicly-controlled properties. Publication would also provide a large stock of public intellectual

²⁵ Banerjee et al 2008.

²⁶ Soraya, 2009a.

²⁷ Olken, 2007.

capital which should (i) reduce legal costs of contracting; and (ii) when combined with information on contract performance, help spread best practices and ease the process of learning lessons from failed approaches.

Contracts specify what is to be delivered when, how, by whom and at what unit prices. As such, they contain a wealth of information about who will benefit from the contract, potential waste or padded prices, and what the project outputs should be. All of this information can be compared against original bid documents, information about implementation and final outputs to allow third parties to monitor procurements, awards and the efficacy of resource utilization.

The potential benefits are clear. The ease and practicality of contract publication in particular is perhaps less so. At the same time, many governments also have laws on the books that grant public access to the majority of contracts on demand, and a few countries are already routinely publishing contract and implementation documentation.

Contract And Implementation Details Publication to Date

While presumption of publication is still a comparative rarity, in many countries, Freedom of Information Acts give citizens theoretical access to contracts. As an example, the US Freedom of Information Act (FOIA) gives citizens the right to access records of the executive branch as long as such documents are not exempt because they are properly classified or involve trade secrets for example. Even then, efforts must be made to provide the fullest possible disclosure (redacting relevant sections rather than withholding the entire document). In theory, then, most contracts signed by the US government (or at least the majority of text of most contracts) could be obtained by citizens.

Nonetheless, FOIA requests are time consuming and can incur significant charges (for documents over 100 pages, review of material to ensure it can be released is charged at rates as high as \$25 per hour). And FOIA requests would be necessary to obtain the contracts, because federal agencies appear disinclined to volunteer them. A 1999 attempt to obtain copies of 81 Federal Contracts listed in the Washington Post over a week-long period found that none were voluntarily disclosed by federal agencies.²⁸ Furthermore, requests are likely to face challenges in jurisdictions including the US and Europe from contracting companies filing ‘reverse’ FOI requests to limit or restrict disclosure.²⁹

Furthermore, many countries lack FOIAs or see them weakly enforced. More than 50 countries have freedom of information laws, and 15–20 more are considering them.³⁰

²⁸ <http://www.cptech.org/ecom/may1999.txt>

²⁹ In these jurisdictions, the government must notify companies of the FOI request and consider any requests to keep the information confidential. Whilst the prejudice caused by possible disclosure must be balanced against the public interest in knowing the requested information, it is likely that, at the very least, this process will add complexity, time and expense to contract publication under FOIAs (Corey, 2005)

³⁰ <http://www1.worldbank.org/prem/PREMNotes/premnote93.pdf>

But this suggests that the majority of countries lack such legislation. And the mere existence of a freedom of information law is clearly inadequate. A recent survey of the effectiveness of freedom of information laws in Armenia, Bulgaria, Macedonia, Peru and South Africa found that, on average, only 35 percent of requests for information were fulfilled.³¹ In short, while FOIAs suggest that contracts and implementation reports *could* be published, the better model is to proactively publish such information.

Some countries have already taken steps towards this approach. Indonesia routinely publishes considerable information for some projects. The Urban Poverty Program was highlighted above. In addition, the National Program for Community Empowerment (Program Nasional Pemberdayaan Masyarakat, PNPM), a community-led development program in Indonesia, also publishes detailed information. Project data and documentation that is routinely published on the project's website includes:

- Contract price, start and finish dates, and contractors' names and addresses
- Contracts (billing rates are excluded) and contract variations
- Reports on project performance
- Audit reports
- Fund disbursements
- Invoices and invoicing information.³²

Other countries routinely publish information on a wider range of government-financed contracts. Argentina publishes detailed information about contract awards and implementation, Turkey publishes winning bids for government contracts, the Philippines allows civil society representatives to observe the tendering process and Uganda publishes procurement audits and contract awards on the web. Colombia's government e-procurement website allows a range of project documents to be viewed by the public online. For example, a \$1.24 million project for the construction of a passenger terminal on river Barrancabermeja has 132 project documents available for review. These documents include:

- Draft Terms of Reference
- Definitive Terms of Reference
- Clarifications during the selection process
- Act from the Awarding Meeting
- Contract
- Contract Extensions and other modifications
- Evaluation Report

By 2008, there were 99,455 transactions recorded and the site received an average of 453,402 visitors per month.³³

Again, the government of the Australian State of Victoria mandates full publication of all Victoria government contracts (including contract revisions) for contracts worth in excess

³¹ <http://www1.worldbank.org/publicsector/legal/freedom.htm>.

³² World Bank, 2009.

³³ World Bank, 2009.

of AUS\$10m.³⁴ In Victoria, exceptions are made for information in contracts that is genuinely a commercial secret the release of which would unreasonably disadvantage the contractor, or which it is against the public interest to disclose, guided by language in the state's freedom of information act. The intent is to limit nondisclosure to the narrowest sections of the contract and for as short a time as is possible.³⁵

Costs and Benefits of Systemic Full Publication of Contracts

The argument against presumption of publication is usually one of cost. For example, the US government (specifically the former Director of the OMB, Mitchell Daniels) resisted pressure to move towards a presumption of publication because "many federal contracts (or the documents that are associated with a contract) contain trade secrets and other confidential business information that is protected under federal law. As a result, agency staff would have to carry out an individualized review of the contract to identify any such confidential information and redact it before publishing the contract". Each year, Daniels noted, the US government enters into 9.5 million contracts of which half a million are in excess of \$25,000. Even reviewing only those contracts over the \$25,000 threshold would require significant resources.³⁶

In its deliberations, the Victoria (Australia) public accounts committee concluded that the insistence of confidentiality clauses in government contracts frequently came from the government, not the contractor, suggesting that fears regarding the complexity of reviewing contracts for commercial secrets may be exaggerated.³⁷ Furthermore, it is difficult to see the significant *public* interest in restricting information regarding company information in contracts beyond those involving patentable (but unpatented) technology. That some countries are managing a process of routine proactive disclosure further suggests that it is administratively possible.

With a suitable dollar cut-off level for automatic publication, it is likely that the review burden could be reduced while still ensuring the publication of contracts involving a considerable percentage of government financing. Using data from the business warehouse on the size of World Bank financed contracts in FY05 gives an indication of the likely magnitudes involved. Figure Four suggests that 7,772 contracts were signed under World Bank projects in FY05 with a total value of USD8.6bn. Out of this universe of contracts, 5,298 contracts accounting for USD8.5bn had a value of above USD100,000. Only 1,218 contracts, or 16 percent of all contracts, had a value of above USD1m—but these contracts accounted for 83 percent of the total value of all contracts signed.

³⁴ See <http://www.tenders.vic.gov.au/CA256AEA00206A7D/webpages/PublicContractsFrameset?Open>

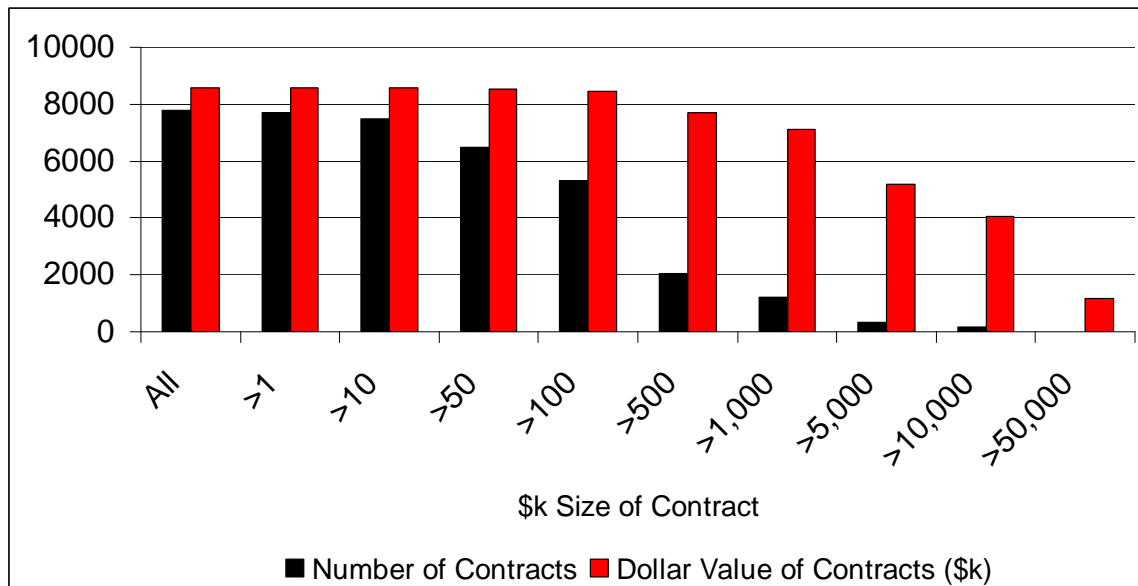
³⁵ Government of Victoria, Australia: Ensuring Openness and Probity in Victorian Government Contracts: A Policy Statement 11 October, 2000.

³⁶ Source: Letter from Mitchell Daniels to Ralph Nader and James Love, November 26 2001. Imagine the average \$25k-plus contract contains 200 pages in need of review, the reviewer reads 5 pages an hour and charges \$25 per hour, for the 500,000 contracts worth more than \$25,000, the US government would have to set aside \$500 million in reviewing fees.

³⁷ Victoria (Australia) (2000).

To extrapolate based on a developing country example, India sees around 5,000 \$1m-plus contracts signed in the roads sector a year. Assuming India's share of developing country road construction is about the same as its share of developing country national income, this suggests a little over 60,000 \$1m-plus roads contracts in developing countries each year—or a little under an average of 400 per developing country. Road construction is probably the largest single government-financed construction activity worldwide. As a back of the envelope calculation, it might be expected that the average number of \$1m-plus government financed construction contracts per developing country might be on the order of 2,000 per year.

Figure Four: World Bank-Financed Contracts by Size: Number and Dollar Value of Contracts



With a higher cut-off, fewer contracts would be involved. As we have seen, the state government of Victoria publishes online the full contract for any government tender worth above AUS\$10m (approximately USD7.7m). A cut-off of USD5m would affect 4.2 percent of World Bank-financed contracts (326 contracts) accounting for 60 percent of total contract value in FY05. A cut-off of USD10m would affect 2.0 percent of Bank-financed contracts (158 contracts) accounting for 47 percent of total contract value in 2005.

It is plausible to imagine significant financial savings to governments from contract publication in terms of reduced prices due to reductions in corrupt payments. Investment climate surveys suggest that bribe fees equal an average of about 3.2 percent of contract values—with sector-level estimates ranging considerably higher. Greater threat of scrutiny can lead to significant reductions in corruption. The threat of an audit reduced

the level of corruption in Indonesian road projects by 8 percent, for example.³⁸ If contract and implementation detail publication reduced levels of corruption by only 5 percent, this suggests a reduction in bribe fees equal to 0.16 percent of total contract values, which is likely to be a multiple of the review costs involved in publishing these contracts.³⁹ Furthermore, given that estimates for the total economic cost of corruption are considered to be as high as 15-50 percent of the funds involved,⁴⁰ it appears clear that the economic benefits of publication may be considerably larger than the direct financial benefits to government in terms of lower initial contract prices.

Once contracts have been published, barriers to the publication of a range of implementation documentation largely fall away. This suggests that with relatively little additional effort or expense one could routinely publish extensions, modifications and evaluation reports.

The Construction Sector Transparency Initiative

The Construction Sector Transparency (CoST) Initiative is a global initiative designed to support more widespread publication of construction contracts and implementation details. It is a partnership between governments, private sector and civil society, which aims to increase transparency and accountability in construction procurement. CoST will require public disclosure of contracting, payment and oversight information regarding government-financed construction projects. For some contracts, this information will be validated and compared to outcomes on the ground. A multistakeholder group of civil society, government and private sector will oversee the process of information release and validation. The core idea of CoST is “Get What You Pay For.” The premise of the initiative is that greater accountability and transparency will reduce costs and improve the quality of government-financed construction.

CoST is designed to regularize publication of the following list of contract details: (i) identification details related to the contract, including project specification, purpose, location, intended beneficiaries, and feasibility study; (ii) project funding related to the contract, including financing agreement; (iii) tender process details including a list of tenderers and the tender evaluation report; (iv) award details including contractor name, contract price, contract scope of work and contract program; (v) contract execution details including individual significant changes to the contract which affect the price and reasons for those changes, individual significant changes to the contract which affect the program and duration and reasons for those changes, and details of any re-award of main contract; and (vi) post completion details including contractor name, actual contract

³⁸ Olken, 2007.

³⁹ Imagine the average \$5m-plus contract contains 500 pages in need of review, the reviewer reads 5 pages an hour and charges \$25 per hour, for the 326 contracts worth more than \$5m, for World Bank financed contracts, \$815,000 in reviewing fees would be required to review contracts worth an aggregate of over \$5 billion. Assuming the 0.16 percent savings held, this would amount to \$8m –about a ten to one benefit/cost ratio.

⁴⁰ Jain, 2001.

price, final contract payment, actual contract scope of work, actual contract program and project evaluation report.⁴¹

CoST is currently being piloted in seven countries (Tanzania, Zambia, Malawi, Vietnam, the Philippines, Ethiopia and the UK). Guatemala has CoST Associate status. An International Secretariat financed by DFID provides technical and financial assistance to pilot countries. An International Advisory Group (IAG) provides guidance regarding CoST design issues to pilot countries and the Secretariat as well as advice to DFID with regard to the future of the initiative. The World Bank is providing technical inputs and advice to DFID, the IAG, the Secretariat and pilot countries.

The pilot stage is further demonstrating the feasibility of publication and the utility of multi-stakeholder oversight of the process. At the same time, it has highlighted the need for considerable government leadership and capacity with regard to publication. If existing management information systems within agencies do not regularly collect the type of information to be released by CoST, preferably electronically, publication can carry reasonably large transactions costs. Without government commitment, these costs are unlikely to be met. Even in cases where existing management information systems are strong, the commitment to publication carries with it the burden of responding to additional oversight and potential complaints.

Conclusion

As a vital activity for development and one that frequently falls victim to failures of governance, publicly-financed construction could benefit considerably from improved oversight. One tool to provide such oversight uses transparency in contracting and implementation to improve the capacity of citizens and beneficiaries to ensure that they are getting what they paid for from projects and contracts. The Construction Sector Transparency Initiative, building on the experience and success of countries such as Colombia in publishing contracting details, provides a model for improving transparency and oversight in the sector, as well as demonstrating the key importance of government commitment to leading reform.

⁴¹ There is an ongoing discussion around the exact nature of the disclosures related to CoST, including the potential addition of bill of quantity prices, the names of project managers, sub-contractors and shareholders.

Bibliography

- Banerjee, A. and R. He (2003b) Making Aid Work mimeo, MIT.
- Banerjee, A., R. Banerji, E. Duflo, R. Glennerster and S. Khemani (2008) Pitfalls of Participatory Programs: Evidence from a Randomized Evaluation in Education in India World Bank Policy Research Working Paper 4584.
- Burnside, C. and D. Dollar (1998) Aid, the Incentive Regime, and Poverty Reduction World Bank Policy Research Working Paper 1937
- Corey, T. (2005) Freedom of Information: Protecting Commercial Information in the Information Age, mimeo, Steptoe and Johnson, New York.
- Dollar, D. and V. Levin (2005) Sowing and Reaping: Institutional Quality and Project Outcomes in Developing Countries World Bank Policy Research Working Paper 3524
- Flyvbjerg, B. M. Holm and S. Buhl (2003) How common and how large are cost overruns in transport infrastructure projects? *Transport Reviews* 23(1):71-88
- GHK, ADB, ADI and UNCDF (2004) Local Governance and Service Delivery to the Poor, A Bangladesh Case Study.
- Isham, J., D. Kaufmann and L. Pritchett (1997) Civil Liberties, Democracy and the Performance of Government Projects World Bank Economic Review 11, 2.
- Isham, J., D. Narayan and L. Pritchett (1994) Does Participation Improve Project Performance? World Bank Policy Research Working Paper 1357.
- Jain, A. (2001) Corruption a Review *Journal of Economic Surveys* 15,1.
- Kenny, C. (2009) Measuring and Reducing the Impact of Corruption in Infrastructure *Journal of Development Studies* forthcoming
- Kenny, C. and M. Musatova (2009) What Drives Contracting Outcomes in Infrastructure Procurement, mimeo, World Bank.
- Olken, B. (2007) Monitoring Corruption: Evidence from a Field Experiment in Indonesia, *Journal of Political Economy* 115, 2.
- Pohl, G. and D. Mihaljek (1992) Project Evaluation and Uncertainty in Practice: A Statistical Analysis of Rate-of-Return Divergences of 1,015 World Bank Projects, *World Bank Economic Review* 6: 255-277.
- Rajan, R. and A. Subramanian (2005b) Aid and Growth: What Does the Cross-Country Evidence Really Show? NBER Working Paper 11513.
- Soraya, G. (2009a) Risk Mitigation of Leakage in UPP, presentation to the World Bank GAC in Projects Group, 4/21/09
- Soraya, G. (2009b) Indonesian Experience Governance and Anticorruption Bali Urban Infrastructure Project (BUIP) presentation to the World Bank GAC in Projects Group, 4/21/09

Soreide T. (2006) Procurement Procedures and the Size of Firms in Infrastructure Contracts Paper Prepared for the World Bank Annual Conference on Development Economics, Tokyo 29-30 May.

Victoria (Australia) Public Accounts and Estimates *Committee Inquiry into Commercial in Confidence Material and the Public Interest* (35th Report to Parliament, March 2000).

Wong, S. and S. Guggenheim (2005) Community-Driven Development: Decentralization's Accountability Challenge in World Bank (ed) *East Asia Decentralizes: Making Local Government Work* World Bank: Washington DC.

World Bank (2007) Indian Road Construction Industry: Ready for Growth? mimeo, South Asia Regional Transport Team.

World Bank (2009) Publishing Information on Public Construction Projects, mimeo, World Bank.

Wright, J. (2006) Aid and Growth in Democracies: How Political Institutions Impact the Use of Foreign Aid, mimeo, Department of Political Science University of California, Los Angeles