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INTEGRATING CONTRACT MANAGEMENT PRACTICES INTO THE ACHIEVEMENT OF VALUE FOR MONEY IN TANZANIA PUBLIC PROCUREMENT: EVIDENCE FROM SELECTED PROCURING ENTITIES IN MOSHI MUNICIPALITY

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ABSTRACT. Contract management is an important activity in public procurement especially on executing development projects while aiming at value for money. On the contrary, reports from the Public Procurement Regulatory Authority show that funds have been wasted due to poor contract management practices hindering value for money achievement. Hence, the study aimed at assessing the contribution contracts management practices towards value for money achievement. Questionnaires and Interviews were used for data collection and findings revealed that contracts contained all the necessary conditions, contracts practices of time management, quality management and costs control were effective and resulted into value for money achievement. Therefore, value for money was achieved above average scale by considering qualitative measures and it was recommended that more efforts are needed to enhance supervision and enforce defect liability clause.

INTRODUCTION

Background

Public procurement often constitutes the largest domestic market in developing countries. Depending on how it is managed, the public procurement system can thus contribute to the economic development of these countries (Migai, 2005). It is a comprehensive process stretching from procurement planning, budget allocation,

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bids invitation, bids evaluation, contract award and management, performance evaluation, auditing and reporting. Due to the cost implication embodied at the different stages throughout the process ranging from need identification up to contract management and termination, public procurement must be built on the principle of value for money (Mamiro, 2010).

Contract management is an important activity in public procurement which covers all the activities performed by the Procuring Entity and Bidders upon signing of the contract up to full discharge of the obligations. It is often an extremely controversial subject matter (Trepte, 2011) especially in developing countries where "the ability to exercise discretion in the award of government contracts has been a source of valued political patronage" and procurement has been "a means for the illicit transfer of funds from government to private hands" regardless of the laws (Patrick, 2005).

Regulation 121 of the Tanzania Public Procurement Act 2004 (PPA 2004) requires Procuring Entities (PEs) to be responsible for the effective management of any procurement contract for goods, services or works which is undertaking in accordance with the terms of each contract. Despite the legal requirements the Controller and Auditor General (CAG) report for the financial year 2010/2011 identified several weaknesses in contracts management and its practices in public procurement. These included improper signing of contracts, lack of important contract information, inadequate quality assurance plans, liquidated damages were not applied for delayed works and completed works were not tested to ascertain whether they have attained the specifications required. Basing on the findings, the CAG challenged PEs to exercise effective contract management practices in order to avert the apparent loss of public funds.

Coverage of the Study

The study has covered issues of procurement contracts formulation, procurement contracts implementation practices as per terms and conditions of the contract and the contribution of contract management practices on the achievement of value for money in public procurement.

LITERATURE REVIEW

Concepts and Theory

Contract management is the process that enables both parties to a contract to meet their obligations in order to deliver the objectives required in the contract. It covers transition and implementation, ongoing day-to-day management, evaluation, and succession planning (Australian National Audit Office, 2001). Hence, it is the process that ensures that a contract is performed to a standard that meets the objectives and expectations of both parties. High priority is placed in achieving value for money by ensuring that there is a balance between costs, delivery, quality and risks while attaining Economy, Efficiency and Effectiveness (3E's).

The Tanzanian Public Procurement Policy of 2012 identifies value for money as the core principle of the policy underlying public sector procurement. Value for Money in procurement contracts is a good measure of an economy and efficiency with which public financial resources are converted into procured quality goods, services and works for provision of public services. It is evaluated on a whole-of-life basis of the good or service being procured and is influenced by a number of factors which procuring entities have to observe (United Republic of Tanzania, 2012). The factors include adoption of procurement methods which are economical; performance history of each prospective supplier through a product search and maintenance of database of best performers; financial considerations, including all relevant direct and indirect benefits and costs; calculation of the relative risk in the entire procurement process and evaluation of contract options that takes value and quality on balance.

The study made use of the Transaction Cost Analysis (TCA) theory focusing on contract management practices with the assumptions that PEs try to manage effectively their procurement contracts because of ex ante and ex post uncertainties that may happen and affect the harmonious implementation or termination of the contract (Rindfleisch, 1997). Also on the other side it is due to the assumption that there is ex ante and ex post opportunism in peoples' mind that once given the opportunity those concerned with contracts management will not practise what was agreed or expected.

Bartle (2002) argues that certain concepts are central in the application of transaction cost theory in Government Procurement.

These include bounded rationality of decision makers, opportunistic behaviour among decision makers, uncertainties which affects transactions and information asymmetry whereby information may not be distributed as expected.

Hence, effective monitoring and administration practices during contract implementation are important to ensure that parties protect themselves from uncertainties, irrational decisions and opportunistic behaviours which might hinder the achievement of value for money by the PE.

Legal Framework for Procurement Contracts Management

Procurement Contracts like any other must be backed up with the legal framework for them to be valid and legally recognised. One of the legal requirements is as captured in section 69 (1) (a) of the PPA 2004 that requires contracts not to be altered or amended in any way by both parties once the contract has been drafted, signed and awarded to the contractor unless such alteration or amendments is to the benefit of the government. Hence, it is the utmost important to ensure that public procurement contracts are for the benefit and interest of the general public in areas of social services provision and development of infrastructure.

Also, regulation 123 of PPA 2004 (GN 97) states clearly that PEs shall monitor the contractor's performance against the statement of requirements or schedule of works stated in the contract, by means of daily, weekly or monthly reports from the PE's supervisor responsible for the services or works. If contractor's performance is satisfactory, the PE has to authorise payments by measurement and certification, contrary to that the PE shall draw contractor's attention to any short-comings, and may refuse to authorise further payments until the identified defects are remedied.

There have been situations where projects contracts have been initiated without a planned follow-up or close monitoring of the implementation process. This led to entering into a project agreements without the PE's management commitment to ensure a return on investment and value for money. Hence, the Public Procurement Policy (2012) put in place an effective contract administration and management system that requires ensure existence of effective contract administration and management

system with adherence to fundamental principles of public purchasing; quality assurance and governance mechanisms in the procurement of works, goods and services; ensure existence of a technically competent contract writing and effective contract administration and management system throughout contract implementation period; and ensure existence of effective contract monitoring and evaluation system throughout contract implementation period. Therefore, when the identified policy and legal framework is observed it provides the grounds for the PEs to achieve value for money through effective contract management.

Contracts Formulation in Public Procurement

In the formulation of the procurement contract for good, works or services it is important amongst other things, to ensure that the terms and conditions of the contract are appropriate so as to ensure the best achievable value for money for the PE. Based on that, the World Bank (2014) has provided some of the general and specific terms and conditions that should be included in the procurement contract. These include currency, price adjustment, bid and performance securities, conflict of interest, professional liability, staff substitution, applicable law and dispute settlement. On the other side the International Federation of Consulting Engineers (FIDIC) has provided some of the general and specific terms and conditions of the contract for works which include applicable law, technical specifications, standards, patent rights, performance security, payment, delivery/completion date, defect liability period, insurance. inspections and tests, contract amendments, subcontracts, delays in the performance, liquidated damages, disputes resolutions, settlement of variations and claims, contract termination and force majeure (Köksal, 2011).

Hence, it is important to formulate the contract that meet the required standards and at the end, adherence to the agreed terms of the contract will result in optimal contract performance, achievement of value for money, timely completion of works and cost effectiveness (Ministry of Finance, 2011). Nonetheless, as pointed earlier the PE has the responsibility of monitoring the contract performance against the statement of requirements or schedule of works as stated in the contract. Therefore, the implementation of the agreed terms and

conditions in the contract is crucial to ensure the achievement of value for money.

Contract Management Activities and Implementation

The implementation of the contract requires Procuring Entities to focus on ensuring that the contract is completed on time, quality is satisfactory, risks are minimised and cost are minimum. In return this demands ethical conducts and professional practices in order to ensure all contract activities are performed to the expected standard by both parties. The practices of contracts management consists of a range of activities that are carried out together to keep the arrangement between customer and provider running smoothly.

These include delivery management, contract administration and relationship management. *Delivery management* ensures that whatever is ordered is then delivered to the required level of quality and performance as stated in the contract; *contract administration* handles the formal governance of the contract and any permitted changes to documentation during the life of the contract while *relationship management* keeps the relationship between the two parties professional, open and constructive, with the aim of resolving or easing tensions and identifying potential problems at an early stage, while also identifying opportunities for improvement (Office of Government Commerce, 2002). The three activities must be managed successfully and should not be separated from each other, but rather form an integrated approach throughout.

Effective Contract Management Practices

Successful and efficient contract management practices are those that meet the needs of the company's stakeholders, achieve optimum conditions and value in regard to the allocation of scarce tax payers resources (best value for money), ensure rational and efficient of funds available, stimulate valuable competition and manage the risk and potential liabilities to the buyer thus improving service delivery (Oluka & Basheka, 2012). Thus enforcement of existing regulatory measures must be enforced to avoid pitfalls of inefficient contract management process and eventual poor service delivery. The people in charge of the contracts need to play an important and meaningful role in ensuring that the company's contractual goals are fully achieved at the minimum cost possible.

The supervisors (contract managers) should be knowledgeable in contract management. Organisations must, therefore, assign experienced staff to supervise the consultant and contractors. This should be accompanied by proper record keeping (*i bid*). The public procurement regulatory framework dictates that contracts must be drawn carefully involving all stakeholders for completeness to avoid as unnecessary deviations. Therefore, key responsibility centres, as they relate to different procurement processes must be established. Minahan (2007) observes that it is possible to design contracts that are robust enough to profitably continue operations in the face of expected deviations and unexpected disruptions and quickly recover from disasters.

In the Common Market for Eastern and Southern African (COMESA) Trainers of Trainers Workshop held in Addis Ababa, Ethiopia from 25th July-5th August 2010, participants identified key five determinant practices that can influence contract management, as shown in Table 1.

TABLE 1
Practitioners' opinions on the determinants of successful Contract
Management

Determinants	Indicators
Putting in place	Identifying and defining processes and a clear
structure and	contract management plan, with a focus on
resources	outputs and milestones to performance
Ensuring the right people are in place	The contract manager has a detailed knowledge of the contract
Clear roles and responsibilities	Clearly defining the responsibilities of the contract manager and the contractor supplier in a contract
Feedback and communications mechanisms	Regular and routine feedback is given to suppliers on their performance; Users understand what the contract is intended to deliver
Payment and	Ensuring payments are made to the supplier in line
incentives	with the contract
Managing risks	Identifying and anticipating risk such as service failure, reputation as, damage and additional costs

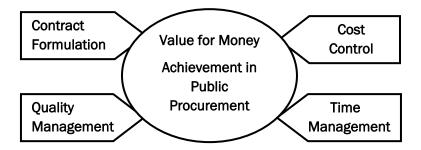
Source: Oluka and Basheka (2012).

Rendon (2010) further outlines critical success factors for both project and contract management as being qualified workforce, clear processes, relationships, resources, leadership and policies all of which have an direct impact on an organization's project management and contract management processes as well as resulting outcomes. Based on the aforementioned practices, the study focused on the contract management practices of managing quality, cost control, time management and performance guarantee in the contract implementation phase.

Conceptual Framework

The conceptual framework (Figure 1) depicts the causal relationship of the variables and the proposition of the study that procurement contract formulation, quality management, cost control and time management are independent variables while the achievement of value for money in public procurement is a dependent variable.

FIGURE 1 Conceptual Framework



Procurement contracts must be adequately formulated to contain more than the minimum required terms and conditions that will provide guidance during contract implementation in order to guarantee the achievement of value for money. The terms depend on the nature of the items to be procured and the complexity of the contract at the time of its implementation. Also, on the other side the contract management practices of managing quality, cost control and

time management have a high contribution on the achievement of value for money through ensuring that there is efficiency, effectiveness and economy during contract implementation.

According to International Trade Centre (2000), procurement contract costs are effectively controlled through the use of contract budget. The PE has got the responsibility of ensuring that the costs are properly controlled and managed in accordance with an agreed budget. Any signs of cost escalations should be dealt with as early as possible before affecting performance and value for money. Furthermore, quality is managed through using the contract quality plan, a prime document spelling out how the quality performance and objectives will be achieved. It provides details on how the quality function is organised, and who are the responsible individuals and the quality control checks (e.g., inspection and testing).

The management of time is effectively done through the use of contract schedule that indicates activities and their completion date. The schedule allows the organisation to identify any slippage or failure to timely completion. The schedule should be developed basing on reasonable understanding of what is involved and how long it will realistically take. Therefore, in order to achieve value for money the contracts should be properly formulated and during contract implementation the focus of the PE should be on efficient/effective monitoring and management costs, time, quality and risks which have an impact on the achievement of value for money.

The Research Problem

Value for money is the core principle underpinning public procurement activities including contract management by ensuring non-discrimination in procurement and using competitive process that promotes the use of resource in an efficient and effective manner to guarantee achievement of value for money (Mlinga, 2007). On the contrary, the pursuit for value for money in public spending remains to be a big challenge to government institutions across most countries. Shortage of appropriate procurement skills, incompetent public procurement staff and rigid rules regulating public procurement systems complicate the challenge and render the achievement of value for money a distant goal (Mamiro, 2010).

In order to have effective contracts management and ensure value for money in public procurement, the government through the PPA 2004 has put down provisions such as Regulation 121 and 123 of GN 97 requiring each PE to initiate steps to correct deviations from contract conditions and ensure that the responsibilities imposed by the contract are fully discharged. Despite these explicit requirements in the provisions, Public Procurement Regulatory Authority (PPRA) admits that many PEs are not managing their contracts properly and for many the procurement process virtually "ends" upon award of contract. According to Mamiro (2010) a lot of good efforts are spent up to the point of selection of contractor without further questioning whether what is being delivered is actually what is being paid for.

Taking the case of procurement audits conducted by PPRA in 2009, it was attested that procurement contracts in 33% of the audited procurements (in 30 PEs) were not implemented as per the terms of the contract. Poor contracts management was contributed by inadequate human and financial resources, weak contract terms, poor supervision and quality control, inadequate contracts management skills and corruption (PPRA, 2009). Also, the CAG report (2012) for the financial year 2010/2011 revealed that procurements amounting Tshs. 3,115,507,827/= (equivalent to 1,832,652 USD) were misappropriated as a result of weaknesses in contracting and contract management practices which in return hindered the achievement of value for money in such public procurement contracts. Therefore, basing on the observed poor contact performances, contract management malpractices and legal incompliance the study aimed at assessing the contribution of contracts management practices towards achieving value for money in public procurement.

METHODOLOGY

Case study research design was used to undertake the study where multiple cases were selected including Public Institutions in Moshi Municipality that engage in the procurement of goods, works and services as required by the Public Procurement Act of 2004. The design involved intensive analysis of the phenomenon in its natural habit, in such a way that the mutual relationship of relevant factors remains intact (Yin, 2003). Moshi Municipality is the Kilimanjaro Regional Headquarters covering about 50sq Kilometres located

under the Southern slopes of Mt. Kilimanjaro which lies approximately 3°18 south of Equator and 37°20 east of Greenwich.

Purposive sampling technique was used to pick a sample of 48 procurement practitioners (out of 60 practitioners in the selected PE) procurement experts, members of Procurement Management Unit and Tender Boards, Legal Officers and members of Contract Management Committees. Multiple approaches including questionnaire (distributed to all 48 practitioners), interviews (with 10 key informants among the 48 practitioners in order to get more information) and documentary review were used to gather both primary and secondary data which enabled the researcher to do cross-data validity checks. Data were analysed through applying qualitative techniques that involved the use of interpretive and reflexive approaches while quantitative techniques involved utilisation of descriptive statistics as a tool for data analysis.

FINDINGS AND DISCUSSIONS

Procurement Contracts Formulation

Effective contract implementation starts with having professionally procurement drafted contract that contains more than the minimum required terms and conditions. Findings depicted in Table 2 show that 72.9% of the respondents reported that procurement contracts are sufficiently formulated while 16.7% reported that contracts are moderately formulated and 10.4% pointed out that contracts are not sufficiently formulated due to presence of contract delays and substandard products in some contracts.

A review of procurement contracts at Procurement Management Unit Offices revealed that contracts are sufficiently formulated

TABLE 2
Coverage of formulated Contracts (n=48)

	Attributes	Frequency	Percent	Cumulative Percent
Valid	Sufficient	35	72.9	72.9
	Moderate	8	16.7	89.6
	Insufficient	5	10.4	100.0
Total		48	100.00	

because they contained more than the required minimum necessary contract information. Some of the terms/conditions contained in the contracts for goods, works and services included specification, terms of reference, drawings, time plan, delivery schedule, liquidated damages, defect liability period, performance guarantee, inspection, rejection of goods, works or services, payment terms, Bill of Quantity and termination. The observed contract terms and conditions (in the reviewed contracts for procurement of goods, works and services) serve as a reminder of the duties/responsibilities and measures to be taken by the PEs in case the supplier, service provider, contractor breaches the contract.

However, during the interview some respondents pointed out that the aforementioned terms and conditions need more backup in terms of monitoring and supervision in order to guarantee the expected results such as timely delivery, risk management, cost minimisation and quality delivery. The findings are in line with the findings of Mshana (2007) who argues that ongoing and post contract award activities have to be closely monitored and controlled to enhance procurement contract management. On the other side, this helps the PEs to avoid problems associated with adverse selection, information asymmetry and elements of ex-post opportunism as put forward by the assumptions of TCA theory.

Contracts Management Practices during Contract Implementation Performance Guarantee Practices

Contracts documents reviewed showed that successfully evaluated and appointed suppliers, service providers and contractors submitted the performance security/guarantee as required in the contract and the PPA 2004 in the form of bank checks or insurance bond. The requirement for submission of performance security/guarantee by PEs was done in order to protect themselves against poor performance practices during contract implementation. This is also supported by the TCA theory assumptions that PEs should protect themselves against *uncertainty* and *opportunism* including *moral hazard* (Bartle, 2002) in case suppliers or service providers fail to perform as expected.

The surveyed PEs provided evidence to show that in all major and expensive contracts suppliers, service providers and contractors

submitted performance guarantees and those who failed to do so were not allowed to start contract implementation until submission. Upon contract implementation, performance and quality inspections were carried out and those who performed to the required performance standard were given delivery note or certificates of completion and performance bonds were returned to the respective suppliers, service providers or contractors. Contract records at the Procurement Management Unit and Accounts Offices provided evidence that performance bond were returned to the suppliers, service providers or contractors as required by the contract terms and regulation 123(7) of GN 97 in the PPA 2004.

Quality Management Practices

As per PPA 2004 provisions, quality is normally defined in several contracts terms including technical specification for goods, terms of reference for services and drawings and Bill of Quantity for procurement of works. Hence, the study wanted to determine how effectively these terms were followed. Findings (Table 3) indicate that 62% of respondents agreed and 8.3% strongly agreed that completed contracts conformed to the quality standards as specified. Respondents reported that as users of the goods, works and services procured are satisfied with the quality because of conformance to technical specification, quality standards and terms of reference. The conformance has been achieved due to presence of better contract management practices including quality inspections, appointment of contract management teams, use of quality consultants and other external experts for quality control purposes. Data from consultant inspection reports and site visit reports confirm that progress was evaluated and in case of variations, recommendations were made to the respective authorities (tender board and accounting officer) for assessment and decision making.

On the other side, 12.5% of the respondents had neutral opinion because they were not fully aware of the proceeding to provide a full judgement while 14.6% disagreed that completed contracts for works conforms to quality standards because presence of substandard goods and completed works with signs of defects such as malfunctioning electrical devices and leaking roofs. The study went

TABLE 3
Completed with Quality * Value for Money Guarantee (n=48)

Attributes	Perceptions	Contracts Guarantee				
		Value for Money				
Contracts		Low	High	Very	Total	%
completed				High		
with	Strongly Disagree	1	0	0	1	2.08
Quality	Disagree	4	3	0	7	14.58
	Neutral	1	3	2	6	12.5
	Agree	6	16	8	30	62.5
	Strongly Agree	0	2	2	4	8.33
Total		12	24	12	48	100

further to determine the relationship as to whether contracts completed with quality guaranteed the achievement of value for money through using cross-tabulation technique.

Respondents who agreed that contracts for works are completed with quality also indicated that quality completion has a very high (8 respondents) and high (16 respondents) contribution to the achievement of value for money as the contracts were properly implemented in terms of quality dimensions as consultants were hired and contract management teams were appointed to supervise and ensure quality conformance. Hence, this depicts a positive relationship between quality completion of the contract and achievement of value for money. This supports the observation of Mamiro (2010) who argued that proper supervision of contract implementation ensures that what is being delivered is actually what is being paid for (i.e, value for the money).

Time Management Practices

Basing on the reviewed contracts the terms related to time included delivery schedule, service and work plan that indicated beginning and completion date, time extensions, liquidated damages and defect liability period. It was realised that time extensions were granted in some contracts (20%) because the time indicated seemed not to be adequate to allow proper delivery due to underestimation caused by poor planning, negligence and transportation problems. As a result some contracts were delayed and unfortunately there was no

evidence of the liquidated damages charged for delayed goods, works and services. The As a result contractors through consultation with consultant claimed for time extensions through time extension order.

Nonetheless, in some contracts time extension were granted basing on sufficient justification/evidence as provided by the suppliers, service providers and contractor which were also supported by the technical units and consultants. In such a case CEO of the PEs were in a position to grant time extensions as required by Regulation 118 (1) of GN 97 which states that "time extension order may be issued only by the Accounting Officer provided that reasons for granting time extension orders must be fully documented in the procurement records". Other contracts had better time management practices that include monitoring, expediting and close follow ups made by contract management teams, consultants and contract managers. The practices ensured that contracts were completed on time whereby goods, services and works were delivered/completed as expected.

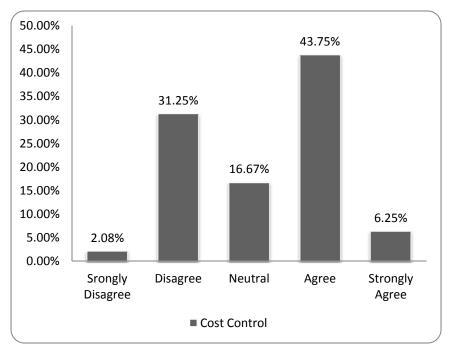
Cost Control Practices

Cost control is an important function during contract management in order to ensure that activities are performed within the established contract budget. Findings showed that practices of cost control in the surveyed PEs focused on price negotiation, budget control, cost documenting and monitoring. To determine as to whether costs were controlled and contracts finished within budgets respondents gave their views and as presented in Figure 2.

Statistics shows that 43.75% agreed and 6.25% strongly agreed that completed contracts were within the contract budget because effective cost control practices by the PEs. Contract management teams and consultants were mandated with the task of monitoring costs so that suppliers, service providers and contractors may not escalate prices unnecessarily or claim additional payments unreasonably.

Nonetheless, a review of contract records at the revealed that cost escalations due to presence of additional requirements and change of specifications were adequately reviewed by the consultants, tender boards and auditors to determine if they are





realistic compared to the budgeted amount. This enabled decision makers such as the tender boards and CEOs to make rational decisions free from *opportunism*, *information asymmetry* and *bounded rationality* as argued by Bartle (2002).

On the other side 31.25% of respondents disagreed on the assumption that cost control practices have resulted into contracts to be completed within the budget because some contract in the procurement of goods and construction have been delayed to be completed which increased contract transaction costs. Also, it is due to price fluctuation in the supply market that makes contract budgets to escalate from time to time as a result of providing additional payments to suppliers, service providers and contractors. Hence, cost control practices need to be improved to avoid overspending of funds.

Contract Management Practices and the Achievement of Value for Money

Based on the identified practices of time management, cost control and quality management the study went further to find out if contract management proceedings are effective or sufficient and contribute to the achievement of value for money. Hence, respondents were required to point out their observation on the above identified aspect and their observations shows 77% agreed that contract management practices are sufficient to guarantee the achievement of value for money while 23% had contrary observations that the proceedings are not enough to guarantee value for money.

Those who agreed during the interview said that contract management practices are effective because they have deep roots from the preliminary procurement proceedings where suppliers, service providers and contractors were selected. This was also supported by the secondary data from the reviewed contract files at the procurement offices which indicated that all contracts had proper procurement proceedings from tender advertisement, submission, evaluation, award and contract signing. Supervisory organs (i.e PMU, Tender Board, Consultants and Accounting Officer) played their roles as required by the PPA 2004 Section 38 without intervening each others' functions. Hence, preparation of sufficient technical specifications, selection and awarding the contract to competent suppliers, service providers and contractors provided a foundation for performing contract management effectively as little supervision efforts would be required.

Time management practices ensured that delivery progress was tracked and there was close follow up to ensure that goods, services or works are delivered on time as agreed and expected by both parties though there were delays and time extensions. Cost control practices involved the use of transparent and accountable mechanism that ensured costs are properly monitored and payments are not made without proper documentation, review and approval by respective authorities. In return this contributed to the achievement of value for money through ensuring transparency, accountability and cost control. On the other side quality management practices guaranteed quality delivery to satisfy users of the goods and services procured because of conformance to technical specification, quality standards and terms of reference. The conformance led to the

achievement of value for money due to presence of better contract management practices including quality inspections, appointment of contract management teams, use of quality consultants and other external experts for quality control purposes.

Those disagreeing (23%) pointed out that the proceedings are not adequate to guarantee achievement of value for money because there has been time extension, changes in scope of works, delivery schedule and visible signs of defects on completed works such as leaking roof, malfunctioning electrical devices and substandard wall paints. All these made them to doubt the possibility of achieving value for money basing on time control and quality perspective. Generally, the contract proceedings were sufficient to guarantee the achievement of value for money regardless of some weaknesses observed for some contracts.

CONCLUSION

Contract management practices are essential in order to achieve value for money in whatever transaction done by the Procuring Entities. On average 70% of the reviewed contracts were properly formulated through constituting more than the minimum required terms and conditions followed by effective contract management practices of performance guarantee, quality management, cost control and time management during contracts implementation. Procuring Entities managed to protect themselves from opportunism, moral hazards, frauds and information asymmetry as a result of having competent contract management teams, consultants and experts who ensured that contract management practices are in line with required and expected performance standards.

This in return provided the basis for achieving value for money through managing quality, time, costs and risks prevention. However, few contracts did not qualify for value for money achievement due to failure to be completed on time and inadequate quality of the finished work, delivered goods and services provided.

Based on the above, therefore, it is concluded that the surveyed Procuring Entities have been able to achieve value for money in procurement contracts for goods, works and services as a result of having effective contract management practices. Finally, it is recommended that, the identified signs of ineffectiveness and poor

performance should not be ignored as they will affect the future efforts with regard to value for money achievement.

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REFERENCES

- Australian National Audit Office, Department of Finance and Administration (2001). *Contract Management: Better Practice Guide*. Canberra, Australia: Australian Government Printing Office.
- Bartle, J. R. (2001). "A Transaction Cost Model of State Government." Paper Presented at the Annual Conference of the Association for Budgeting and Financial Management, Washington, DC. [Online]. Available at www.abfm.org/pdf_2001_conf/bartle.pdf. [Retrieved September 28, 2012].
- Controller and Auditor General (CAG) (2012). Annual General Report of the Controller and Auditor General on the Financial Statements of the Central Government for the year ended June, 30th 2011, Dar es Salaam, Tanzania: Author.
- International Trade Centre (2000). Module 9: Managing the Supply Contract. International Purchasing and Supply Management, Modular Learning System Workbook. London, UK: ITC & CIPS.
- Köksal, J. T. (2011). "FIDIC conditions of Contract as a model for an International Construction Contract." *International Journal of Humanities and Social Science*, 1 (8): 140-157.
- Mamiro, R. G. (2010). Value for Money: The Limping Pillar in Public Procurement-Experience from Tanzania. Paper Presented at the 4th International Public Procurement Conference, August 16-18, 2010, Seoul, South Korea. [Online]. Available at www.ippa.org/ippc4_proceedings1.html. [Retrieved September 26, 2012].

Migai, A., (2005). Development Partners and Governance of Public Procurement in Kenya: Enhancing Democracy in the Administration of Aid. New York: NYU School of Law.

- Minahan, T. (2007). "Get Real: The Secret to Supply Risk Management." *Journal of Business Logistics*, 21 (2): 1-16.
- Mlinga, R.S., (2007). *Tanzanian Policy Framework towards Achieving Value for Money in Procurement*. [Online]. Available at www.ppra.go.tz/papers. [Retrieved December 12, 2014].
- Mshana, J. (2007): An Assessment of the Effectiveness of Procurement Contract Management, a case study of Ngorongoro Conservation Area Authority. Unpublished Dissertation, Mzumbe University Dar es Salaam.
- Office of Government Commerce (2002). Principles for Service Contracts: Contracts Management Guidelines. London, UK: Author. [Online]. Available online at www.ifad.org/operations/finance/procurement/contract_management.pdf. [Retrieved December 12, 2014].
- Oluka, P. N., & Basheka, B. C. (2012). "Determinants and Constraints to Effective Procurement Contract Management in Uganda: A Practitioner's Perspective." Paper Presented at the 5th International Public Procurement Conference, August 18-20, 2012, Seattle, US. [Online]. Available at www.ippa.org/IPPC5/Proceedings/Part4/PAPER4-1.pdf. [Retrieved June 18, 2014].
- Public Procurement Regulatory Authority (2009). *Procurement Audit Report for 30 Procuring Entities*. http://www.ppra.go.tz [Retrieved September 28, 2012].
- Rendon, R. G. (2008). "Procurement Process Maturity: Key to Performance Measurement." *Journal of Public Procurement*, 8 (2): 200-214.
- Rindfleisch, A., & Heide, J.B. (1997, October). "Transaction Cost Analysis: Past, Present and Future Applications." *Journal of Marketing*, 61 (5): 30-54.
- Trepte, P. (2011). Public Procurement Contract Management. SIGMA
- United Republic of Tanzania (2004). Public Procurement Act Number 21 of 2004. Dar es Salaam, Tanzania: Government Printers.

- Ministry of Finance and Economic Affairs, United Republic of Tanzania (2012). *The National Public Procurement Policy*. Dar es Salaam, Tanzania: Government Printers.
- World Bank (2014). *Types of Contracts and Important Provisions*. [Online]. Available at http://go.worldbank.org/2GM7RPO200. [Retrieved May 20, 2014].
- Yin, R. K. (2003). Case Study Research: Design and Methods (3rd ed.). Thousand Oaks, CA: Sage Publication Inc.

COMPLEX PRODUCTS AND COMPREHENSIVE SERVICE AGREEMENTS: A CASE STUDY OF OUTSOURCING IN CONTRACT CITIES

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ABSTRACT. This study investigates how outsourcing multiple public functions in a single contract increases the complexity of the services rendered under the agreement. We hypothesize that product complexity arises in these bundled service agreements due to several factors including diseconomies of scope, the "lock-in" problem, and communications problems between the contractor, the government and the public. We investigate these questions using a textual analysis research methodology to examine the initial contract documents that formalized an agreement between the City of Sandy Springs Georgia and the firm CH2M Hill. The results of this qualitative study identified several ways that different combinations of functions increased product complexity. It also revealed ways the contracts were designed to mitigate the risks of outsourcing multiple functions in a single contract.

INTRODUCTION

This study examines the impact of outsourcing multiple services in a single contract agreement. We investigate whether the combination of multiple functions increases the complexity of the outsourced activities. Complexity is defined as uncertainty with respect to the cost, quality and quantity of the products to be delivered under the contract (Bajari & Tadelis, 2001). Product complexity is a problem for contract administration because it makes it difficult to establish the terms of a service agreement and it can provide incentives for both parties to the agreement to act self-interestedly at the other party's expense (Brown et al., 2009). This

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self-interested behavior creates risks that threaten the public good. Our research objective is to identify how combining multiple functions in a single contract can increase product complexity and determine how contract elements impact the risks associated with this form of product complexity.

Developing an understanding of bundled service agreements is important to the study of public procurement because it is an increasingly common approach to outsourcing. Firms offering a set of services can offer economies of scale, meaning a reduction in average costs as the level of service delivery increases. At the extreme, several cities have adopted a "contract city" model of governance in which all public functions are outsourced to one or two private partners and only and handful of public employees remain on the city staff. Although these contract cities have received some attention in the literature (see Bradbury & Waechter, 2009; Ni, 2010), there remain many unanswered questions about what risks this new model of government poses to the public and whether public officials are designing contracts that can adequately mitigate those risks. Local governments that outsource to a lesser extent should also be aware of any risks associated with bundled service agreements.

We develop a principal-agent framework to analyze the interaction between the public good and the risks associated with product complexity. Within this framework, the principals are the governments interested in outsourcing services and the agents are the firms hired to deliver those services. Before an agreement is signed, both parties negotiate the terms of a contract in order to mitigate risk and protect the public good. The agent is also assumed to pursue terms that allow it to maximize its long-term profits. The public good is conceptualized according to Cooper's (2003) model of public outsourcing. The risks of outsourcing through bundled services contracts are identified in the contracting literature. Most prominent are the "lock-in risk" and the concept of "diseconomies of scope" (Bajari & Tadelis, 1999; Brown, Potoski & Van Slyke, 2009; Rawley & Simcoe, 2010). Also, we argue that some risks associated with single service contracts, such as those associated with the termination of a contract or with the distance between the service consumers and government officials, can be heightened in a bundled service context.

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We use this framework to analyze one particular contract document that is an extreme case of outsourcing multiple functions in a single agreement. The city of Sandy Springs, Georgia adopted the contract city model at the time of its incorporation in 2006. At that time, it outsourced the majority of municipal services, the primary exception being public safety,¹ to a single private firm. The city manager was the only public employee at the time. The contracts between the city and its private partner are subjected to a textual analysis. This analysis identifies several ways in which outsourcing multiple functions to a single firm creates new challenges for contract administration that would not be present if functions were distributed across multiple firms. The textual analysis also identifies contract elements that mitigate the product complexity risks created by the combination of outsourced functions.

THERORETICAL FRAMEWORK

In this section, we explain why combining multiple functions in a single outsourcing contract can create new risks for a public entity. Our theoretical framework applies the standard assumptions of the principal-agent model. Local officials decide to outsource services when they expect external production provides net benefits to the public. They recognize, however that there are risks associated with outsourcing and that the contract must be designed to protect against uncertainty. Private firms seek to maximize their long-run profits and therefore will accept contracts and seek to meet the agreed upon terms so that at a future date the contract will be renewed. These firms may have opportunities to increase short-run profits by acting at the principal's expense because the officials have limited information regarding the costs of service production and the level of effort exerted by the agent. The contract is designed to reduce problems created by this information problem. As put by Gary Miller (1993, 2), "The principal's job is to anticipate the rational responses of agents and to design a set of incentives such that the agents find it in their own interests (given the incentive system) to take the best possible set of actions (from the principal's perspective)." A well designed contract will align the agent's objective of maximizing long-term profits with the principal's desire for service delivery.

The framework we develop to evaluate comprehensive service agreements mediates two factors in contract design: the public good and risk from product complexity. The first is based on Cooper's (2003) criteria for assessing how contract elements influence the public good. The second encompasses the risks and uncertainties that complex products create. Between the two nodes is an action space where principals and agents negotiate and design contract agreements. Figure 1 depicts this dynamic. The following discussion describes each element in greater detail.

The Public Good

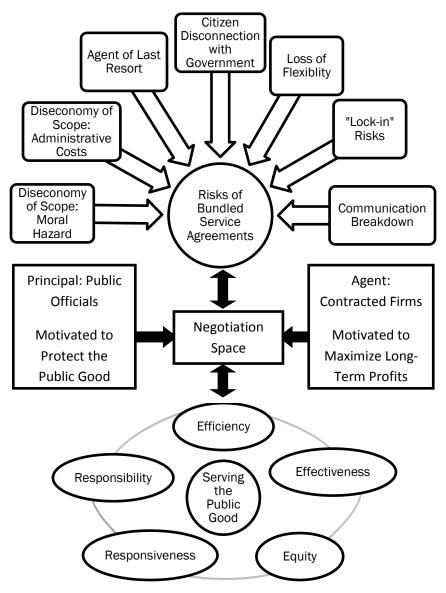
Local officials must balance multiple objectives as they seek to provide public services. Cooper (2003) identifies five evaluative criteria for public service contracts. These are: 1) efficiency 2) equity, 3) effectiveness 4) responsiveness and 5) responsibility. These criteria can be used collectively to evaluate whether an instance of outsourcing is in service of the public good. Officials are interested in developing contracts that exhibit each of these characteristics because they provide them with protections against the risks associated with external service production. There are tradeoffs between these goals, however. For example, an increase in responsiveness to citizen preferences by doing trash pick-up only at certain times of day may increase costs and reduce overall efficiency. Each locality must determine its own balance among competing criteria.

Efficiency is pursued by reducing the cost of producing a given level of output. The underlying premises of the New Public Management doctrine is that private firms are able to operate at a lower cost and a higher level of productivity than the public sector. These cost savings can come from several sources. Overhead costs per unit of services may be smaller in a larger operation that spans multiple cities. For example, a trash collection firm servicing multiple cities may be able to use a more capital-intensive production process that is cheaper, but not economical for individual cities.

The principle of equity has both ethical and legal implications for local government service provision. Many public social services target vulnerable groups such low income households. Cooper describes limiting eligibility for services funded by taxpayers "deliberately

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FIGURE 1
Conceptual Framework



unequal treatment in the interests of justice" (p. 6). Public officials outsourcing social services have an interest in ensuring their private partners are able to reach and provide adequate services to the

Service delivery is effective when it has its intended impact on social outcomes. The now common use of performance measures that are spelled out directly within public service contracts is a direct response to local officials' need to ensure that their goals are being addressed.

Responsiveness is another important criterion for localities that have outsourced services. Local conditions and service needs can change over time and it is necessary that both parties to a given contract can come together to discuss adjustments to the agreement. Is the agent able to provide services with the speed and flexibility needed to meet the public's needs?

Responsibility has both a legal and political dimension. Every contract must address the limits of legal responsibility for any actions taken by either party. Cities must protect themselves from the actions taken by their contracted agents. Similarly, private firms are going to require certain protections from legal liability as they provide services to the population. Both must ensure that all activities comply with state and local laws. The balance of liability between both partners is an important criterion for how a given contract protects the public interest. The political responsibility for the provision of public services will remain with public officials even when the production of services is performed by contracted agent.

Risks of Complex Products

There are many potential risks for both the buyers and the sellers of complex products. One of the primary concerns is the "lock-in" problem. First identified by Williamson (1996), the lock-in problem arises when the resources and investments used by the agent to provide services are customized to the buyer's specifications and therefore cannot be easily shifted to other customers. Once the contract has been signed and the initial investments have been made, the agent would face significant losses if the agreement were terminated because it cannot shift resources to another contract. This gives the buyer the opportunity to request additional services at no additional cost lest the agreement be terminated. Additionally, the seller obtains an advantage because no other firms have made the

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initial investments and they therefore face diminished competition should the contract be rebid. The lock-in problem gives both the principal and the agent opportunities act in each other's expense and harm the public good.

Brown, Potoski and Van Slyke (2009) explored the lock-in problem and complex products in a case study of the US Coast Guard's procurement of systems and equipment for the "Deepwater" program. The authors model the strategic interaction between principal and agent as a type of "prisoner's dilemma problem", in which two actors must decide whether to cooperate with each other or act self-interestedly. Although both would be better off if they cooperated, the uncertainty they face and the potential advantage they could obtain if they act at the other actor's expense leads both to make the selfish choice and results in the worst possible outcome. The authors found that the complexity of the services specified in the contract and the uncertainty regarding the costs of providing them resulted behavior that closely fits the predictions of a prisoner's dilemma model and explains the poor performance of the Deepwater program.

An issue related to the lock-in problem is whether the market for a given product is "thin", meaning that there are so few providers that there is little competition for a contract. For buyers of complex products, this is a significant concern because there may not be many firms that are able to meet the buyer's specifications. In the context of bundled service agreements, a broad scope of services combined in a single contract limits the number of firms that can provide all of the elements. Unless multiple firms can group together in either a collaborative or hierarchical sub-contractor arrangement, the supply of the services will not be competitive and the agent will be able to increase the price of services.

Also associated with the lock-in problem is the risk of an inflexible service arrangement. If the asset specific investments make it difficult to change the nature of public services provided. Local governments are subject to changes in voter preferences for services and must also respond to unforeseen events that require immediate responses. At a smaller scale of outsourcing, it may be easier to simply replace a service provider with another vendor that offers a better match for services. Comprehensive service contracts are not

easily replaced, however, and therefore may heighten the risk of inflexible service agreements.

When environmental conditions change and new services are required, governments reliant on comprehensive service contracts may use their primary contractor as an "agent of last resort". The lack of internal service delivery capacity means that new services will require new external service delivery arrangements. When there is an explicit expectation that the primary contractor will provide these new functions, then it is the agent of last resort. Possible scenarios are failures in infrastructure due to inclement weather, or the failure of a separate contractor providing other services to the locality. The unknown nature and cost of these potential services introduces complexity to the contractual agreement.

Another set of risks are generated from the mix of products combined in the contract. As the agent becomes responsible for a more diverse set of activities, the costs of administering the contract can increase. The term "diseconomies of scope" (Panzar and Willig, 1981) describes the increases to the cost of production due to a larger set of functions undertaken by a single entity. In their analysis of the impact of corporate diversification on scope diseconomies, Rawley and Simcoe (2010) identified various sources for these costs. First, firms that have diversified their activities may experience greater monitoring costs due to cognitive limitations (Schoar, 2002) and incomplete information (Hölmstrom, 1979). One large firm that only provides a single simple service would be expected to have lower administrative costs than a similarly sized firm that performs multiple unrelated tasks. Managerial expertise used in monitoring productivity and efficiency may not transfer across tasks and therefore requires additional overhead as the number of different functions increases. These risks are identified on Figure 1 as administrative costs associated with diseconomies of scope.

Second, problems associated with "moral hazard" can arise as the combination of activities creates opportunities for the agent to strategically act in its own interest. In a public service contract setting, this refers to changes to the service provider's incentives after the contract has been signed that encourage them to act at the expense of the public good (Baumol, 1984). For example, the function of tax collection is a problematic target for outsourcing because the agent has the incentive to underreport their collections,

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therefore requiring the principal to engage in costly monitoring of the agent's behavior.² Private collectors may also pursue revenues more aggressively than public workers, at significant political cost (Montgomery, 2014). Anywhere that a conflict of interest arises because of the functions bundled in a single contract requires the principal to monitor the agent's behavior and ensure that the services are rendered with the same degree of effort and honesty that would have occurred if they were provided individually by separate firms.

There are other related risks associated with diseconomies of scope that are not found in the corporate context, but are a concern for local governments. First of these is the connection between the government and the citizens it serves. As the public has more interactions with contracted agents, there may be an increased risk of public officials becoming distanced from the citizens. Milward and Provan argue that "the delegation of authority to nongovernmental agents can lead to potential loss of legitimacy of government action accomplished at arm's length" (Milward & Provan, 2000, p. 363). In the contract city environment, the city manager may be the only public worker that citizens encounter that is not a contracted employee.

Another potential risk associated with outsourcing at this scale is that it requires strong interpersonal relationships that foster trust and communication. Interpersonal relationships have been viewed as a crucial part of contracting relationships for the last two decades (see Davis-Blake and Broshack (2009) for a review). A breakdown in these relationships can contribute to the termination of the contract agreement (Uzzi, 1997, p. 1996). For contract cities, the relationship between the city manager and the primary service provider is a particularly crucial relationship because if it sours there are consequences for the delivery of much greater scope of services. This is a risk that is present for all types of outsourcing, but it is heightened with a greater degree of scope because localities can't diversify the risk by having relationships with multiple contractors. If there are only one or two contractors, then there is more at stake if those relationships break down.

Contract Design

Within the framework depicted in Figure 1, both the principal and the agent are expected to anticipate some or all of the risks discussed above associated with bundled service agreements. Both parties are interested in mitigating these risks in order to obtain an agreement that will allow them to pursue their own objectives within the principal-agent framework. Risk is reduced through contract structures that clarify expectations and responsibilities for all participants. The central action space at the center of Figure 1 is the arena in which the specific elements of the contract are negotiated and agreed upon.

There are several ways that individual contract elements can mitigate risk. Three categories of contract structures are those dealing with 1) production and delivery of services 2) communication between principal and agent and 3) changes to the agreement. The first category is the broadest as it includes all contract elements that describe the nature of service production and delivery. It covers compensation awarded for adequate performance and would also include performance measures and agreements on cost controls. These elements mitigate risks associated with the agreement by clarifying expectations for what is to be delivered and how it is to be produced.

Second, as a principal becomes dependent on the agent for delivering services there will need to be specific contract elements that address appropriate communication between the two parties to the contract. Norms for how the principal can request changes to services would be specified in the contract. Similarly, the way that the agent represents itself to the public will also be an important part of the contract. Specific rules on how the agent will interact with citizens would be expected. We place contract elements that address any conflicts of interest within this category.

The third classification addresses the need for flexibility to deal with changes to the environment. As a government outsources an increasing share of its functions to a single partner, it reduces its capacity for in house production. In the event of unforeseen events that require public actions that are new or different than those specified in the contract, the government may be dependent on the contractor for these additional functions. Contract elements that lay out strategies for negotiating additions or subtractions from the contract as the need for services change over time. This is similar to the "cost plus" contract designs used in the construction

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management context to address the risk inclement weather increasing projects' cost and time (Bajari & Tadelis, 1999).

The objective of this study is to examine how the contract elements arising from the negotiating space address the risks that are created by combining multiple service functions in a single contract. How do the specific structures of the agreement protect the public good against the complexity created by grouping multiple services in a single contract? Are there risks that are overlooked that create vulnerabilities for either the principal or the firm? The theoretical framework developed in this section identifies provides a structure for analyzing how contracts are designed in light of government officials' interest in protecting the public good from the risks associated outsourcing services in bundled contracts. The following section describes how this framework is applied to a qualitative textual analysis methodology.

RESEARCH DESIGN

In order to examine how contract structures address the risks associated with bundled outsourcing agreements, we conduct a textual analysis case study of a pair of contract documents that governed the initial outsourcing agreement between the City of Sandy Springs, Georgia and the firm CH2M Hill. This contracting agreement was chosen for analysis because it represents a critical case for testing the theory of diseconomies of scope. Yin describes the conditions when a critical case research design may be appropriate:

The theory has specified a clear set of propositions as well as the circumstances within which the propositions are believed to be true. A single case, meeting all of the conditions for testing the theory, can confirm, challenge, or extend the theory. The single case can then be used to determine whether a theory's propositions are correct or whether some alternative set of explanations might be more relevant (Yin 2008, p. 47).

We argue that the initial contracting arrangement between Sandy Springs and CH2M Hill meets these conditions. The scope of services outsourced in the contracting agreement is extremely broad; it included all administrative and technical functions for the new city. Table 1 provides a detailed description of which functions were

outsourced to CH2M Hill, which were retained internally and those that were obtained via contract from other local governments. If diseconomies of scope ever arise due to bundled service contracts then they would at least be present in the most extensive form of

TABLE 1
Initial Service Production Methods of Sandy Springs, GA

Alternatives	Service/Function
Internal Production	- Mayor
	- City Council
	- City Manager
	- Courts
	- City Clerk
	- Clerk of Court
	- Office of City Attorney
Contract with Current	- Police (6-month contract)
Government (Fulton County)	- Fire (6-month contract)
	- E911 (6-month contract)
	-Sewer
Contract with other local	-City of Roswell, GA: Jails
governments	-City of Smyrna, GA: Enhanced Library
	Service
	- City of Atlanta, GA: Water
Private Partnerships	- Accounting
	- Finance
	- Information Technology
	- Administration
	- Human Resources
	- Administrative support of: Courts,
	Police and Fire.
	- Parks and Recreation
	- Community Development (Planning,
	Zoning and Permitting)
	- Public Works
	- Transportation
	-Solid Waste (one-year nonexclusive
	contract, evolving into franchises)

Source: Porter (2006, pp. 60, 116-118).

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municipal outsourcing – the contract city model of governance. If the potential for their existence is observed in this case, then there may be reason to search for their presence in less extensive outsourcing arrangements. If they are absent here, then it would appear to be less likely that they would be present elsewhere.

The first step of the textual analysis approach was to develop a set of codes that could be used to assign meaning to individual contract elements. Our development of codes was influenced by interview methodology (DeCuir-Gunby et al., 2011; Miles and Huberman, 1994). We used a theory-driven approach to code development that operationalized the theoretical framework discussed in the previous section into three tiers of codes. In an iterative process, the codes were developed from the framework, applied to the data and then reviewed within the context of the data. Following each review, the code definitions were adjusted and then reapplied to the data. The task of creating, applying and tracking the codes were performed using the Dedoose software package.

This iterative process developed three tiers of thematic codes that operationalize different elements of our theoretical framework. The first two tiers identify where the concepts of the public good and risks associated with bundled services are found within the contract elements. The third tier identifies specific structures within the contract that are designed to mitigate risks or protect the public good. This latter tier of codes is assigned to the intentional design elements of the contracts that were developed within the negotiation process to mitigate the risks of complex produces stemming from the bundled nature of the contract.

The Tier 1 codes are displayed in Table 2. These codes were developed directly from the five elements of the public good that we have adapted from Cooper (Cooper, 2003). Contract elements that relate to one or more aspects of the public good are applied with the corresponding codes.

Table 3 displays the Tier 2 codes that identify the risks associated with bundled service agreements. Each of the seven codes corresponds to one of the risks identified in the theoretical framework. We apply codes to elements that both directly and indirectly relate to one of these risks. Direct relationships are interpreted as single contract elements that either identifies the risk

TABLE 2
Tier 1 Thematic Codes: Expressions of Public Good

#	Code	Description	
1.1	Efficiency	Getting the most economical value for the	
		output per unit invested	
1.2	Effectiveness	Scope and quality of contracted service	
		outcome.	
1.3	Equity	Non-discrimination and ensuring programs	
		meet a variety of population needs.	
1.4	Responsiveness	Meeting constituent demands for timeliness	
		and appropriateness of services.	
1.5	Responsibility	Political and legal accountability	

or which create the risk. Indirect relationships are those that would not be generated by a single contract element alone, but arise through a combination of multiple elements of the contract. As an example of an indirect relationship, the code for a diseconomy of scope associated with moral hazard was associated with an excerpt requiring that the firm provides annual recommendations to the City on the capital program requirements for future years, and also with a separate excerpt requiring that the firm will purchase, procure and maintain these assets. This combination of functions was identified as a potential source of moral hazard because the firm has the discretion to recommend projects that will be more profitable for it to procure and administer.

TABLE 3
Tier 2 Thematic Codes: Risks to Public Good Expression

#	Code	Description	
2.1	Diseconomy of	The combination of diverse functions	
	Scope: Moral	performed by the agent gives them	
	Hazard	opportunities to strategically act at the	
		principal's expense to increase its immediate	
		profits.	
2.2	Diseconomy of	Monitoring a diverse set of functions	
	Scope:	performed by a single agent may be more	
	Administrative	complicated and costly than if they were	
	Costs	outsourced to separate entities.	

TABLE 3 (Continued)

#	Code	Description
2.3	Vendor Acting as "Agent of Last Resort"	The agent may be expected to provide additional services that are initially unclear because it is responsible for maintaining an overall continuation of services.
2.4	Risk of citizen disconnection with government - distance between citizens and their government	Contracting often places the private contractor in between citizens and their government. They can come to believe that government does nothing and everything needed is provided by the private sector. The connection between the public funding and initiation and ultimate accountability between a government and its citizens is weakened and obscured.
2.5	Risk of lack of flexibility to make changes and course corrections given contractual relationship	Environmental or political changes will require adjustments to services. Can an agent that provides a diverse set of functions adapt with the required speed?
2.6	"Lock-In" Risks	The agent knows that the market is thin and that few if any other firms could compete with it on price. Also, the principal knows the agent stands to lose its specific investments if it should lose the contract.
2.7	Risk of breakdown of relationship and communication between elected officials and contracted administration	The principal's increased dependence on its agent requires good working relationships. They are not conducive to arm's-length transactional approaches and instead, require a relational approach based upon good two-way communication, trust and flexibility.

The Tier 3 codes listed in Table 4 identify strategies that may be used to mitigate the risks associated with outsourcing multiple functions in a single contract. Individual contract elements that correlate to one of these strategies are given the appropriate code.

The codes were applied to the contract documents over the course of multiple successive readings of the text. After applying the codes, they were analyzed in order to identify patterns and connections across the codes. Our analysis focused on identifying any patterns among the coded excerpts that related to how combinations of function might influence the complexity of the overall service package. The primary tool used to identify such patterns was a code co-occurrence table that identifies instances where codes are applied in combination with each other. Review of the excerpts that received multiple codes was helpful in identifying relationships

TABLE 4
Tier 3 Thematic Codes: Ways in Which the Contract Anticipates and Responds to Risks to the Public Good

#	Code	Description
3.1	Cost control and	Direct and indirect ways in which
	management	the City retains control over cost
	strategies	issues
3.2	Service quality	How service quality is addressed
	strategies	and assured
3.3	Communication and	Direction as to when and how
	relationship strategies	communication between contractor
		and City is to occur
3.4	Citizen responsiveness	Ways in which issues of citizen
	and engagement	connection are addressed
	strategies	
3.5	Conflict of interest	These are contract responses that
	strategies	appear directed at issues of moral
		hazard
3.6	Change management	How change is anticipated and
	strategies	ways it is managed
3.7	Contract termination	How the ending of the contract is
	strategies	handled

between risks and the structures placed to mitigate risks and/or to protect elements of the public good.

The initial theoretical propositions relating to impact of combining multiple functions in a single contract were used as a lens guiding this analysis. One way this impacted the analysis of patterns among the codes was to filter out relationships that did not appear relevant to the focus of the study on bundled service contracts. For example, one of the strongest co-occurrence relationships observed in the data was between the Tier 1 codes for Effectiveness and Efficiency. Many of these excerpts dealt with requirements that services be delivered in both "competent" and "economically feasible" fashion and were applicable to outsourcing in general and did not relate to the comprehensive nature of the service agreement. Co-occurrence was used as a starting point for examining how the contract elements relate to risks to the public good, but was followed by comparison to the theoretical propositions. The following section discusses the findings that were both relevant and revealing.

An additional source of information was also used to help put the development of the contract documents into context. Oliver Porter, the Interim City Manager for the City of Sandy Springs prior to its incorporation and one of the key organizers of the incorporation effort, wrote a personal account of the process that resulted in a contract between Sandy Springs and CH2M Hill.

RESULTS

Several patterns emerged from analyzing the co-occurrence of codes across the contract documents. This section will discuss these findings and their implications for the hypotheses regarding bundled services contracts.

Diseconomies of Scope

The textual analysis revealed multiple interactions across service functions that create the potential for diseconomies of scope. These interactions increase the complexity of the product being outsourced because they either create opportunities for moral hazard or require additional monitoring functions. Both introduce uncertainty regarding the costs associated with administering the contract.

Two services included in the contract document that exemplify this type of interaction are 1) the provision of advice on investment practices,4 including the selection of an investment firm, and 2) advice on capital improvements to municipal infrastructure.⁵ This combination of functions means that the agent is acting as a matchmaker between the city and a financial services firm and at the same time providing advice on a broad range of investment policies. Although procedures for issuing municipal debt are not explicitly discussed in the contract, it is likely that the financial services firm recommended by the agent would be the same entity that would underwrite any bonds that the city would issue. This combination of functions would require an assessment of whether these services come under the jurisdiction of the Municipal Securities Rulemaking Board (MSRB) Rule G-23, covering the activities of financial advisors. The agent would likely need to register as a Municipal Adviser under this rule.

The threat of potential violations of rule G-23 has already been raised for the conventional contracting context. Tamar Frankel (2007) raised the issue that some brokers have contracted with cities to provide financial advice and then have terminated the relationship to then subsequently begin a new relationship as bond underwriter. Frankel's point that while the rule only prohibits firms from providing both types of services simultaneously, serially providing both services to skirt the rule still allows for a significant conflict of interest because the firm has developed a relationship of trust with the issuer and could potentially capitalize on this trust. On May 27, 2011 the MSRB approved amendments to rule G-23 that prohibited this practice (Municipal Securities Rulemaking Board, 2011). The extreme dependence of a contract city on its primary service provider can create a similar degree of trust that may leave the city vulnerable to a conflict of interest.

Recent changes to the Municipal Securities Rulemaking Board under the Dodd-Frank Wall Street Reform and Consumer Protection Act have expanded the MSRB's role to include the protection of state and local bond issuers. Part of the new regulations requires that "municipal advisors" register with the Securities and Exchange Commission. The MSRB's has issued statements explaining that:

Municipal advisors also include firms and individuals that solicit business from municipal entities on behalf of broker-

dealers, banks, other municipal or investment advisers to secure certain types of investment banking, financial advisory or investment advisory work with municipal entities, such as public pension funds, 529 plans, local government investment pools and other state and local governmental entities or funds. These municipal advisors are sometimes referred as consultants, third-party marketers, placement agents, solicitors or finders (MSRB, 2014).

The investment services that CH2M Hill provides to the City of Sandy Springs appear to qualify under this definition of municipal advisor. If the functions of providing investment advice, help selecting a financial services firm and providing capital improvement advice were separated across multiple firms then registration with the SEC as a formal municipal advisor would not be necessary.

The agent's responsibility for advising the city in capital improvements also interacts with the responsibility for producing those same projects. The contract agreement combines both the administrative function of providing advice on which projects to select with the public works function of procuring and maintaining those same projects. This grouping of responsibilities creates a new moral hazard risk. The firm has the ability to advise projects to its own advantage, rather than to the public's benefit. Although the contract has language that prohibits any conflict of interest, 6 monitoring the contractor's behavior to verify that this element of the contract is obeyed would require greater effort than would be necessary if the functions were separated.

This interaction between an administrative function and a public works function is typical of several other connections across functions identified through the textual analysis. There are a variety of information production activities that the agent is responsible for that create opportunities for moral hazard. The most important of these are the development and preparation of the budget, the generation of economic forecasts used in determining future needs within the municipality, and assessing for the city the cost of producing public works. By outsourcing the entire set of information production functions, the city is without internal capacity to obtain information on the true cost of services. This creates uncertainty with respect to the set of services outsourced through the agreement. The contract document is silent on the topic of how to evaluate the quality of

information produced externally when that information may be biased to increase the agent's profits in the provision of technical public works services. Even the audit process may be subject to the pressures of moral hazard because the contracted agent is responsible for recommending an auditor to the city.⁷

Maintaining transparency and ensuring proper control of public funds are important aspects of public financial management. One aspect of administering a bundled service agreement that complicates ensuring transparency and control is the movement of funds across contracted activities. The contract agreement allows the agent to move funds across agreements as long as it does not increase costs or harm service delivery.8 There is a strong justification to allow this practice – it allows for greater flexibility across changing environmental conditions. The cost, however, is that if transfers from one set of services to another are not clearly documented, it heightens the information asymmetry between the principal and the agent regarding the true cost of producing services. If the city comes to a situation where it needs to either renegotiate the agreement or rebid it entirely, this lack of information will put it at a disadvantage.

Communication Breakdown

One of the key concepts to arise through this review of the contract documents relates to the crucial role of interpersonal relationships for outsourcing at this scale. This analysis identified several ways how the scale of outsourcing in the contract city model heightened the vulnerability to the public interest if these relationships deteriorate. First, the relationship between the City Manager and the primary firm is central to the health of the contract agreement. In this arrangement, the manager is essentially the only city employee that the contractor has contact with. A communications breakdown would threaten the entire operation of the city given the scale of service delivery in this agreement. It also would threaten to impose the loss of the asset specific investments associated with the "lock in" problem.

There are several elements of the contract document that are designed to mitigate the risk of a deteriorating relationship between the city and its agent. These include explicit descriptions of how the principal and the agent to the agreement will communicate with each other and the public. For example, there is language requiring that

the agent will "foster and maintain harmonious relationships" with public officials, citizens and other contractors employed by the city. There is also a requirement that CH2M Hill implement a code of conduct for its employees that requires professional and polite conduct. These elements describe the behaviors that are undesirable for both parties to the agreement. The contract also contains procedures that the city manager can follow in order to address problems related to interpersonal relationships. Specifically, the city manager is allowed to require that individual employees of CH2M Hill be transferred out of the city. Additionally, CH2M Hill agreed to make its senior executive available to meet with the City Manager in person on an annual basis in order to discuss the status of the agreement.

These contract elements target the agent's role in maintaining interpersonal relationships, but they are silent regarding the risks associated with the position of city manager. If it is the city manager's behavior that is damaging to the relationship, there is little recourse for the agent, particularly given the prohibition on the firm contacting council members directly. Without additional contract elements to protect against this risk, firms may need to consider the individual character of the city manager they enter into business with as a factor before they commit non-transferrable assets to a city contract.

Agent of Last Resort

The scale of outsourcing in a contract city means that the principal relies heavily on the agent for the provision of additional services that arise through unforeseen circumstances. The contract documents contained multiple elements that all for the City Manager to request "additional services as may from time to time be needed at the discretion of the City." ¹³ By its very nature, this meets the definition of a "complex product". In the event of any unforeseen circumstance that requires services that go beyond normal operations, there is an explicit assumption written into the contract that the agent will be asked to provide these functions.

The contract contains rules and procedures for managing these requests, whether they are for one time assistance or for ongoing services that will be permanently added to the agreement. These structures provide the city with the ability to respond to variable circumstances. They also protect the agent from uncertain costs. By

designing procedures for handling these uncertain costs, the contract allows both parties to manage the complexity associated with the outsourced services.

Contract Termination

Given the scale of outsourcing in a contract city, termination of the service agreement has the potential to cause great disruption in the provision of public services. Several contract elements that dealt with contract termination procedures showed a code co-occurrence between the Tier 1 code for public service effectiveness. These contract elements describe strategies for reducing the disruption that would occur should the agreement end. One contract element provides the city "the absolute right to offer employment to any of the Corporation Employees" in the event that the contract is fully or even only partially terminated.14 This effectively allows the city to internalize services with a trained and experienced workforce. The city would not have to start the time intensive bidding process to find a new agent. Strategies such as this would be less important in a market where there are multiple firms providing similar services, or in cities with sufficient internal production capacity to handle the new functions.

One of the objectives of this textual analysis is to identify how contract structures can mitigate the risks associated with outsourcing multiple functions in a single contract. Allowing the transfer of human and capital resources from the agent to the firm in the event of contract termination is one of the key approaches to accomplish this.

CONCLUSION

The goal of this analysis was to identify how multiple outsourced services become more complex when they are combined into a single agreement. The theoretical framework identified several risks associated with bundled agreements that reduce the certainty regarding the nature and the cost of externally produced services. The textual analysis then identified specific features of the contract documents that illustrate how these risks materialize. The analysis also highlighted several contract structures that help to mitigate these risks and show awareness on the part of both principal and agent of the unique challenges associated with a comprehensive service agreement.

This study contributes to the literature on complex products by showing how the arrangement of the contract agreement and the distribution of functions across contracting partners matters in determining how difficult it will be to monitor and administer an outsourcing agreement. Individual service functions may be simple when they are outsourced in isolation to a single private partner, but then become complex when combined with certain other functions.

For practitioners interested in contract management, this study calls for increased attention to contractor performance when there is potential for moral hazard, particularly when information production functions are paired with administrative functions. Audits of contractor performance should include external validation of forecasts, budget proposals and economic assessments. Financial services combined with "matchmaking" services in which the agent helps the city find an underwriter for its debt should also be scrutinized in order to determine whether all parties are fully compliant and registered, if necessary, with the appropriate regulatory commissions.

These findings and conclusions come with some caveats. First, we wish to reiterate that this paper is confined to the incentives and the potential behaviors that may be spurred on by them, but in no way does it reveal any actual behavior on the part of CH2M Hill in conflict of its interest to provide services to the City of Sandy Springs. The findings and conclusions drawn from this research should be a guide to both public and private partners on how to design appropriate contract structures so as to protect both participants in Second, this study examined the initial contract agreements. contracts signed at the time of municipal incorporation before any services had been delivered and before the City of Sandy Springs had gained any direct experience with the contract city model of governance. Future research that examines a greater number of contract agreements, or looks at cities that have gained greater experience in negotiating this type of principal-agent relationship will certainly add to our understanding of bundled service agreements.

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NOTES

- 1. These functions were obtained by contract from neighboring local governments.
- Privatized tax collection can be desirable, however, if it allows the government to shift some of the risk of volatile revenue collections to the private agents. Multiple different contractual arrangements for privatized tax collection existed in France up until the late 18th century with varying degrees of success (White, 2004).
- 3. See "Agreement 1" (City of Sandy Springs, Georgia [2005], p. 1).
- 4. See "Scope of Services 1" (City of Sandy Springs, Georgia [2005], Paragraph 1.2.3).
- 5. See "Scope of Services 1" (City of Sandy Springs, Georgia [2005], Paragraph 1.2.2).
- 6. See "Agreement 1" (City of Sandy Springs, Georgia [2005], Section 17).
- 7. See "Agreement 1" (City of Sandy Springs, Georgia [2005], Paragraph 3.3).
- 8. See "Agreement 2" (City of Sandy Springs, Georgia [2005], Paragraph 2.3).
- 9. See "Agreement 2" (City of Sandy Springs, Georgia [2005], Paragraph 2.6).
- 10. See "Agreement 1" (City of Sandy Springs, Georgia [2005], Paragraph 1.2.11.2)
- 11. See "Agreement 2" (City of Sandy Springs, Georgia [2005], Paragraph 5.6).
- 12. See "Agreement 2" (City of Sandy Springs, Georgia [2005], Paragraph 2.8).
- 13. See "Agreement 2" (City of Sandy Springs, Georgia [2005], Paragraph 3.1).

14. See "Agreement 1" (City of Sandy Springs, Georgia [2005], Paragraph 14.2).

REFERENCES

- Agreement By and Between City of Sandy Springs, Georgia and CH2M Hill, Inc for Provision of Administrative, Financial Community Services, Motor Vehicle, Staffing, and Purchasing, Procurement, and Contracting Services (2005). Sandy Springs, GA: City of Sandy Springs.
- Agreement by and between City of Sandy Springs, Georgia and CH2M Hill, Inc for Provision of Services for Public Works, Transportation, Streets, Right-of-Way, Facilities, Parks and Recreation, Capital Improvements, Planning and Zoning, Inspections, Code Enforcement, Permitting, Purchasing, Procurement, and Contracting Services (2005). Sandy Springs, GA: City of Sandy Springs.
- Agreement By and Between Corporation and the City of Sandy Springs Exhibit 'A' RFP 1 Administration Scope of Services (2005). Sandy Springs, Georgia: City of Sandy Springs.
- Bajari, P., & Tadelis, S. (1999). "Procurement Contracts: Fixed Price vs. Cost Plus" (SSRN Scholarly Paper No. ID 156470). Rochester, NY: Social Science Research Network.
- Bajari, P., Tadelis, S. (2001). "Incentives versus Transaction Costs: A Theory of Procurement Contracts." *RAND Journal Economy*, 32 (3): 387 407.
- Baumol, W.J. (1984). "Toward a Theory of Public Enterprise." *Atlantic Economics Journal*, 12 (1): 13–20.
- Bradbury, M.D., & Waechter, G.D. (2009). "Extreme Outsourcing in Local Government". *Review of Public Personnel Administration*. 29 (3): 230–248.
- Brown, T.L., Potoski, M., & Van Slyke, D.M. (2009). "Contracting for Complex Products." *Journal of Public Administration Research and Theory*, 20 (1): i41–i58.
- Cooper, P.J. (2003). Governing by Contract: Challenges and Opportunities For Public Managers. CQ Press. Washington, DC

- Davis-Blake, A., Broschak, J.P. (2009). "Outsourcing and the Changing Nature of Work." Annual Review of Sociology, 35 (1): 321–340.
- DeCuir-Gunby, J.T., Marshall, P.L., & McCulloch, A.W. (2011). "Developing and Using a Codebook for the Analysis of Interview Data: An Example from a Professional Development Research Project." *Field Methods*, 23 (2): 136–155.
- Frankel, T. (2007). "Let Me Advise You on How Much to Pay Me: Subverting Fiduciary Duties and Rules." *Municipal Finance Journal*, 28 (1): 53–64.
- Hölmstrom, B. (1979). "Moral Hazard and Observability." *Bell Journal of Economics*, 10 (1): 74–91.
- Miles, M.B., & Huberman, A.M. (1994). *Qualitative Data Analysis: An Expanded Sourcebook*. Thousand Oaks, CA: Sage.
- Miller, G.J. (1993). *Managerial Dilemmas: The Political Economy of Hierarchy*. New York: Cambridge University Press.
- Milward, H.B., & Provan, K.G. (2000). "Governing the Hollow State." Journal of Public Administration Research Theory, 10 (2): 359-380
- Montgomery, L. (May 15, 2014). "Congress Moves to Turn Back Taxes over to Debt Collectors." *Washington Post.*
- MSRB (2014). *How the Market Works* [WWW Document]. URL http://www.msrb.org/Municipal-Bond-Market/How-the-Market-Works.aspx (Accessed 9.11.14).
- Municipal Securities Rulemaking Board (2011, May 31). MSRB 2011-29 Securities and Exchange Commission Approves Amendments to MSRB Rule G-23 Relating to the Activities of Financial Advisors (MSRB Not. 2011-29). [Onlime]. Available at www.msrb.org/Rules-and-Interpretations/Regulatory-Notices/2011/2011-29.aspx. (Accessed 9.7.11).
- Ni, A.Y. (2010). "Lean and Mean: An Assessment of Contract Cities." *International Journal of Organizational Theory and Behavior,* 13 (4): 408–428.
- Panzar, J.C., & Willig, R.D., 1981. "Economies of Scope." *American Economics Review*, 71: 268–272.

Porter, O. (2006). Creating the New City of Sandy Springs: The 21st Century Paradigm: Private Industry. Bloomington, IN: AuthorHouse.

- Rawley, E., & Simcoe, T.S. (2010). "Diversification, Diseconomies of Scope, and Vertical Contracting: Evidence from the Taxicab Industry." *Management Science*, 56: 1534–1550.
- Schoar, A. (2002). "Effects of Corporate Diversification on Productivity." *Journal of Finance*, 57: 2379–2403.
- Uzzi, B. (1996). "The Sources and Consequences of Embeddedness for the Economic Performance of Organizations: The Network Effect." American Sociology Review, 61: 674–698.
- Uzzi, B. (1997). "Social Structure and Competition in Interfirm Networks: The Paradox of Embeddedness." *Administrative Science Quarterly*, 42: 35–67.
- White, E.N. (2004). "From Privatized to Government-Administered Tax Collection: Tax Farming in Eighteenth-Century France." *Economics History Review*, *57*: 636–663.
- Williamson, O.E. (1996). The Mechanisms of Governance. Oxford, NY University Press.
- Yin, D.R.K. (2008). Case Study Research: Design and Methods. Thousand Oaks, CA: Sage Publications.

FIVE DILEMMAS IN PUBLIC PROCUREMENT

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ABSTRACT. Procurement systems in democratic governments across the globe face competing demands, conflated values and goals, and are being called upon to address societies "wicked" problems under the rubric of government "reform." As a result, government purchasing professionals are being challenged to develop new flexible structures and processes that devolve purchasing responsibility, yet maintain accountability and control; limit the opportunity for fraud/mismanagement while reducing operational constraints; increase economic efficiency while satisfying political demands for minority/local/small and women owned business participation; increase open and transparent competition while achieving best value; and applying best practices while confronting legal limitations. Essentially these dilemmas have placed public procurement at the forefront of government reform efforts. The current study delineates the nature of five dilemmas that purchasing practitioners face, and the implications of these dilemmas for purchasing in the public sphere are explored. Given the complexity of these dilemmas, procurement professionals will be continually called upon to balance these inherent tensions with little guidance from policymakers or elected officials.

INTRODUCTION

The link between poor procurement practices in government and economic growth are unambiguous (Pagell, Wasserman & Zhaohui, 2010; McCue, Buffington, & Howell, 2007). Therefore governmental

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reform efforts that attempt to increase economic growth will not only require an understanding of the complex nature of public procurement, but reform efforts in the public domain must also simultaneously address issues of accountability, transparency, fairness, and economic efficiency (Schiele, 2009; Lenders & Fearon, 2008; Kattel & Lember, 2010). Thus the particularly complex nature of public procurement makes coordination among numerous segments—whether they be governments, businesses (suppliers), or political actors—of society critical to the successful implementation of strategies that might promote accountability and improve governance (Blair, 2000; Benner, Reinicke, & Witte, 2004). Yet, little is known about the various values and goals that underlie the public sector procurement process, other than noting there is a host of conflated and conflicting values and goals that purchasing professionals must attend to on a daily basis.

This may not be overly problematic if those charged with determining which value or goal is to be selected over other values and goals. For example, public purchasing professionals are constantly called upon to provide goods or services to their respective entities efficiently. However, there may be competing demands, such as a "buy local" preference (Tucker, 1998; Thai, 2001; Ssennoga, 2006) that may inhibit the actualization of efficiency (Qiao, Thai & Cummings, 2009). Moreover, given that democratic governments across the globe promote open and fair competition in the purchasing process (Trybus, 2006), the realization of these values have a direct relationship to the costs of doing business. When confronted with these situations, where do purchasing professionals turn to for deciding which value or goal to pursue?

Performance of public procurement systems is frequently used to measure the integrity of governments in power (Mamiro, 2012). Since there is no established metric to resolve these issues, successful procurement reform may be dependent on which values and goals are pursued by procurement professionals. Under this condition, public sector procurement professionals are instrumental in any reform effort that requires government intervention into the marketplace. In fact, procurement professionals may be struggling to balance the inherent tensions between what is directly in front of them with what they perceive as the right direction to follow.

Ultimately it depends on the choices made by procurement professionals between what they perceive are the right choices and what is defined by others as the right choices, ex post. In fact, when confronted with choices, the procurement professional may in fact rely on the preverbal "stick" to guide them – in many cases the "stick" are the rules and processes that limit discretion. It is through the procurement professionals' lens that we delineate the nature of dilemmas that they face, and how these dilemmas manifest stasis over reform.

Organizations of all sizes, industrial sectors, market share, and cultures constantly face dilemmas such as differentiation/integration, autonomy/interdependence, low cost/value, economies of scale/ product variety, scale/flexibility, flexibility/controllability, and change/ continuity. In the public sector however, some of these dilemmas may not be as common. According to Norman (2003), various reform efforts over the last 20 years in the public sector have witnessed an increasing need for accountability, efficiency, effectiveness, all-thewhile balancing the inherent tensions that these reforms have caused. Although Norman was generally talking about the dilemmas faced by political and administrative actors, he does highlight the manifestation of these dilemmas at the operational level. Moreover, given the complexity of these dilemmas, it is likely that procurement professionals will be continually called upon to balance these inherent tensions with little direct guidance from policymakers or elected officials attempting to reform government.

THE CONTEXT: PRIVATIZATION OF PUBLIC SERVICES

It might be trite to suggest, but over the last half century privatization¹ has been a growing mantra in governance. In fact, a number of governments have shifted some or all components of their service delivery systems and sub-systems to the private sector in hopes of lowering costs and achieving higher performance outcomes for their tax payers. As a result, many contend that government's role in society is evolving from a service provider to that of a broker of services (Goldsmith & Eggers, 2004). In fact, recent scholarship has shown that for a number of traditional government services the private sector can do it cheaper, faster, and produce higher quality services.

This begs the question why can the private sector do it cheaper, faster, and deliver quality? As Adam Smith (1776) noted over two centuries ago, the profit motive is the primary driver as to why the private sector can out-perform the public sector. After all, Niskanen, (1971) suggested, bureaucrats (government officials) are budget maximizers, where success is judged not based on the quality of services provided, but on the size of their respective budgets. While some contend that the monopoly powers of government necessitate inefficiencies, since there is no competition by which to drive down prices and increase quality, others maintain that by their very nature democratic governments are inefficient, since elected officials can never agree on what constitutes the public interest.

Apparent in all of this discussion is that the metric by which we judge success is singular, profit. Economists have long asserted that firms are motivated to increase profits to the point where marginal costs equal marginal revenues, and facing competitors in the marketplace, firms are forced to reduce costs and increase quality to differentiate themselves from their competitors. If they fail to attract customers through lower prices and higher quality they will eventually go out of business. In fact, Tiebout (1956) suggested that local governments do face competition in terms of voters voting with their feet. That is, if a particular government did not offer the right mix of goods and services, taxpayers will move to jurisdictions that do provide those goods and services. Eventually those governments would go out of business if they did not satisfy taxpayer's demands.

Based on these views, how we measure the success of government service delivery is through the lens of price, speed, and quality. Yet we know differently. Government is not all about these measures, but instead must curry to other values that are not easily operationalized in terms of price, speed and quality. This can be witnessed by looking specifically at one of the main functions within both private and public organizations, that is how they acquire the goods and services that drive their organizational decision-making, and thus our five dilemmas.

As a first approach to confirm that practitioners face these dilemmas in practice, the method taken herein is based on two processes. The first gathers and explicates the relevant extant literature from public administration over the last several decades to sketch the contours of both theory and practice of these dilemmas in

public procurement. There is currently an inadequate discussion in the scientific literature concerning these dilemmas that public procurement professionals face that is in need of attention. In turn, this has led to little generation of substantive theory applicable to public procurement that can help drive the field in terms of dealing with often conflicting values and goals in the procurement process – often because the frameworks by which research has approached public procurement has not addressed these dilemmas sufficiently.

A second approach taken in the paper is a systematic process of confirming that the dilemmas exist in the field by using experts that can either confirm or refute that the dilemmas exist to show that they are not simply artifacts of the literature or personal biases of the researchers. Confirmation is an essential step for developing such dilemmas and helps reduce framing bias (Judd, Smith and Kidder, 1991). Five current public procurement practitioners were selected to validate if these dilemmas are realities in practice, and if so how they are typically addressed. The process for selecting the thought leaders (experts) in public procurement was based on standards established by the Delphi technique. The Delphi technique is typically used to identify alternatives, explore or expose underlying assumptions, and relate expert judgments on topics spanning a wide range of practical or theoretical issues within their knowledge domain. Consistent with the Delphi technique, experts were identified by examining the National Institute of Governmental Purchasing's key award winners over the last several years. We examined the NIGP website (which is recognized as the foremost authority on public procurement) to identify five key recipients of the various service awards the NIGP offers. Then the group was vetted by looking at whether they had achieved a prominent position within a national or international professional association (an indicator of leadership); have achieved national recognition as thought leaders (recognition by others as experts in the field); and have more than 20 years of experience in public procurement (an operationalization of domain-specific knowledge). Five individuals were identified as fulfilling these criteria, and from that list were sent an email asking if they would be willing and able to participate. All five indicated their willingness to participate in the process, and the results are reported in the discussion section of this paper.

The following is a discussion of each of the key areas developed along with the related dilemmas that could be used to help improve both research onto public procurement and the practice of public procurement.

Public Procurement Dilemma #1 – The Accountability/Responsibility Dilemma: Develop Flexible Procurement Systems While Maintaining Accountability and Control

Many contend that purchasing is distinctively different between the public sector and private sector (Hood, 1995; Rainey, Pandey, & Bozeman, 1995; Alford, 2002; Boyne, 2002; Johnson, Leenders, & McCue, 2003), as well as between the public sector and non-profit sector (Salamon & Anheier, 1998). Although Muller (1991) found several similarities in public and private sector purchasing responsibilities, other researchers have identified numerous features that differentiate the private and public sectors such as the nature of the inter-organizational network and the public service provided (Johnson, Leenders & McCue, 2003), the nature of the supply market and availability of private sector alternatives, but perhaps most importantly, the nature of accountability and regulation (Harland, Gibbs & Sutton 2000). Through principles of transparency and accountability, the regulation of public procurement provides a pedestal of the legal, economic, and policy interface between the public and private sectors (Bovis, 2008). For the present purposes, a focus will be on the differences emanating from the accountability and control functions utilized within public purchasing while ensuring the need for fairness and transparency.

There are noticeable differences between public and private purchasing. Consider that because public procurement professionals often provide advice during the preparation of purchase descriptions and statements of requirement, evaluating and negotiating contracts must be done in a way that any resulting contracts adequately protect the interests of the government agency and the public in general. Thus public procurement is typically characterized by high levels of public disclosure and a heavy reliance on the bid process compared to private sector organizations (Osborne & Pastrik, 1997). It is well-known that private and public sector organizations respond differently to scarcity of resources. Where the private sector tends to see increased competition (Harrigan, 1980), public sector organizations tend to react to cutbacks by increasing centralization to avoid

duplication (Ludwig, 1993). This often results in the increased use of purchasing consortia (Johnson, 1999).

However, due to statutory regulations and public oversight, public procurement must be transparent in a way unrivaled by private entities. As a result of open and public surveillance (Vagstad, 1995), public agencies tend to be cautious and risk-adverse while responding to procedures and policies that outline how to avoid risk or the perception of misappropriation (McCue, 2000). Even among transparent public procurement, the interface of public and private sectors creates incentives for corruption (Coppier & Piga, 2007). Efforts to curb corruption through increased levels of transparency often confront high implementation costs. If transparency is costly, organizations have a tendency to stop short of implementing the level of transparency in procurement that would dissolve corruption. Consequently, Coppier and Piga (2007) argued transparency alone is not enough to reduce corruption levels.

While transparency may foster risk-averse tendencies, a higher level of transparency does not automatically evidence improved performance by purchasing agents (Humphreys & Weinstein, 2007). Since it is typically government administrators or elected officials rather than agency end-users who must answer to public criticism perceptions of bureaucratic waste or budgetary mismanagement, end-users are usually not as appreciative of oversight nor are they as aware of the need for the steps taken to minimize the potential for fraud and abuse. Moreover, because service departments are often reactionary instead of proactive in solving societal problems, a tension between line agencies and the procurement organization tends to develop over time. centralized procurement departments are often seen as roadblocks to effective service delivery by both elected officials and agency endusers.

Nonetheless, purchasing agencies must continue to exercise a control function through strict adherence to legal, professional, and administrative requirements that define the purchasing process (McCue & Pitzer, 2000). Since one of the main factors in accountability is the control of discretion and the ability to fix responsibility, it is easy to see a tension develop in complying with the structure and policies that attempt to limit flexibility (Aberbach & Rockman, 1988). This need to respond to conflicting values and to

deal with unforeseen problems requires, in many cases, an adaptable process willing to accept risk through experimentation. Thus, although no single central purchasing authority can fully control the behavior of subordinate units (NIGP 1989; NASPO 1997; Appleby, 1947), a centralized purchasing system inevitably results in conflicts between the central purchasing department and the line departments it is established to serve.

In fact, Downs (1967) pointedly alluded to the evasion of control that is almost a natural response to the attempts of top-level officials to control the behavior of service managers and subordinates. Labeling these reactions laws, he found that the "law of counter control" suggests that the more the effort by top administrators to control subordinates, the greater the effort to evade the control. What is more, if we couple his "law of imperfect and diminishing control" with his "law of control duplication," we can conclude that bureaucracies tend to multiply while increasingly mitigating the purpose for which they were created. Consider that since larger organizations generally have weaker control by the top, the attempts to control large organizations tend to generate other organizations to oversee the attempted control. Thus, many contend that purchasing authority, especially in government, must be decentralized in order to provide more responsive support to end-users, eliminate bureaucratic obstacles to program accomplishment, improve inter-departmental coordination, and empower service delivery managers to procure what they need without impediments created by a centralized organization (Osborne & Gaebler, 1992; Osborne & Plastrik, 1997; MacManus, 1992; Gore, 1993; McCue, 2001).

These issues highlight the public procurement tradeoff which center around the tension between economic efficiency in the procurement of public goods and services and the public's need to maintain control against fraud and mismanagement (Schwartz, 2010). This requires a delicate balance that at the least is difficult to achieve if not illusory. Procurement systems across the U.S. have established control systems and accountability standards that attempt to balance these inherent tensions between efficiency and oversight in the procurement process. For example, Picci (2007) proposed a reputation-based governance model to allow for the routine production of statistics that are useful for monitoring purposes and also provide a framework to limit rent-seeking and

corruption. But there is no objective standard to judge the juncture at which rules become too burdensome to control against the potential for fraud, nor is there a benchmark threshold to determine the point where the risk for fraud is too high. Thus judgment of the "correct" balance between efficiency and oversight in procurement is based on a political assessment (Key, 1940).

From the perspective of the five participants in the Delphi study, the relationship between efficiency and oversight is ambiguous. As one expert responded, "The issue that we have to face, however, is that the more decentralized an operation becomes, the less likely that a procurement professional will be handling the procurement process. Operational staff who do not have proper training in procurement will likely be exercising procurement decisions that may have negative consequences for the organization, whether from an economic or accountability perspective." Another expert stated:

Yes, I believe there is a tradeoff and much of it comes down to risk mitigation. By this, I mean that we can decentralize our procurement authority downward (for example, we give departments the autonomy to purchase up to \$25K), but we are still assuming the risk. During a procurement and contract audit, the issues will come back to the procurement authority, regardless of who actually did it. If departments are abusing small dollar limits or showing favoritism to certain suppliers, then it will be central procurement that failed to adequately train or provide oversight. So decentralizing may make sense, but there are some tradeoffs in the way of increased risks.

In all, there are always going to be tradeoffs between decentralizing and empowering line managers in order to provide more flexible procurement processes and the need to control how line managers spend public resources. Although electronic procurement systems may help in providing more flexibility to line managers in the purchase of goods and services, ultimately the central purchasing authority will be held accountable if things go wrong.

Public Procurement Dilemma #2 – The Fraud/Red Tape Dilemma: Limit the Opportunity for Fraud/Mismanagement While Reducing Operational Constraints

One might be tempted to adopt a risk-management perspective to this problem, yet it is unclear how an observer would gauge the competing values of economic efficiency (often measured in monetary terms) against the value of public transparency and accountability, because it is not readily apparent how this latter value should be measured.² Nonetheless, we are confident that the attempts to institutionalize internal control processes in purchasing often have the unintended consequence of mitigating attempts by service delivery managers to effectuate added-value in the organizational supply chain. Moreover, it is plausible that additional regulations result in goal displacement where efforts of purchasers are redirected toward proxy measurements and evaluations. Under these circumstances, the focus of purchasers would likely shift to reporting and offering a detailed accounting of their activities that is more reactionary rather than proactive, and more clerical than Indeed, in the long-run, this may actually inhibit strategic. accountability in the procurement function by shifting the efforts of public purchasers to properly filling out forms which are viewed by others. In turn, this may absolve the purchaser of responsibilities for procurement mistakes, miscalculations, or poor decisions because the forms were properly filled out while the standard operating procedures were followed.3

Indeed, this is but one reason why over time, organizations tend to become sclerotic and rule-driven, and this concern has been at the forefront of the reinventing government movement (Osborne & Gaebler, 1992; Rauch, 1999). It has been noted by Downs (1967) that not only do all organizations tend to become more conservative as they become older, but the quantity and detail of paperwork tends to increase steadily over time, regardless of the amount or nature of the activity. But we are still left with a public procurement dilemma. Consider the implications of this for centralized procurement versus devolved purchasing authority. A hierarchical purchasing apparatus has reporting requirements that are one-step while devolution is likely to have duplicative paperwork requirements due to intradepartmental and interdepartmental controls. In other words, a one-stop shop will provide uni-stage auditing while there will be at least two stages of

auditing under a more decentralized system. Since under devolution there would be the auditing of both the agency and the purchasing department which is likely to hold a copy of the agency records, great cost savings are not necessitated if there is any level of control granted to the procurement agency.

Thus, it is no easy task to delineate the proper procedures that will balance the efficiency-oversight tradeoff – or what we term the fraud-red tape dilemma. To address the fraud-red tape dilemma, consideration must be given to establishing training and education of not only procurement personnel but elected officials, administrators, suppliers, and line services personnel as well. Furthermore, this training will likely have elements of not only proprietary rules and regulations, but also enhanced ethics education as well. This is likely to lead to increasing costs in training and personnel hires for those purchasers who are becoming more specialized. All the while, there is a need to establish monitoring and evaluation systems to insure accountability is maintained and that the controls on the factors of production are not overly burdensome.

In addition to the concerns just laid out within this public procurement dilemma, discretion is a major problem and a balance between service delivery managers' requests to loosen regulations (red tape) must be struck against the need of organizations to operate according to standard operating procedures to reduce the opportunity for fraud (McCue, Buffington, & Howell, 2003). Yet due to significant efforts to streamline and centralize roles, missions, and budgets, not surprisingly, the multitude of agencies makes assessing costs for locating the purchasing function in decentralized organizations extremely difficult (Walker & Poppo, 1991). Consider that funding for those charged with making purchases and procuring goods and services would now be included in agency budget accounts that provide funding for other activities. When coupled with the evolving uncertainties surrounding the communication and procedural architecture associated with increasingly decentralized purchasing, the ability to hold line-employees accountable by those charged with oversight may be diminished because optimal allocations of resources should be based on the informed expectations of strategic outcomes (for example, see Arrow, 1962). Thus there are difficulties in gauging the consequences of decentralizing the purchasing function. In fact, devolution can lead to

less transparency and make it more difficult in identifying trade-offs between purchasing and other goals of the agency (Tanzi, 2001).

From the perspective of the experts in the Delphi study, there is consensus that "although creating proper checks and balances and eliminating close loop situations can be done efficiently without jeopardizing process times so long as these check points are assigned to the proper personnel and there are established thresholds in place." Moreover, "the bottom line is that there is a significant tradeoff between red tape and minimizing fraud and/or mismanagement," and that these tradeoffs require that "there is a balance, for sure, but when we increase fraud prevention we need to understand the tradeoff is more bureaucracy involved."

The issue of public trust, and those charged with the responsibility for the discharge of the public weal, will limit purchasing's ability to devolve authority while insuring against corruption. The fraud – red tape dilemma is one that is often not discussed in the literature, yet is critical to how governments are constrained when attempting to empower service delivery managers yet simultaneously maintain accountability structures that accurately reflect public values. It is how and by whom those values are interpreted and applied that purchasing is constantly struggling with maintaining a balanced set of operational policies and procedures that satisfy both objectives.

Public Purchasing Dilemma #3 – The Principle/Agent Dilemma: Identifying "Best Value" in the Presence of Competing Goals and Common Agency

Because price, cost, quality, and value lead to discretion in procurement decisions, the means by which accountability may be attained when that discretion is exercised becomes more difficult. Consider that a principal-agent relationship in procurement involves a fiduciary relationship which arises because of the asymmetric knowledge and superior training of the purchasing-agent (Soudry, 2007). This means that the agent in charge of purchasing has the trust and confidence to act in the capacity of a "caretaker" of another's rights, assets and/or wellbeing. However, the purchasing agent cannot be given the full freedom to set the sum of requirements for the award of a public contract (Hettne, 2013). Instead, it implies that the agent-purchaser has a moral, personal,

and legal responsibility to ensure that the funds are expended responsibly, reasonably, and in compliance with the intentions, rules, laws, and concerns of the provider of the funds.

However, throughout the procurement process, there are inevitable opportunities to shirk these responsibilities to act in a fiducial capacity, often because of the presence of moral hazard which is the incentive to act in a way detrimental to one party after an agreement has been made (Baron & Besanko, 1987). Obviously in this case, this occurs due to the personal gains to be derived from such action. As such, there is a conflict of interest which describes the potential or real clash between what is beneficial to the agent in terms of adopting best practices and what is beneficial to the principal in terms of best value as operationalized through better prices, better quality, and quicker delivery. To offer guidance on these matters, codes of ethics are developed to regulate public procurement and typically apply to all expenditures. They often include internal policies and statutes that describe the appropriate conduct for all public employees, but sometimes even when faithfully following these codes of conduct, the "best" value option may not be entirely apparent or clear because of competing goals and competing principals - the third dilemma.

Because actors within the process can be simultaneously modeled as the principal to some while considered the agent of others (Sappington 1991, 63), there are problems which to date appear to be unrecognized in the literature on public procurement and which emanate from this public procurement dilemma, and it concerns the issues of common agency and rivalry. Common agency refers to the situation when one agent simultaneously represents multiple principals (Grossman & Helpman, 1997). Common agency has been categorized at least two ways. The first is one of delegation when several parties voluntarily agree to have one agent. The second is referred to as intrinsic common agency whereby a single agent is "naturally" endowed with the right to make binding decisions affecting the principals (for a fuller explication, see Bernheim & Whinston, 1986). Depending on the enabling legislation. procurement procedures, and the location of the purchasing function, there may be multiple and conflicting principals utilizing a common purchasing agent, or there may be multiple purchasing agents each representing a single principal in conflict with other principals.

Additionally, inherent political tensions tend to pull public procurement agendas in different directions (Schwartz, 2010). When this happens, issues of public control and accountability emerge, especially when government agencies are pursuing multiple missions and there is a fuzziness surrounding public objectives (Dewatripont, Jewitt, & Tirole, 1999), which in turn makes the identification of best value extremely difficult, if not impossible.

Hence, it is easy to see how under conditions of scarce public resources (which appears to be a constant situation), competition for public resources can lead to purchases by one agent that may contradict or counteract the purchases of another (Rolfstam, 2009). Under these circumstances, it is unclear how the ultimate principal (which is regarded as society) can maintain control over the agent ostensibly acting on its behalf. Indeed, there are several principals who may be operating under competing goals and jurisdictional rivalries (Strauss, 1964). Moreover, because procurement authority creates fiduciary responsibilities to fulfill obligations and avoid certain actions, decision-makers are theoretically held accountable for those decisions, and it is believed that accountability is realized through the transparency of actions taken within a formal network of internal and external controls.4 As a result there are competing incentives to achieve best practices in light of the potential common agency constraint.

As the experts from the Delphi study noted that the major problem is reaching a balance between determining what exactly best value is and how best value is used to select suppliers. For example, one expert noted:

I believe this to be a long standing issue in the public sector. Every stakeholder in an acquisition has a different idea of best value. The accountants will say cost, project managers want large contractors (higher price), and the end user wants functionality for their business needs (they don't care about other stuff). Therefore, it is imperative that the procurement professional broker a compromise in the way of an RFP evaluation committee and agreed upon criteria. Nobody gets their way entirely, but can have input into the best value determination. The "easy out" is to look at lowest responsive bid (hard to argue with who is lowest), but the problem is that [this] is outdated thinking that does not serve the government well.

The complexity of defining "best value," coupled with the competing demands that are placed on the purchasing function, will require purchasing to "broker" compromises between stakeholders on just what is best value. Although we might all agree that best value can be operationalized in terms of efficiency, effectiveness, economy, and in some cases the need to meet the social equity goals as articulated in law, it would be extremely difficult to agree on how these dimensions are to be weighted. Moreover, even if we could agree on a particular weighting scale, how we measure those artifacts is problematic.

Public Procurement Dilemma #4 – Short-Term Benefit/Long-Term Cost Dilemma: Short-Term Economic Efficiency vs. Long-Term Monitoring Costs

Internal controls are the protocols that ensure effective and efficient operations (Cox, 2008), and they are typically maintained through reliable financial reporting; compliance with applicable statutes; and adherence to administrative directives, rules, policies, and procedures (Schiele & McCue, 2010). Moreover, the control environment is assumed to be very important. This consists of the administrative assumptions, standards, values, and norms (see Schein, 1992 for an introduction to organizational culture) that promote appropriate purchases that have a clear public purpose.

In theory, the environment helps to guide members of an organization and their behaviors (Palmer, 2005) while ensuring that funds are expended responsibly and in compliance with the intentions, rules, laws, and concerns of the provider of the funds. By setting the organizational culture of their departments, administrators help to control purchases through their own actions and directives (Preuss, 2009).

There are numerous control activities which are often assumed to increase accountability. For example, those staff given purchasing authority – whether they are procurement or line-agency personnel – should be intimately familiar with the control environment and thus have adequate training about the institution's policies and procedures. Moreover, control can also be employed through the use of pre-approvals and auditing. Prior to making some purchasing transactions, reviews which typically require supporting documentation of the proposed purchases can be conducted to

determine that the purchases are appropriate. In general, higher dollar purchases and those that carry more risks than usual are more likely to require pre-approval, yet similar to a pre-audit, pre-approvals are often burdensome and slow down the purchasing process, especially if several layers of pre-approval are required (Ellram, 1995).

At key stages in a contract selection or negotiation process, probity audits may offer control measures in real time. Probity audits offer independent reviews of government procurements and expressions of interest to ascertain whether procedures followed are consistent with appropriate regulations and principles of transparency (Ng & Ryan, 2001). Such audits are typically employed in relation to high-value, high-risk transactions. The growth in probity audits reflects the argument that public sector managers are more attuned to stakeholder expectations and more adept at developing risk management strategies (Shead, 2001).

An additional level of control can be done by utilizing post-transaction reviews (Tadelis, 2012). This means that although departments may require pre-approval within their own units yet are not subject to pre-approval at the central level, a request for information is sent to the agency responsible for the transaction. Upon receipt of the explanation for the transaction, the central procurement office evaluates the purchase to determine if they have violated applicable policy and procedures. This is similar to a post-audit. Evidence has suggested either pre-approval or post-audit procedures in a traditional top-down monitoring system plays an important role to reduce missing funds and corruption (Olken, 2007).

All of these control activities are impacted by administrative risk assessments. It is perhaps no secret that administrators engage in control activities in order to reduce activities that might jeopardize the agency's ability to meet its commitments. In terms of purchasing functions, controls are maintained to reduce risks which are uncertainties "about whether potentially significant and/or disappointing outcomes of decisions will be realized" (Sitkin & Pablo, 1992, p. 10). However in trying to close the gap between agency outcomes and expectations through monitoring and purchasing controls, more bureaucracy is required which can lead to reduced productivity, increased complexity, and a reduction in marginal value-additivity. On the other hand, allowing excessive purchasing risks

may lead to a loss of assets, economic inefficiency due to poor business decisions, increased instances of non-compliance, and loss of public confidence. Again, the public procurement dilemma surfaces with no clear answer which establishes the proper balance between the level of control that is needed with the level of risk that is present (Schapper, Malta, & Gilbert, 2006).

Because any conceptualization of risk should account for the tradeoffs between expected economic and political returns from changing the location of the purchasing function compared to those costs of maintaining the status quo, a clear definition of success is required. Yet this definition is illusive for two reasons (Schapper, Malta, & Gilbert, 2006). First, there are numerous competing goals that have an unknown distribution of benefits, so defining costs and benefits in an environment rife with common agency requires identifying individual, organizational, and societal winners and losers. Second, organizational dynamics associated with changes such as these have an unknown a priori economic impact, because it is currently unclear whether any proposed reforms of purchasing protocols, especially those that encourage the redistribution of responsibility and authority across jurisdictions and agencies, are likely to make individual purchasers more risk-seeking or risk-averse. These parameters impact both the long and short-term costs of public procurement.

The tradeoff between short-term economic efficiency and long-term monitoring costs was a key issue discussed by the experts in the Delphi study. For example, one expert noted:

Certainly there is a tradeoff here. On an immediate, short term basis, we can cut departments loose with their spending. No central oversight or approvals and they consider their procurement efforts to be efficient and nimble. However, the big picture is that these efforts will be monitored or audited in the future and require some attention. So, raising a p-card threshold to \$5K will make your departments happy and they are off and running! But the likely result is increased maverick spend, contract pricing that is missed out on (we pay more), fragmentation through order splitting, potential ethical violations with favored vendors (or family), and purchase of unapproved items (or personal items). I have seen all of these

happen and the long term "clean up" costs are significant, as is the political fallout and damage to our reputation.

When service delivery managers are empowered with more purchasing authority there is a corollary increase in monitoring costs. In turn monitoring costs require additional resources expended on procurement, either in terms of personnel with the appropriate monitoring skills or through technology that is capable of insuring compliance. In either case the additional costs associated with monitoring increases since there is no true incentive for the service delivery managers to act in the best interests of the procurement department.

Public Procurement Dilemma #5 – The Cost of Empowerment Dilemma: Responsiveness to "End User" through Decentralization while Increasing Training and Evaluation Costs

If one considers that decentralizing the purchasing function is equivalent to a functional reorganization, the presumed savings may not be realized. Indeed, the scholarly literature on the savings to be enjoyed from major governmental reorganizations or terminations of agencies should give reformers pause. Consider that Carpenter and Lewis (2004) found that at least at the federal government level, although termination of agencies happens frequently, those commitments the agencies executed are rarely discarded. Thus, termination of organizations may actually increase costs in both the short and the long-run because of efficiency losses associated with fragmentation of functionally-related activities into different agencies (Carpenter & Lewis, (2004). There are also numerous other empirical and qualitative studies that point in the same direction, especially contributing to higher costs in the short-run (Frantz, 1997; Meier, 1980; Salamon, 1981; Szanton, 1981; Behn, 1978).

Now one might make the argument that decentralizing the purchasing function is not comparable to a major reorganization, but we would differ on the grounds that devolution may violate classical organization theory which holds that agencies with no duplication and limited spans of control can result in the provision of services with fewer persons and at less cost (Downs, 1967). Indeed, the training that is required for decentralized purchasing is likely to be substantial and require new job skills for line employees. For these and other reasons, we reserve judgment that devolution will reduce costs. In

fact, it is just as likely that the total administrative expenses devoted to procurement will in fact increase while those expenses will be redistributed across more agencies. In time, one can expect that lapses in procurement protocols will incrementally lead to more rules and regulations designed to control these mistakes which will then lead to increasing overall costs and calls for centralization in the chase for more accountability. Ultimately, this can lead to loss of efficiency in the name of increased accountability - another public procurement dilemma. This dilemma might also help explain some of the cycles and swings from centralization to decentralization and back again that are often witnessed in public procurement organizations. Rule-making explodes under devolution in order to control fraud or waste which in turn, leads to calls for more efficiency via centralization of purchasing. However, this centralization can lead to less procurement responsiveness and end-user effectiveness because the discretion of end-user agency is curbed - all in the name of accountability.

Lember, Kattel, and Kalvet (2014) concluded there is no single dominant approach to public procurement and innovation that governments follow. Implementation remains cautious and indirect rather than substantial and direct. The very process of public procurement, regardless of its position in the cyclical continuum, plays a far more modest role in the actual implementation than expected (Lember, Kattel, & Kalvet, 2014)

Because expectations of returns are intimately linked with the distribution of potential outcomes, a culture of taking risks and the uncertainty that it sires can be traced to organizational norms and actors' perceptions of situational risks (Bozeman & Kingsley, 1998; Sitkin & Pablo, 1992). Thus bureaucratic cues from the top become important in outlining the potential for risk-taking by purchasers. Consequently, if one is more concerned with maintaining control and reducing the aforementioned risks, this argument implies that oversight can be done better through centralized purchasing, and the trend toward more devolution in purchasing may be fraught with indeterminate risks.

Of course, there are many examples in both the scholarly literature and daily newspapers of corruption or the impact of "special interests" on elected officials too numerous to mention here, yet they underscore the role that a professionalized procurement department

might have played in lending expertise in negotiating contracts that might have better served the community while saving a lot of money. Indeed, it appears that as devolution continues and outsourcing expands, the likelihood that the public will witness similar examples in the future will probably continue to grow. Thus another purchasing dilemma unfolds, namely that as outsourcing and thus short-run efficiency increases, the opportunities for corruption and fraud also expand. Over time, rules will be put in place that attempt to control opportunism – all the while burdening procurement processes with more bureaucratic detail that diminishes efficiency in the long-run.

Perhaps this all points out that in many respects, it is often as important for bureaucrats to be as politically efficient as economically efficient. However, in order to accomplish this, bureaucrats need to be alienated from the resources under their control, something which current reform efforts and purchasing trends do not improve. As a consequence, aligning the functions and incentives of various agencies and levels of government is extremely difficult in such a complex environment (McCue & Gianakis, 2001).

What is obvious is that public purchasing is accomplished within a manifestly political environment via both formal political leadership contingencies and through the negotiation of informal power dynamics (Fisher, 2013). Consequently both economic and political risk assessments should be conducted to examine proposed alternative solutions to the public procurement dilemmas outlined herein so that a systematic comparison and evaluation of alternatives available to policy-makers can be obtained. The power of purchase must capture a paradigmatic shift from 'doing things better' to 'doing better things' (Fisher, 2013). As a result, both economic and political risks must be priced into any proposal for government reforms and organizational architecture. Because any conceptualization of successful reform should account for the tradeoffs between expected economic and political returns from changing the location of the purchasing function and the rules under which practitioners operate, a clear definition of success is required - something which is lacking in the literature because of the ambiguous nature of the dilemmas they face.

Although common metrics are dollar-savings, little attention is paid to the prices associated with loss of public confidence and accountability. It has been persuasively argued in economics that a well-designed contract may have unspecified and vague obligations, especially when some aspects of performance are unverifiable (Bernheim & Whinston, 1998). For this reason, subjective performance is still the norm in politics as it is in many private firms (Gibbons, 1998; Aggarwal & Samwick, 1999; Prendergast, 1999). Yet any future proposed courses of action in purchasing should resolve the tradeoffs in a rational way, and the identification of these procurement dilemmas help in that calculus.

Once again, the experts confirm that this fifth dilemma exists in practice. For example as one expert noted, "there will likely be a short term spike in training and evaluation costs, which should stabilize after some time, however, I believe that if a system becomes too decentralized that the lack of consistency between different operations will likely create a total breakdown in the procurement system. That's why I still believe that there must be some form of centralization within an organization." Another expert stated "procurement left in the hands of the end user without proper and frequent training will result in higher cost overall. The end user is mission driven and has less concerned in regards to procurement policies and regulations."

Since procurement in any organization is central to various core objectives, it is basically impossible to align all of them together under multiple demands. Since each department is motivated by different immediate objectives, there remains the search for proper incentives to align procurement goals and department objectives. Moreover, unless there is a centralized process to aggregate purchases, there are potential significant economies of scale losses since individual departments will be inclined to purchase what they "need" irrespective of the associated efficiency losses.

CONCLUSION

Within public procurement, procurement professionals are constantly grappling with at least five public procurement dilemmas that are summarized in Table 1 below and include 1) balancing the perceived need for accountability and control while ensuring fairness and transparency; 2) devolving purchasing responsibility while maintaining accountability and control; 3) identifying a "best" fiducial acquisition decision in the presence of competing goals and common agency; 4) gains from short-term economic efficiency versus the long-

term costs to monitor and control against fraud and mismanagement; and 5) elevated responsiveness to end-users through coordinated decentralized organizational arrangements that can empower service delivery managers while increasing training, monitoring, and evaluation costs.

Although RAND developed the Delphi method in the 1950s to forecast elements of warfare, it has since been adapted in many ways. The original method entailed a group of experts who anonymously reply to questionnaires and subsequently receive feedback, after which the process repeats itself.⁵ The goal was to reduce the range of responses and arrive at something closer to expert consensus. The use of the Delphi Technique for current purposes attempts to assess the literature findings based on informed intuitive judgments of some of the most prominent practitioners in the field of public procurement. Based on the second round of expert feedback, a concurrence of opinion was exhibited in the second and final round of the Delphi data collection which is reported in Table 1.

Thus there is little doubt that procurement systems in governments face competing demands and dilemmas that may be unresolvable. As a framework to the public procurement dilemmas outlined here, procurement within the public and private sectors are confronted with significantly different objectives, especially in the area of common agency accountability and a regulatory environment that is designed to be openly transparent to all.

It has been argued that within the principal-agent problem and resultant delegations, procurement must create incentives for the agent to act in the best interest of the principal – all of which is fraught with moral hazard and conflicts of interest in the public sector. That is why codes of ethics, internal policies, and statutes assist in providing some guidelines. Nonetheless, many government purchasing professionals are being challenged to develop new flexible structures and operational processes, but it is difficult to see how this new flexibility will result in substantive long-term resolutions to these dilemmas. The balancing tradeoff between economic efficiency coupled with efforts to maintain control against fraud and mismanagement is at least difficult, if not illusory.

TABLE 1
Expert Convergence Results from Delphi Technique

Dilemma	Purpose	Expert Convergence Results
Flexible Procurement Vs. Accountability and Control	Balance Centralized- Decentralized Procurement	Decentralized flexibility requires sufficient end-user education and training to mitigate risks to process consistency/integrity and procurement agency reputation
Fraud Opportunities Vs. Operational Red-Tape	Balance the Efficiency- Oversight Tradeoff	Reduced fraud opportunities via technological transparency often requires additional FTE support and additional flow-through check points in procurement process
Best Value Vs. Competing Goals	Common Agency Balance	Vending community responses often entail conflicts with competing "best value" operationalization throughout numerous stakeholders
Short-Term Economic Efficiency Vs. Long-Term Monitoring Costs	Balance Levels of Control With Levels of Risk	Initial investment costs that spike then taper can reduce long-term monitoring costs but failure can lead to significant "clean-up" costs that can be politically and reputationally injurious
Responsiveness to End User Vs. Increasing Training and Evaluation Costs	Demonstrate Both Political and Economic Efficiency	Process decentralization empowers end-users but education and training costs escalate and must be maintained which may result in procurement FTE substitution (trainers replace procurement analysts)

We also found that nearly by definition, efficiency must be sacrificed in the face of efforts at control through the use of standard operating procedures that catalyze routine organizational actions to guard against misguided actions. As a result, pre- and post-approvals often become burdensome by slowing down the purchasing process which likely mitigate added value efforts by purchasers. In turn, reform efforts that do not address these underlying issues will only be successful if the public procurement professional chooses the right course and the metrics by which success is measured and that reflect broader social values.

Although there are many calls for governments to operate more like a business, the existence of the public procurement dilemmas outlined herein strongly suggest that at least in this area, it would be doubtful that public procurement operations and standards can be reverse engineered from experiences in the private sector. We have identified several joint properties of an inherent tension between inputs, outputs, and the factors of producing procurement and acquisition decisions in the public space. While this tension may give politicians political cover from being held accountable for ambiguous directives, it actually may create unintended yet costly problems for procurement practitioners. In sum, with such inherent tensions and no as-yet identified objective standard that can judge the right balance to strike in resolving these dilemmas, a prescriptive panacea remains elusive at this point. However, it is hoped that this article helps outline the nature of some of these problems in a way that can benefit future research in this important policy area.

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NOTES

- Generally privatization has been variously labeled competitive sourcing, outsourcing, contracting out, and more recently publicprivate partnerships.
- 2. It might be argued that even when money is not the medium, the compensation principle allows that if there is connexity, people can indicate how much money they would require to compensate them for the loss attributed to the exchange. However, the lack of a common metric of transparency and accountability may mitigate the connexity requirement. For a beginning discussion, see Kaldor (1939) and Bailey (1954).
- 3. For a discussion of the linkage between accountability and protection, see Crozier (1964, pp. 213-220).

- 4. The terms used in the current discussion on accountability rely heavily on the following resource: "Welcome to Purchasing Guide Chapter 5 Accountability" from the Unit Administrator Guide at the University of Oregon, Eugene, OR. Accessed 7-31-04 from http://baowww.uoregon.edu/eGuide/Procurement/procch5frame .htm
- 5. See Dalkey, Brown, and Cochran (1969) for an in-depth explanation of the Dephi Technique and its applications.

REFERENCES

- Aberbach, J. D., & Rockman, B. A. (1988). "Mandates or Mandarins? Control and Discretion in the Modern Administrative State." *Public Administration Review*, 48(2): 606-612.
- Alford, J. (2002). "Defining the Client in the Public Sector: A Social-Exchange Perspective." *Public Administration Review*, 62(3): 337-346.
- Appleby, P. H. (1947). "Toward Better Public Administration." *Public Administration Review*, 7(2): 93-99.
- Arrow, K. (1962). "Economic Welfare and the Allocation of Resources for Invention." In Universities-National Bureau (Ed.), The Rate and Direction of Inventive Activity: Economic and Social Factors (pp. 609-626). Princeton, NJ: Princeton University Press.
- Baron, D. P., & Besanko, D. (1987). "Monitoring, Moral Hazard, Asymmetric Information, and Risk Sharing in Procurement Contracting." *The RAND Journal of Economics*, 18(4): 509-532.
- Benner, T., Reinicke, W. H., & Witte, J. M. (2004). "Multisectoral Networks in Global Governance: Towards a Pluralistic System of Accountability." *Government and Opposition*, 39(2): 191-210.
- Blair, H. (2000). "Participation and Accountability at the Periphery: Democratic Local Governance in Six Countries." World Development, 28(1): 21-39.
- Boyne, G. A. (2002). "Public and Private Management: What's the Difference?" *Journal of Management Studies*, 39(1): 97-122.
- Bovis, C. (2008). "The Effects of the Principles of Transparency and Accountability on Public Procurement and Public Private

- Partnerships Regulation." European Procurement and Public Private Partnerships Law Review, 1 (1): 17-35.
- Carpenter, D. P., & Lewis, D. E. (2004). "Political Learning from Rare Events: Poisson Inference, Fiscal Constraints, and the Lifetime of Bureaus." *Political Analysis*, 12(3): 201-232.
- Coppier, R., & Piga, G. (2007). "Why Do Transparent Public Procurement and Corruption Go Hand in Hand?" In G. Piga and K. V. Thai (Eds.), *The Economics of Public Procurement* (pp. 183-199). New York: Palgrave MacMillan.
- Cox, M. F. (2008). "Supply Chain Compliance." In A. Tarantino (Ed.), Governance, Risk, and Compliance Handbook: Technology, Finance, Environmental, and International Guidance and Best Practices (pp. 507-529). Hoboken, NJ: John Wiley & Sons, Inc.
- Downs, A. (1967). Inside Bureaucracy. Boston, MA: Little Brown.
- Ellram, L. M. (1995). "Total Cost of Ownership: An Analysis Approach for Purchasing." International Journal of Physical Distribution & Logistics Management, 25(8): 4-23.
- Fisher, E. (2013). "The Power of Purchase: Addressing Sustainability through Public Procurement." European Procurement and Public Private Partnerships Law Review, 1 (1): 2-7.
- Goldsmith, S., & Eggers, W. D. (2004). *Governing by Network: The New Shape of the Public Sector*. Washington, DC: Brookings Institution Press.
- Gore, A. (1993). Creating a Government that Works Better and Costs Less: Report of the National Performance Review. Washington, DC: U.S. Government Printing Office.
- Harland, C., Gibbs, J., & Sutton, R. (2000). "Supply Strategy for the Public Sector: Framing the Issues." In *The 9th International IPSERA Conference Proceedings*, 24(27): 342-351.
- Harrigan, K. R. (1980). "Strategy Formulation in Declining Industries." *Academy of Management Review*, 5(4): 599-604.
- Hettne, J. (2013). "Sustainable Public Procurement and the Single Market Is There a Conflict of Interest?" *European Procurement and Public Private Partnerships Law Review*, 1: 31-40.

- Hood, C. (1995). "The "New Public Management" in the 1980s: Variations on a Theme." *Accounting, Organizations and Society,* 20(2): 93-109.
- Humphreys, M., & Weinstein, J. M. (2007, August). "Policing Politicians: Citizen Empowerment and Political Accountability in Uganda." Paper Presented at the American Political Science Association Meeting, August, Chicago, IL.
- Johnson, P. F. (1999). "The Pattern of Evolution in Public Sector Purchasing Consortia." *International Journal of Logistics:* Research and Applications, 2(1): 57-73.
- Johnson, P. F., Leenders, M. R., & McCue, C. (2003). "A Comparison of Purchasing's Organizational Roles and Responsibilities in the Public and Private Sector." *Journal of Public Procurement, 3*(1): 57-74.
- Kattel, R., & Lember, V. (2010). "Public Procurement as an Industrial Policy Tool: An Option for Developing Countries." *Journal of Public Procurement*, 10(3): 368-404.
- Key, V. O. (1940). "The Lack of a Budgetary Theory." *The American Political Science Review, 34*(6): 1137-1144.
- Leenders, M., & Fearon, H. E. (2008). "Developing Purchasing Foundations." *Journal of Supply Chain Management*, 44(2): 17-27.
- Lember, V., Kattel, R., & Kalvet, T. (2014). "How Governments Support Innovation through Public Procurement: Comparing Evidence from 11 countries." In V. Lember, R. Kattel, and T. Kalvet (Eds.), *Public Procurement, Innovation, and Policy* (pp. 287-309). New York: Springer.
- Ludwig, D. C. (1993). "Adapting to a Declining Environment: Lessons from a Religious Order." *Organizational Science, 4*(1): 41-56.
- MacManus, S. (1992). Doing Business with Government: Federal, State, Local and Foreign Government Purchasing Practices for Every Business and Public Institution. New York: Paragon House.
- Mamiro, R. G. (2012). "Regulating Procurement in Commercial Public Entities: Merits and Demerits." Paper Presented at the 5th

- International Public Procurement Conference, August, Seattle, WA.
- McCue, C. P., & Pitzer, J. T. (2000). "Centralized vs. Decentralized Purchasing: Current Trends in Government Procurement Practices." Journal of Public Budgeting, Accounting & Financial Management, 12(2): 400-420.
- McCue, C. P. (2000). "The Risk-Return Paradox in Local Government Investing." *Public Budgeting & Finance*, 20(3): 80-101.
- McCue, C. P. (2001). "Organizing the Public Purchasing Function: A Survey of Cities and Counties." *Government Finance Review*, 17(1): 9-14.
- McCue, C. P., & Gianakis, G. A. (2001). "Public Purchasing: Who's Minding the Store?" *Journal of Public Procurement*, 1(1): 71-95.
- McCue, C. P., Buffington, K. W., & Howell, A. D. (2003). "The Fraud/Red Tape Dilemma in Public Procurement: A Study of U.S. State and Local Governments." Proceedings of the International Research Study of Public Procurement Workshop (pp. 187-210).
- Moe, T. M. (1984). "The New Economics of Organization." *American Journal of Political Science* 28(4): 739-777.
- Muller, E. W. (1991). "An Analysis of the Purchasing Manager's Position in Private, Public and Nonprofit Settings." *International Journal of Purchasing and Materials Management*, 27(4): 16-23.
- National Association of State Purchasing Officials (1997). State and Local Government Purchasing: Principles & Practices. Lexington, KY: Author.
- National Institute of Governmental Purchasing (1989, January 1). Resolution: Centralized Purchasing. Reston, VA: Author.
- Ng, C., & Ryan, C. (2001). "Assurance Services in the Australian Public Sector: The Case of Probity Audits." *Managerial Auditing Journal*, 16(1): 69-75.
- Norman, R. (2003). Obedient Servants? Management Freedoms and Accountabilities in the New Zealand Public Sector. Wellington, New Zealand: Victoria University Press.
- Osborne, D., & Gaebler, T. (1992). *Reinventing Government*. New York: Addison-Wesley.

- Osborne, D., & Plastrik, P. (1997). Banishing Bureaucracy: The Five Strategies for Reinventing Government. New York: Addison-Wesley.
- Olken, B. A. (2007). "Monitoring Corruption: Evidence from a Field Experiment in Indonesia." *Journal of Political Economy,* 115(2): 200-249.
- Pagell, M., Wasserman, M.E., & Wu, Z. (2010). "Thinking Differently about Purchasing Portfolios: An Assessment of Sustainable Sourcing." *Journal of Supply Chain Management*, 46(1): 57-73.
- Palmer, J. W. (2005). *Innovative Behavior of Frontline Employees in the Public Sector*. (Unpublished Doctoral Dissertation). Cincinnati, OH: University of Cincinnati.
- Picci, L. (2007). "Reputation-Based Governance of Public Works." In G. Piga and K. V. Thai (Eds.), *The Economics of Public Procurement* (pp. 159-182). New York: Palgrave MacMillan.
- Preuss, L. (2009). "Addressing Sustainable Development through Public Procurement: The Case of Local Government." Supply Chain Management: An International Journal, 14(3): 213-223.
- Qiao, Y., Thai, K. V., & Cummings, G. (2009). "State and Local Procurement Prefernces: A Survey." *Journal of Public Procurement*, 9(3 & 4): 371-410.
- Rainey, H. G., Pandey, S., & Bozeman, B. (1995). "Research Note: Public and Private managers' Perceptions of Red Tape." *Public Administration Review*, 55(6): 567-574.
- Rolfstam, M. (2009). "Public Procurement as an Innovation Policy Tool: The role of Institutions." *Science and Public Policy*, 36(5): 349-360.
- Salamon, L. M., & Anheier, H. K. (1998). "Social Origins of Civil Society: Explaining the Nonprofit Sector Cross-Nationally." Voluntas: International Journal of Voluntary and Nonprofit Organizations, 9(3): 213-248.
- Schapper, P. R., Malta, J. V., & Gilbert, D. L. (2006). "An Analytical Framework for the Management and Reform of Public Procurement." *Journal of Public Procurement*, 6(1): 1-26.

Schiele, J. J. (2009). "Lean Thinking." Government Procurement, 17(4): 10-12.

- Schiele, J. J., & McCue, C. P. (2010). "A Framework for the Adoption of Lean Thinking within Public Procurement." *International Journal of Procurement Management*, 3(4): 379-396.
- Schwartz, J. I. (2010). "Procurement as a Tool for Economic Stimulus: The United States' Experience, 2008-2010." Paper Presented at the International Public Procurement Conference, August, Seoul, South Korea.
- Shead, B. (2001). "Probity Auditing: Keeping the Bureaucrats Honest?" Australian Journal of Public Administration, 60(2): 66-70.
- Soudry, O. (2007). "A Principal-Agent Analysis of Accountability in Public Procurement." In P. Piga and K. V. Thai (Eds.), *Advancing Public Procurement: Practices, Innovation and Knowledge-Sharing* (pp. 432-451). Boca Raton, FL: PrAcademics Press.
- Ssennoga, F. (2006). "Examining Discriminatory Procurement Practices in Developing Countries." *Journal of Public Procurement*, 6(3): 218-249.
- Strauss, G. (1964). "Work-Flow Frictions, Interfunctional Rivalry, and Professionalism: A Case Study of Purchasing Agents." *Human Organization*, 23(2): 137-149.
- Tadelis, S. (2012). "Public Procurement Design: Lessons from the Private Sector." *International Journal of Industrial Organization*, 30(3): 297-302.
- Tanzi, V. (2001). *Pitfalls on the Road to Fiscal Decentralization*. Washington, DC: Carnegie Endowment for International Peace.
- Thai, K. V. (2001). "Public Procurement Re-Examined." *Journal of Public Procurement*, 1(1): 9-50.
- Trybus, M. (2006). "Improving the Efficiency of Public Procurement Systems in the Context of the European Union Enlargement Process." *Public Contract Law Journal*, 35(3): 409-425.
- Tucker, T. (1998). "A Critical Analysis of the Procurement Procedures of the World Bank." In S. Arrowsmith and A. Davies (Eds.). *Public*

- Procurement: Global Revolution (pp. 139-157). London, UK: Kluwer Law International.
- Vagstad, S. (1995). "Promoting Fair Competition in Public Procurement." *Journal of Public Economics*, 58(2): 283-307.
- Walker, G., & Poppo, L. (1991). "Profit Centers, Single-Source Suppliers, and Transaction Costs." *Administrative Science Quarterly*, 36(1): 66-87.

DO KEY PERFORMANCE INDICATORS MATTER ON PUBLIC PROCUREMENT RULES 2008? AN EMPIRICAL STUDY ON LOCAL GOVERNMENT ENGINEERING DEPARTMENT, BANGLADESH

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ABSTRACT. This study focuses on the importance of transparency and accountability of Local Government Engineering Department (LGED)'s procurement performance based on 45 predetermined Key Performance Indicators (KPIs). The main objectives of this study are to find the extent of compliance of PPR 2008 by LGED and to identify gaps in compliance and scope of improvement for implementation. For this study, a questionnaire survey method collected data from different stakeholders related to procurement activities of LGED. Key informant interviews were also conducted with senior officers of LGED and IMED. The study result shows a clear adherence to the rules of PPR 2008 by LGED in operating its procurement functions except when paying interest for delayed payment. This study was confined to compliance issues covering 11 KPIs set by the Central Procurement Technical Unit (CPTU).

INTRODUCTION

The Chartered Institute of Procurement & Supply dictionary defines "procurement" as commonly interchangeable with the term

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"purchasing." Procurement is a broad concept that includes the entire process of acquisition that starts with detection of a requirement and ends with the fulfilment of that requirement. In short, such is the life cycle of any procurement. The process encompasses activities during a pre-contract period such as "sourcing" and also activities during post-contract period such as "contract management" and management of vendor relationship. Nonetheless, the wider aspects of Supply Chain Management like store management and logistics do not come under its purview. Requirements for procurement are usually categorized into "goods", "works" and "services" (CIPS, undated, p. 27).

According to Weele (2010), procurement refers to acquiring goods, works, and services from other than internal sources. He further explained that some questions to be asked for ensuring effective procurement are if the procurements are appropriate and if they meet the requirement of acquisition: quality, quantity, time and location at the most competitive cost.

To ensure transparency and accountability in the procurement of goods, works or services by using public funds, and ensuring equitable treatment and free and fair competition among all persons wishing to participate in such procurement, the Government of the People's Republic of Bangladesh enacted Public Procurement Act (PPA) 2006 and subsequently Public Procurement Rules (PPR) 2008 which became effective on January 31, 2008 (Hoque, 2010).

Issuance of the PPA 2006 and PPR 2008 bound the government agencies to follow the Act and Rules. The Central Procurement Technical Unit (CPTU) of the Implementation Monitoring and Evaluation Division (IMED) of the Ministry of Planning was established for carrying out monitoring compliance.

For this, the government of Bangladesh undertook Public Procurement Reform Project II (PPRP II) in 2009, to monitor compliance of PPA 2006 and PPR 2008 by the target agencies in the light of 45 predetermined Key Performance Indicators (KPIs). The KPIs were developed by taking the Organization for Economic Cooperation and Development Assistant Committee (OECD-DAC) indicators into consideration within the overall framework of the PPA/PPR and its features within the local context.

Among the four target agencies, LGED is the largest in terms of budget allocation against the projects in the Annual Development Programme (ADP). In general, a total of 80% of ADP allocation are spent for procurement of goods, works and services which are administered by PPR 2008. Thus, it seems to be a good consideration to have a look on the compliance issues of PPR 2008 in LGED.

This study is designed to know the extent of compliance of PPR 2008 by LGED procurement activities as well as to explore the hindrances faced by LGED while complying with the rules of PPR 2008. The research questions of this study are as follows: (i) Does LGED follow PPR 2008 subjectively? (ii) If no, then what are the hindering causes behind this? The specific objectives of this study are as follows:

- To find out the extent of compliance of PPR 2008 by LEGD.
- To find out the gap of compliance in regard to PPR 2008 at LGED and
- To suggest for policy guidelines for improving PPR 2008 in LGED.

THEORETICAL DESCRIPTION

Public Procurement Rules (PPR 2008): An Overview

Public Procurement Rules (PPR) 2008 was framed by the Government of Bangladesh under the Public Procurement Act (PPA) 2006 which became effective on January 31, 2008. The main objective of enacting PPA 2006 and introducing PPR 2008 was, generally, to achieve value for money ensuring transparency, accountability, fair treatment in all public procurement throughout the public sector organizations of the country.

There are 130 rules in PPR 2008 under nine chapters. Most of the rules have several sub-rules. In Chapter One, there are 3 rules where preliminary issues like definition of key terms, scope and application of the rules are given. There are 9 rules in Chapter Two. Guidelines for preparation of tender or proposal document and the make-up of different committees for disposal of tender or proposal are given in this chapter. In Chapter Three, principles of public procurement are given. This large chapter is divided into twelve parts with a total of 48 rules (rule 13 to rule 60) Included are the procedure for preparation of technical specification, preparation of

terms of reference, procedure for rejection of tender, approval procedure of tender, contract administration and management. Rules 61 to 89 constitute Chapter Four where methods of procurement for goods and related services, works, physical services and their use are given. Processing of procurement including advertisement, prequalifications, processing of tenders etc. are given in Chapter Five where there are 13 rules (rule 90 to rule 102). In Chapter Six, the guideline for procurement of intellectual and professional services is given in 24 rules (rule 103 to rule 126). Rule 127 and rule 128 constitute Chapter Seven and Chapter Eight respectively. Professional misconduct is described in Chapter Seven and e-government procurement is described in Chapter Eight. In Chapter Nine, miscellaneous issues are described in 2 rules (rule 129 and rule 130).

PPA 2006 and PPR 2008 with all amendments have been reviewed thoroughly. The rules which form the basis of compliance KPIs were reviewed keenly.

Key Performance Indicators

Key performance indicators (KPI), also known as key success indicators (KSI), help an organization define and measure progress toward organizational goals. These KPIs are quantifiable measurements agreed to beforehand, that reflect the critical success factors of an organization. Once an organization has analyzed its mission, identified all its stakeholders, and defined its goals, it needs a way to measure progress toward those goals. Key performance indicators are those measurements.

KPIs allow an organization adequate measure of performances from the standardized activities. Velimirovic et al. (2011) stated that continuous measuring can ensure improvements of organization performances, which is one of the most important management principles. Thus, compliance measurement is very important public procurement.

Compliance in Public Procurement

Compliance means the act of adhering to, and demonstrating adherence to, a standard or regulation. In the context of procurement, compliance is the state of being in accordance with the relevant policies, rules and regulations.

Compliance indicates to what extent the procuring entities adhere to the procurement rules and procedures specified in PPA 2006 and PPR 2008. The level of adherence to government procurement rules attained by the procuring entities has been determined by 11 specific KPIs as described in Table 1.

TABLE 1
Compliance Key Performance Indicators (KPI) for PPR 2008

Serial	KPI	Description of KPI	Related Rules	Compliance
No.	No.	-	of PPR 2008	issues
1.	6	Average number of days	Rule 61(4),	- Generally 14-
		between publishing of	64(5),	28 days,
		advertisement and tender	Schedule II	- For an emer-
		submission deadline		gency, 7-10
				days
2.	11	Percentage of cases Tender	Rule 7,	- Three (3)
		Opening Committee (TOC)	Schedule II	members in
		included at least ONE		TOC
		member from the Tender		- One (1) from
	4.0	Evaluation Committee (TEC)	D 1 0	TEC is a must.
3.	13	Percentage of cases TEC	Rule 8,	- 5-7 members
		included two external	Schedule II	in TEC
		members outside the		- 2 from outside
		ministry or division		the procuring entity (PE)
4.	14	Average number of days	Rule 8 (14),	14-21 days
4.	14	between tender opening and	36(6),	14-21 uays
		completion of evaluation	Schedule III	
5.	19	Average number of days	Rule 8 (14),	7-14 days
0.		taken between submission	36(6),	1 1 adyo
		of tender evaluation report	Schedule III	
		and approval of contract		
6.	20	Percentage of tenders	Rule 36,	100%
		approved by the proper	delegation of	
		financial delegated authority	financial power	
7.	21	Percentage of cases TEC	Rule 36(3)	100%
		submitted report directly to		
		the contract approving		
		authority where approving		
		authority is HOPE or below		

TABLE 1 (Continued)

Serial No.	KPI No.	Description of KPI	Related Rules of PPR 2008	Compliance issues
8.	25	Average number of days between final approval and notification of award (NOA)	Rule 8 (14), 36(4), Schedule II, Schedule III	7 days but before the expiry of the tender validity period
9.	31	Percentage of contracts having liquidated damage imposed for delayed delivery/ completion	Rule 39(27)	As per defined in the contract
10.	33	Average number of days taken to release payment from the date of certificate of PM/ engineer	Rule 39(22), Schedule II	Within 28 days
11.	35	Percentage of contracts where interest for delayed payments was made	Tender Data Sheet (TDS)/ General Conditions of Contract (GCC)	Mandatory if payment is delayed

Penalties for Non-compliance of PPR 2008

It is to be noted that compliance of PPR 2008 is essential and failing to comply will result in penalty of the procuring entity (PE). In this case, the concerned administrative ministry as well as the Anticorruption Commission (ACC) in Bangladesh will take necessary actions against the procuring entity.

METHODS

Selection of Study Area

Considering time constraint and convenience of the present study, LGED headquarters and Dhaka office were selected for collection of data through Questionnaire One. Also, data through Questionnaire Two were collected from the Office of the Executive Engineer, LGED, Dhaka. The study mainly focused on the on-going development projects of LGED under Annual Development Programme (ADP) 2012-2013. Especially those projects which were in the middle stage of their implementation were considered for the

study, but some procurement information was collected from the projects which ended in June 2012. Newly started projects where procurement activities were slow or not yet started were excluded from the study to get more reliable data.

Study Period

The survey was conducted at different offices like LGED, the Planning Commission, the Implementation Monitoring and Evaluation Division (IMED), and the Tender Evaluation Committee (TEC) members of LGED from Roads and Highways Department (RHD) and the Public Works Department (PWD) Dhaka, Bangladesh from 05 August 2012 to 30 August 2012.

Sample Size

For Questionnaire One, the respondents were categorized into four different types, namely: (1) LGED's employee, 92) TEC Members, (3) Persons who are dealing with LGED's projects such as officers of IMED, Planning Commissioners and Local Government Division members. As there are numerous people concerned with LGED's procurement activities, a total of 35 different officers were interviewed with Questionnaire One.

There were 72 on-going projects of LGED in the ADP 2012-2013. In the last 2011-2012 RADP, the total projects of LGED were 85. From these projects, a total of 8 projects were selected for the compliance study under Questionnaire Two.

Projects for the study were randomly selected, but there was a representation of projects from the ADP sectors under which LGED had projects in the ADP.

Sampling Method

A combination of questionnaire survey and interview method was adopted for this study. Survey method was used as this is considered the best method available to social scientists interested in collecting original data. Also, the interview method was used as this is helpful to gather clear idea on the issue providing insight into the conversation. Both qualitative and quantitative methods were followed in this study.

Two types of questionnaires were used for this study. The questionnaire survey was adopted for collecting primary data from

different stakeholders related to procurement activities of LGED and having an acquaintance with PPA 2006 and PPR 2008. Before asking for completion of the questionnaire, the general idea of the research objectives was explained. After the exchange of general ideas of the research objectives, the questionnaire was administered. Responders were asked to complete the questionnaire based on the practical experience they had had regarding compliance issues of PPR 2008 in LGED based on KPIs in Questionnaire One. Both open and closed-ended questions were set in the questionnaire to reveal the real perception of the respondents. A 5-point Likert Scale was set to measure the responses against all KPIs.

For the in-depth study on compliance issues of PPR 2008, Questionnaire Two was given to 8 (eight) selected project offices of LGED with a general introduction of the research. Here both openand closed-ended questions were stipulated for getting the in-depth essence of procurement activities.

For key informant interviews, a few senior officers of LGED and IMED were interviewed. They were asked to give their perception in respect to compliance KPIs to monitor the PPRP II Project.

Data Analysis

As a means of processing, collected data have been cleaned, edited, arranged and coded before statistical analysis. The main statistical analytical tool used in this study was Statistical Package for Social Science (SPSS) to analyze and interpret the subject matter of the study. A 5-point Likert Scale was used in the questionnaire to categorize the answers for the ease of data analysis. Both a frequency distribution table and central tendency test have been done to see the findings of the sample.

RESULTS AND DISCUSSION

The purpose of this study is to find out the extent of compliance of PPR 2008 by LEGD in its procurement activities. More specifically, the purpose of the study is to assess the gap of compliance and scope of improvement for implementation of PPR 2008 in LGED.

Demographic Overview of the Respondents

The questionnaire survey was conducted mainly by officers from LGED as well as PWD, RHD, IMED and Planning Commission who are relevant and well known about LGED's procurement. The respondents belong to different ranks in different organizations. A summary of the information regarding the respondents' profiles is presented in Table 2.

TABLE 2 Summary of Demographic Information of the Respondents

		<u>, </u>			
Respondent Attribute/Variants	Frequency	Percent			
Organization					
LGED	27	77.1			
RHD	1	2.9			
PWD	1	2.9			
IMED	4	11.4			
Planning Commission	2	5.7			
Total	35	100.0			
Designation					
Assistant Engineer	4	11.4			
Senior Assistant Engineer	10	28.6			
Executive Engineer	7	20.0			
Administrator/Consultant	11	31.4			
Project Director	3	8.6			
Total	35	100.0			
Relevancy with LGED					
Employee	14	40.0			
TEC Member	10	28.6			
Dealing with LGED projects	9	25.7			
Others	2	5.7			
Total	35	100.0			
Respondent Attribute/Variants	Frequency	Percent			
Education Level					
Masters'	17	48.6			
Bachelor	17	48.6			
Others	1	2.9			
Total	35	100.0			

TABLE 2 (Continued)

Respondent Attribute/Variants	Frequency	Percent		
Training on PPA/PPR 2008				
Yes	34	97.1		
No	1	2.9		
Total	35	100.0		

Overview of the Survey Questionnaire

The respondents were asked eleven (11) questions regarding compliance of PPR 2008 in LGED's procurement activities. To get their clear perception on the issue, the compliance KPI's were asked to the respondents in a 5-point Likert Scale where 1 for "Very Poor", 2 for "Poor", 3 for "Neutral", 4 for "Good" and 5 for "Very Good". Frequency distributions for these questions and descriptive statistics (mean and standard deviation) are presented in Table 3.

TABLE 3
Frequency Distribution and Descriptive Statistics of the Responses on KPIs

KPI	Frequency Distribution (Number)				Total	M±SD	
No.	Very Poor	Poor	Neutral	Good	Very	fre-	
140.	very r oor	1 001	Neutrai	aoou	good	quency	
KPI-6	0	0	0	0	35	35	5.00±.000
KPI-11	0	0	0	5	30	35	4.86±.355
KPI-13	0	0	0	1	34	35	4.97±.169
KPI-14	0	0	2	26	7	35	4.14±.494
KPI-19	0	0	2	10	23	35	4.60±.604
KPI-20	0	1	0	5	29	35	4.77±.598
KPI-21	0	2	4	9	20	35	4.34±.906
KPI-25	0	0	0	21	14	35	4.40±.497
KPI-31	2	2	5	17	9	35	3.83±.1.071
KPI-33	0	5	22	7	1	35	3.11±.676
KPI-35	17	8	5	4	1	35	1.97±1.175

Overview of the Key Informant Interview

A key informant interview was conducted with a few officials of eight (8) different projects of LGED. Also, the monitoring and evaluation consultant engaged in LGED on behalf of CPTU has been considered as a key informant and was interviewed as well. Most of the key informants stated that before the introduction of PPR, General Financial Rules (GFR) was applied for the procurement of goods, works and services. The monitoring and evaluation of the then procurement activities were not so structured. Rather, these have been streamlined after the introduction of PPR 2003 and strengthened after PPR 2008.

All the key informants were asked about the compliance of KPIs and expressed that their in-depth opinion was expected for a clear view of the issue, understanding the same and concluding thereof. Also, the key informants were asked about the problems of compliance of PPR 2008 in their respective procurement activities and what they think is the best solution for them. The opinions of the key informants were noted and used for analyzing the consistency of the questionnaire survey.

Findings of the questionnaire survey, analysis and discussion

While asked about the compliance issues of PPR 2008 in LGED, the respondents replied to different questions in different ways. Findings of the survey are discussed below on an individual question basis:

KPI 6: Publishing Advertisement and Tender Submission Deadline

The perception of the respondents is very much consistent for KPI 6 (publishing advertisement and tender submission deadline) where every respondent (100%) encircled the *Very Good* option on the questionnaire, *i.e.*, LGED is maintaining the time frame for publishing advertisement and tender submission deadlines strictly. No one responded *good*, *neutral*, *poor or very poor*. This has been shown in Table 3. It is assumed that LGED is strictly following the rule as there is no standard deviation among the findings. The mean and standard deviation of the responses are presented in the same Table 3. Regarding key informant interviews, similar results were found in the opinions of the interviewees.

According to rule 61(4) of PPR 2008, the allowable maximum time between publishing of advertisement of an Invitation for Tender (IFT) and tender submission deadline depends upon the estimated value of the IFT. The minimum time allowed in this regard is 14 days for procurement up to 2 (two) crore² taka, 21 days for procurement of above 2 (two) crore to 5 (five) crore taka, 28 days for procurement of above 5 (five) crore taka, 10 days for re-tendering up to 2 (two) crore taka and in other cases 14 days, 42 days for international tendering and 28 days for re-tendering. From the survey results, it can be said that LGED is strictly following rule 61(4) allowing sufficient time for publishing advertisement and tender submission deadline. This result is supported by the findings of the quarterly report (April-June, 2012) submitted to CPTU by the consultant appointed by LGED. LGED took on an average 30 days for this purpose and 97% of the tenders had sufficient tender submission time as reflected in the consultant's report. However, monitoring and evaluation consultancy firm, SRG Bangladesh appointed by the CPTU mentioned in its April-June 2012 quarterly report that 24 days on an average (ranging from 23-31days) which is the worst among the four target agencies as BWDB took 22 days and RHD took 19 days on an average.

KPI 11: Tender Opening Committee (TOC)

In regard to KPI 11 (tender opening committee), the choices of the respondent were limited in two options: *Very Good* and *Good* where a majority of the respondents (85.7%) answered the question as *Very Good* and the rest of them (14.3%) answered *Good*. No one answered *Neutral, Poor or Very Poor*. This has been shown in Table 3. This is meant that LGED is complying with rule 7 of PPR 2008 in a good manner where tender opening committee (TOC) always consists of at least one member from TEC. The standard deviation of the response is 0.355 which means an insignificant effect on the study result. The mean and standard deviation is also presented in Table 3. The findings of the key informant interview also show a similar result.

According to schedule II [rule 7] of PPR 2008, a tender opening committee must include one member from the tender evaluation committee (TEC). From the perceptions of the respondents received through the questionnaire survey and responses of the key informants, it can be said that LGED is complying with rule 7 of PPR 2008 as the responses are highly positive to this issue. The result of this study has similarity as reported by the consultant appointed by

CPTU for LGED. In the quarterly report (April-June 2012) submitted in CPTU, it has been found that TOC included 1(one) member from tender evaluation committee in 92% of cases. However, SRGB's report of April-June 2012 quarter indicates that TOC included one member from TEC in 100% of cases signifying that LGED is serious about complying with mandatory requirements of PPR 2008. This is similar with other target agencies of CPTU.

KPI 13: External Members for Tender Evaluation Committee (TEC)

In regard to KPI 11 (external members for tender evaluation committee), the respondents used only two options to answer: *Very Good* and *Good*. The majority of the respondents (97.1%) choose *Very Good* while the rest of them (2.9%) choose *Good* to answer the question. No one answered *Neutral, Poor or Very Poor* (Table 3). The standard deviation of the response is 0.169 which means an insignificant effect on the study result. It indicates that LGED is complying with rule 8 of PPR 2008 very minutely and always including two external members in the tender evaluation committee. The mean and standard deviation are 4.97 and 0.169 respectively. Similar results were found from the opinions of the interviewees on the key informant interview.

According to Schedule II [rule 8] of PPR 2008, tender evaluation committee (TEC) must include two (2) external members outside the ministry of the procuring entity except in the case of low value purchases. From the perceptions of the respondents to the questionnaire survey, it appears that LGED has gradually become more conscious about compliance with the requirement of PPR 2008. The findings of this question have been supported by the CPTU appointed consultant's reports in LGED. In the quarterly report (AprilJune 2012) submitted in CPTU, it had be found that in LGED, TEC included 2(two) external members in 100% of tenders. This has also been supported by the SRGB's report (April-June 2012) where it has been mentioned that in 100% of the tenders of LGED two external members from outside the Local Government Division were included in TEC. This fact indicates the keenness of LGED to comply with rule 8 of PPR 2008.

KPI 14: Standard Time between Tender Opening and Tender Valuation

In response to KPI 14 (standard time between tender opening and tender valuation), the majority (74.3%) of respondents listed their opinion as *Good* while 20% reported *Very Good* and the remaining 5.7% gave *Neutral* as their response to the question. No one answered it as *Poor* or *Very Poor* (Table 3). The mean value of the responses is 4.14. The standard deviation of the response, 0.494, is an insignificant result. It indicates that LGED is complying with rule 36 of PPR 2008 keenly by allowing standard time between tender opening and tender valuation. Key informant interviews also reflect similarly.

According to Schedule III [rule 8(14), rule 36], 2 weeks and 3 weeks time is allowed for evaluation when the approving authority is the project director (PD) or an authorized officer (Executive Engineer-XeN) and Head of Procuring Entity (HOPE) respectively. The present study result on this issue indicates that LGED is closely following the standard for time between tender opening and tender valuation. In most of the cases, the time required for tender evaluation is within the time limit or slightly longer the threshold limit as mentioned in PPR2008. In the April-June 2012 quarter, an average of 13 days was required for evaluation of tenders (days between tender opening and completion of evaluation) as SRG Bangladesh Limited (SRGB)'s report (April-June 2012) where it was within the threshold limit. As stated in SRGB's report, LGED is the best performer for compliance of this time schedule among the target agencies.

KPI 19: Standard Time between Submission and Approval of Tender Evaluation Report (TER)

In regard to KPI 19 (standard time between submission and approval of tender evaluation report), the respondents have shown three responses: *Very Good*, *Good* and *Neutral*. The majority of the respondents (65.7%) choose *Very Good* while 28.6% reported *Good* and the rest, 5.7%, answered *Neutral* question. No one responded with *Poor* or *Very Poor*. See Table 3. The mean value of this KPI is 4.6, while standard deviation is not higher (.604). , the similar results were found among the opinions of the interviewees in the key informant interview.

According to the provisions of PPR 2008, the timeline has been specified for completion of approval of TERs by the respective contractapproving authority (CAA) delegated with proper financial powers. As per schedule III and rule 8(14) and rule 36(6), 1-week and 2-week time is allowed for approval of a contract where the approving authority is PD or authorized officer (XeN) and HOPE, ministry and Cabinet Committee on Government Purchase (CCGP). From the results of this study, it clear that LGED is usually complying with this regulatory requirement, i.e., the average number of days between submission of tender evaluation report and approval of contract is within the threshold limit. The consultant's April-June 2012 quarterly report stated that in 78% of contract award cases, decisions were made within the timeline; on average it took 11 days. However, SRGB's report indicates that LGED took a maximum of 6 days for this task which is the second highest among the four target agencies. This phenomenon actually varies in different quarters, as found from the consultant's and SRGB's reports.

KPI 20: Tender Approval by CAA and DFP in LGED

In regard to KPI 20 (tender approval by CAA and DFP in LGED), the majority (82.8%) of the respondents have given their opinions as *Very Good* while 14.3% reported as *Good* and the rest 2.9% chose the *Poor* response to the question. No one answered it as *Neutral* or *Very Poor* (Table 3). The mean and standard deviation of the responses are 4.77 and 0.598 respectively. Similar results were found among the opinions of the interviewees who participated in the key informants' interview.

Delegation of financial powers is a document issued by the Finance Division of the Ministry of Finance. As per rule 36 of PPR 2008, this delegation has to be followed strictly for the approval of the contracts. Responses to the questionnaire survey indicated that LGED is very much keen in following this rule. This is also supported by the consultant's April-June 2012 quarterly report which stated that 96% of tenders have been approved by the proper financially delegated authority while 4% of tenders have been approved by a higher tier than the contract approving authority (CAA). However, SRGB's report (April-June 2012) indicated that LGED 87% of tenders have been approved by a proper CAA which is more or less similar with other target agencies.

KPI 21: TEC Submits TER Directly to CAA in LGED

The perceptions of the respondents to KPI 21 (TEC submits TER directly to CAA in LGED) varied from *Very Good* to *Poor* with a maximum frequency (57.1%) to a minimum (5.7%). The other 25.7% of respondents choose *Good* and 11.5% remained *Neutral* in their opinions. However, no *Very Poor* answer was received (Table 3). The mean and standard deviation of the responses are 4.34 and 0.906 respectively. Informal questioning of the key informants revealed similar results.

As per rule 36(3) of PPR 2008, TEC should submit the tender evaluation report (TER) directly to the Head of the Procuring Entity (HOPE) or the project director, project manager, or the authorized officer, as the case may be, for approval. In response to this key requirement of PPR 2008, and even though a majority of the respondents' perception is Very Good, it must be said that LGED is complying with this rule only in a fair basis as some respondents choose the *Poor* option. This has been supported by the consultant's April-June 2012 quarterly report that claimed that in only 10% of the cases did TEC submit a tender evaluation report directly to the contract approving authority. However, SRGB reported (April-June, 2012) that 99% of TERs were submitted directly to the appropriate Contract Approving Authority (CAA) which is not in agreement with the findings of this study. SRGB also mentioned that RHD had 100% compliance with the requirement of PPR 2008 in the April-June 2012 quarter.

KPI 25: Timeline between Approval of TER and Issuance of NOA Properly

In regard to KPI 25, the choices for the respondents were limited within two options: *Very Good* and *Good*. A majority of respondents (60%) answered *Good* and the rest (40%) answered *Very Good*. No one answered *Neutral, Poor* or *Very Poor* (Table 3). The mean and the standard deviation of the responses are 4.40 and 0.497, respectively.

According to Schedule II [rule 36(4)] and Schedule III [Rule 8(14)], within one week after the approval of the approving authority, notification of the award (NOA) should be issued. In response to this requirement of PPR 2008, the present study indicates that LGED is very eager to comply with this timeline. As mentioned in the consultant's April-

June 2012 quarterly report, it took seven days for issuance of NOA after approval of TER. This position has been strengthened by the findings of SRGB in the April-June 2012 quarterly report where it was mentioned as five days. Thus, it can be said that LGED is complying with the requirement of PPR 2008 fully in this regard.

KPI 31: Liquidated Damage towards the Contracts as Per Rule 39 (27)

In regards to KPI 31, the respondents covered all the options in their perceptions, from *Very Good* to *Very Poor*. Though a majority (48.6%) answered the question with 'Good', there were some who answered *Very Good* (25.7%), *Neutral* (14.3%), *Poor* 5.7% and *Very Poor* 5.7% (Table 3). Thus, there was an overall positive response to the question. The mean and the standard deviation of the responses are 3.83 and 1.071 respectively. However, the majority of the key informants responded negatively. A liquidity damage clause is not often included in the contracts.

As per rule 39 (27) of PPR 2008, it is mandatory to include the liquidated damage clause in the contracts where applicable. The questionnaire survey indicated an overall positive result towards imposing a liquidated damage clause in the contract; however, the key informants' interview does not comply with this. While discussing the about liquidate damage, they stated that a liquidated damage clause is there in the contracts, but because the contractors are not paid regularly for their bills because of a shortage of funds, the liquidated damage is not applied. Individual consultant's reports for the April-June 2012 quarter also indicate that no liquidated damage had been imposed for delayed delivery/completion in that quarter. SRGB in its April-June 2012 quarters' report also reported findings similar to those of the individual consultants –that no liquidated damage was imposed on any of the defaulters. Thus, it can be concluded that LGED is not complying with rule 39 (27) of PPR 2008.

KPI 33: Contractor Payment Disbursed Timey as per Rule 39 (22)

In response to KPI 33 (contractor payment disbursed timey as per Rule 39), respondents showed a mixed response. A majority (62.8%) of respondents remained *Neutral* in their opinions while the second largest group (20.0%) responded *Good*. Among others, 14.3%

respondents showed their perception as *Poor* while the remaining 2.9% replied *Very Good*. No one answered *Very Poor* (see Table 3). The mean and the standard deviation of the responses are 3.11 and 0.676, respectively.

According to Schedule II [rule 39(22)], the procuring entity shall pay the contractor the amount certified by the project manager within 28 days from the date of the certificate of PM/ engineer. As seen from the questionnaire survey of the present study, the majority remain neutral in their perception; the key informants were asked the same to explain in a broad aspect. Most of them argue that payment is not made within the stipulated time. However, misunderstanding about the submission of a bill by the contractors and the payment of that bill resulted because many started to count the date from submission of bills. The days should actually be counted from the date the certificate was issued by the project manager, Thus, the finding was somewhat distorted. The individual consultant's April-June 2012 quarter report indicated that payments were settled within 4 days. In the April-June 2012 quarter the time was further reduced to 1.90 days so stated SRGB. This time period indicates the promptness of releasing payment in LGED. However, this issue needs further close study carefully.

KPI 35: LGED Paid in Delay Payment Regularly

Regarding KPI 35 (LGED paid in delay payment regularly), Table 3 the majority (48.6%) of the respondents responded *Very Poor*, while the second largest group' (22.8%) opinion was *Poor* while 14.3% remained *Neutral* in their opinions. However, 11.4% responded *Good* to this question and 2.9% of the respondents chose the *Very Good* option. The mean and the standard deviation of the responses are 1.97 and 1.175, respectively. Key informants' interviews also revealed results similar to those of the questionnaire survey.

Payment of interest for delayed payment is a mandatory requirement of PPR 2008. However, from the present study, it can be said that LGED has not been paying any interest for a delayed payment. This conclusion was derived from the survey results where a majority (more than 70%) of the respondents' perception is *Poor* in this regard. While conducting key informants' interviews, the respondents expressed their opinions candidly that as there was no provision for sufficient funds in the contract, the contractors were never paid for a delayed payment. The

individual consultant's April-June 2012 quarterly report indicates that no interest had been paid for delayed payments. SRGB's report in this regard states that no agency including LGED paid interest to the contractors for a delayed payment. Such action is clearly a violation of PPR 2008 and improvement is needed in this area.

CONCLUDING REMARKS

Compliance monitoring of PPR 2008 is a vital issue for ensuring good standards and value for money in public procurement. The PPRP II has added a new dimension in the field of monitoring in the sense that it envisages to assess the compliance of the provisions of PPA 2006 and PPR 2008. This system has made a shift from the existing approach and methods in dealing with procurement using public funds. Though awareness to some extent about PPA 2006 and PPR 2008 has already been developed in the officials and staffs of LGED through mandatory application of PPR 2008 in practice and training, it will certainly take some time to get momentum for the reform activities.

The present study results both in the form of questionnaire survey and key informants' interviews show a clear adherence to the rules of PPR 2008 by LGED in carrying out most of the compliance related KPIs. The individual consultant's report as well as SRGB's related report also shows a clear indication of compliance of PPR 2008 in LGED. Although varied in different quarters of the years, it has shown a gradual improvement since the starting of monitoring.

With respect to KPI 6 (average number of days between publishing of the solicitation advertisement and tender submission deadline), KPI 11 (percentage of cases for which TOC included at least ONE member from TEC), KPI 13 (percentage of cases TEC included two external members outside the ministry or division), KPI 14 (average number of days between tender opening and completion of evaluation), KPI 19 (average number of days taken between submission of the tender evaluation report and approval of the contract) and KPI 20 (percentage of tenders approved by the proper authority as defined by the Delegation of Financial Power (DoFP) and KPI 25 (average number of days between final approval and NOA), LGED is doing fine. Yet there is scope and need for improvement in these areas in order to have a 100% compliance of PPR 2008. However, LGED's performance in the areas of KPI 21 (percentage of

cases when TEC submitted a report directly to the contract approving authority where the approving authority is HOPE or below), KPI 31 (percentage of contracts having liquidated damage imposed for delayed delivery/completion), KPI 35 (percentage of contracts where interest for delayed payments was made) are not satisfactory and need to improve these to a great extent. Moreover, compliance of KPI 33 (average number of days taken to release payment from the date of certificate of PM/ engineer) need to investigate more cautiously as there is ambiguity in the findings of the present study, individual consultants' reports and SRGB's report.

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NOTES

- 1. The Likert Scale is an attitude or opinion measuring survey scale, developed by Rensis Likert. In this study we used this scale to measure respondents' agreement on questionnaire with a 5 point ranging scale where, 1=Very Poor, 2=Poor, 3=Neutral, 4=Good, 5=Very Good.
- 2. 1 crore Taka=100 million-a unit of South Asian Numbering System, Taka-Bangladeshi Currency.

REFERENCES

Central Procurement Technical Unit, Implementation Monitoring and Evaluation Division, Ministry of Planning, Government of the People's Republic of Bangladesh (2013). *Public Procurement Act (PPA) 2006 and Public Procurement Rules (PPR) 2008*. [Online]. Available at www.cptu.gov.bd.

Chartered Institute of Purchasing & Supply (Undated). *P* & SM Jargon Buster. [Online]. Available at www.cips.org. (Accessed on March 16, 2014).

Hoque, R. (2010). "Public Procurement Law in Bangladesh: From Bureaucratisation to Accountability." *National University of Juridical Sciences (NUJS) Law Review, 3*(3): 281-29. [Online]. Available at www.nujslawreview.org. (Accessed on June 20, 2011).

- Local Government Engineering Department, GOB. (2012). *Quarterly Monitoring Reports* (April-June 2008 to April-June 2012). Dhaka, Bangladesh: Government of Bangladesh.
- Ministry of Finance (MoF) (1998). *General Financial Rules*. Dhaka, Bangladesh: Finance Division, Government of the People's Republic of Bangladesh, [Online]. Available at http://mof.gov.bd/en/index.php?option=com_content&view=article&id=48&Itemid=1. (Accessed on 19 February 2013).
- Ministry of Finance (MoF) (2004, December 22). *Delegation of Financial Powers for Development Projects*. Dhaka, Bangladesh: Finance Division, Government of the People's Republic of Bangladesh.
- Ministry of Planning (2008, January 27). "Public Procurement Act of 2006." Bangladesh Gazette. Dhaka, Bangladesh: Central Procurement Technical Unit (CPTU), Implementation Monitoring and Evaluation Division (IMED), Ministry of Planning, Government of the People's Republic of Bangladesh.
- Ministry of Planning (2008, January 28). "Public Procurement Rules (PPR) (2008)." Bangladesh Gazette. Central Procurement Technical Unit (CPTU), Implementation Monitoring and Evaluation Division (IMED), Ministry of Planning, Government of the People's Republic of Bangladesh.
- Ministry of Planning (2012). *Annual Development Programme 2012-2013*. Dhaka, Bangladesh: Ministry of Planning (MoP), Government of the People's Republic of Bangladesh.
- Ministry of Planning (2012). *Revised Annual Development Programme* 2011-2012. Dhaka, Bangladesh: Author.
- Survey and Research Group of Bangladesh (2012). *Half-yearly Report* (July-December 2010 to January-June 2012) Submitted to Central Procurement Technical Unit, Implementation Monitoring and Evaluation Division. Dhaka, Bangladesh: Author.

- Survey and Research Group of Bangladesh (2012). *Quarterly Reports*. (April-June 2010 to April-June 2012) submitted to CPTU, IMED. Dhaka, Bangladesh: Author.
- Likert, R. (1932). A Technique for the Measurement of Attitudes. *Archives of Psychology*, 140: 1–55.
- Velimirović, D., Velimirović, M., & Stanković, R., (2011). "Role and Importance of Key Performance Indicators Measurement." Serbian Journal of Management, 6(1):63 -72.
- Weele, A.J.v. (2010). Purchasing and Supply Chain Management Analysis, Strategy, Planning and Practice (5th ed.). Andover, UK: Change Learning.