



---

GW Law Faculty Publications & Other Works

Faculty Scholarship

---

2010

## A Versatile Prism: Assessing Procurement Law Through the Principal-Agent Model

Christopher R. Yukins

*George Washington University Law School, cyukins@law.gwu.edu*

Follow this and additional works at: [https://scholarship.law.gwu.edu/faculty\\_publications](https://scholarship.law.gwu.edu/faculty_publications)



Part of the [Government Contracts Commons](#)

---

### Recommended Citation

Christopher R. Yukins, A Versatile Prism: Assessing Procurement Law Through the Principal-Agent Model, 40 Pub. Cont. L. J. 63 (2010)

This Article is brought to you for free and open access by the Faculty Scholarship at Scholarly Commons. It has been accepted for inclusion in GW Law Faculty Publications & Other Works by an authorized administrator of Scholarly Commons. For more information, please contact [spagel@law.gwu.edu](mailto:spagel@law.gwu.edu).

A VERSATILE PRISM: ASSESSING PROCUREMENT LAW THROUGH THE PRINCIPAL-AGENT MODEL

Christopher R. Yukins

I. Introduction..... 63
II. Applying Agency Theory to Procurement Law ..... 66
III. The Key Desiderata Illuminated by Agency Theory ..... 68
A. Competition ..... 68
B. Transparency ..... 69
C. Integrity and Corruption ..... 70
D. Efficiency ..... 71
E. Customer Satisfaction and Best Value: The Dueling Principals..... 73
F. Wealth Redistribution and Risk Aversion: Understanding Stakeholders Through the Principal-Agent Model..... 76
IV. Using Agency Theory to Guide Conflict-of-Interest Rules..... 79
V. Conclusion: Potential Applications of Agency Theory in Procurement ..... 83

I. INTRODUCTION

Over the past several decades, the federal procurement system in the United States has grown remarkably, and now totals over \$500 billion annually.1 Over that same period, the rules governing federal procurement have been buffeted by broad efforts at reform. At no point, however, have we ever had an overarching theory—a model or prism—through which to assess the procurement system or its reform. Agency theory provides one such theoretical model. Long established in economics and the other social sciences,2 the principal-agent model (agency theory) provides a model to explain successes (and failures) in

1. See, e.g., Memorandum for the Heads of Executive Dep'ts and Agencies (Mar. 4, 2009), available at http://www.whitehouse.gov/the\_press\_office/Memorandum-for-the-Heads-of-Executive-Departments-and-Agencies-Subject-Government/.

2. See, e.g., Oliver Hart, An Economist's Perspective on the Theory of the Firm, 89 COLUM. L. REV. 1757, 1758-60 (1989) (discussing development of the principal-agent approach); Jon D. Michaels, Privatization's Pretensions, 77 U. CHI. L. REV. 717 (2010) (application of principal-agent theory in procurement); Richard W. Waterman & Kenneth J. Meier, Principal-Agent Models: An

Associate Professor of Government Contract Law and Co-Director, Government Procurement Law Program, The George Washington University Law School.

organizational structures, and also to understand the procurement system and its rules.<sup>3</sup>

The theory builds upon the classic principal-agent model. A *principal* enlists an *agent* to carry out the principal's goals, presumably because the agent enjoys some comparative advantage in performing the goals.<sup>4</sup> Inevitably, however, the agent's interests diverge from the principal's; if the agent's goals diverge sufficiently, the agent may be said to have a *conflict of interest*.<sup>5</sup> Notably, the risk that such a conflict (such a divergence in goals) will be material—will impair the principal<sup>6</sup>—increases when an *asymmetry of information* tilts in the agent's favor, i.e., in those situations where the agent holds much more information than the principal, or when a particularly robust “moral hazard” lures the agent from the principal's ends.<sup>8</sup>

---

*Expansion?*, 8 J. PUB. ADMIN. RES. & THEORY 173, 177–78 (1998); see also Øyvind Böhren, *The Agent's Ethics in the Principal-Agent Model*, 17 J. BUS. ETHICS 745, 745–46 (1998) (surveying literature); Thomas D. Jeitschko & Leonard J. Mirman, *Information and Experimentation in Short-Term Contracting*, 19 ECON. THEORY 311, 316–18 (2002) (discussing theoretical model for renegotiation of principal-agent agreement). There are, of course, extensive precedents in public procurement law on the relationship between the Government and its agents. See, e.g., *Brunner v. United States*, 70 Fed. Cl. 623, 629 (2006) (discussing lines of legal precedent regarding agents' authority to act on behalf of Government). While there are overlaps between those precedents and our discussion here, our focus here is not on defining the limits on agents' authority—the classic issue in agency law—but rather on understanding how the Government, as the procuring principal, should approach the issue of controlling its various agents and sub-agents in the supply chain.

3. The discussion here draws in part upon an unpublished paper the author presented at the International Public Procurement Conference in 2008. See Christopher R. Yukins, *Addressing Conflicts of Interest in Procurement: First Steps on the World Stage, Following the U.N. Convention Against Corruption 1196–2001* (Aug. 28–30, 2008) (unpublished paper) (on file at <http://www.ipppa.ws/IPPC3/Proceedings/Chaper%2061.pdf>).

4. See, e.g., Michael G. Jacobides & David C. Croson, *Information Policy: Shaping the Value of Agency Relationships*, 26 ACAD. MGMT. REV. 202, 203 (2001).

5. As is discussed below, not all technical “conflicts” are actionable; where a society draws the line can depend on many variables. Professor Bradley Wendel lamented the somewhat arbitrary line between what is permissible and what is not:

It can be difficult to rationalize distinctions drawn between impermissible and permissible interests of the agent. In Stark's terms, the conceptual challenge is to survey the field of interests [sic] and pick out those which are “encumbering” in the sense of creating a normatively significant influence on the agent's judgment. The question of how we distinguish encumbering interests from innocuous ones is just as contestable as the discretionary judgment that we entrust to agents, however, which is what gives rise to worries about conflicts of interest in the first place.

W. Bradley Wendel, *The Deep Structure of Conflicts of Interest*, 16 GEO. J. LEGAL ETHICS 473, 485 (2003) (reviewing ANDREW STARK, *CONFLICT OF INTEREST IN AMERICAN PUBLIC LIFE* (2000) & *CONFLICT OF INTEREST IN THE PROFESSIONS* (Michael Davis & Andrew Stark eds., 2001)).

6. One useful conceptual device is to consider the “principal” to be the public interest. See Waterman & Meier, *supra* note 2, at 174–75. The question of how to identify the “principal” is discussed further below. See *infra* notes 12–17 and accompanying text.

7. See generally David P. Baron & David Besanko, *Monitoring of Performance in Organizational Contracting: The Case of Defense Procurement*, 90 SCANDANAVIAN J. ECON. 329 (1988), for an attempt to model the factors at play in effective defense contracting, including the moral hazard that the contractor may lack true incentives to hold down costs.

8. See, e.g., Kathleen M. Eisenhardt, *Agency Theory: An Assessment and Review*, 14 ACAD. MGMT. REV. 57, 57–70 (1989) (discussing information asymmetry as increasing likelihood of agent's diversion from the principal's goals, and moral hazard issues). As Kathleen Eisenhardt noted, “[W]hen principals and agents engage in a long-term relationship, it is likely that the principal

To mitigate that conflict of interest—to keep the agent aligned with the principal’s goals—the principal relies upon supervisory strategies sometimes known as *monitoring* and *bonding*. *Monitoring* is what it sounds like: it is the principal’s efforts to monitor what the agent is doing, to ensure that the agent pursues the principal’s ends.<sup>9</sup> *Bonding*, in contrast, was classically understood

---

will learn about the agent . . . and so will be able to assess behavior more readily. Conversely, in short-term agency relationships, the information asymmetry between principal and agent is likely to be greater,” and so more precautions must be taken to ensure the principal’s ends are met. *Id.* at 62. In procurement, this nuance in agency theory may explain why procuring officials tend to favor established contractors with long relationships with the Government; that long familiarity, as Eisenhardt explained, reduces the risks that a contractor’s informational advantage (the information asymmetry) might otherwise bring to the government-contractor relationship. *Id.* at 62–63.

9. Sharon Hannes described monitoring and bonding as follows:

Under agency theory, whenever one person, the agent . . . is required to fulfill a task for another person, the principal . . . a conflict of interest emerges. This conflict means the agent may pursue her own agenda rather than actions optimal in fulfilling her task for the principal. As a result, goes the argument, the principal-agent setting entails three types of costs. *The first type is monitoring costs.* Since the agent is prone to deviate from the goals set for her, the principal must employ expensive means to verify what her agent is doing and, if necessary, call her to order . . .

*The second inevitable type of cost is bonding costs.* Bonding measures do not assist the principal in scrutinizing and governing the actions of the agent, but, rather, are intended to ensure that the agent sticks to the objectives of her employment. Hence, a public servant is often required to cut any ties he may have with the business community to ensure objectivity; financial reporters or advisors are required to refrain from personal investments to prevent skewed recommendations; and workers go to much trouble to bring references and pursue studies, which, at least in part, are efforts aimed at showing how devoted they are going to be to their jobs.

*Finally, even after monitoring and bonding costs, there is a residual loss to be borne.* This means there is always enough room for a conflict of interest to arise between the principal and agent. For example, a certain amount of theft by workers always occurs; some confidential information will always leak; and employee effort levels rarely meet those of owners. In fact, as long as the residual losses are lower than the cost of additional bonding or monitoring costs required to overcome them, it is efficient to incur these losses.

Sharon Hannes, *Reverse Monitoring: On the Hidden Role of Employee Stock-Based Compensation*, 105 MICH. L. REV. 1421, 1438–39 (2007) (emphasis added). Hannes’ descriptions drew on the landmark 1976 paper by Michael C. Jensen and William H. Meckling, *Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure*, 3 J. FIN. ECON. 305 (1976), which has framed decades of discussions that followed regarding the principal-agent model. A revised version of that paper states:

If both parties to the relationship are utility maximizers, there is good reason to believe that the agent will not always act in the best interests of the principal. The *principal* can limit divergences from his interest by establishing appropriate incentives for the agent and by incurring monitoring costs designed to limit the aberrant activities of the agent. In addition in some situations it will pay the *agent* to expend resources (bonding costs) to guarantee that he will not take certain actions which would harm the principal or to ensure that the principal will be compensated if he does take such actions. However, it is generally impossible for the principal or the agent at zero cost to ensure that the agent will make optimal decisions from the principal’s viewpoint. In most agency relationships the principal and the agent will incur positive monitoring and bonding costs (non-pecuniary as well as pecuniary), and in addition there will be some divergence between the agent’s decisions and those decisions which would maximize the welfare of the principal. The dollar equivalent of the reduction in welfare experienced by the principal as a result of this divergence is also a cost of the agency relationship, and we refer to this latter cost as the “residual loss.”

*Id.*, available at <http://papers.ssrn.com/abstract=94043> (manuscript at 5).

in agency theory to refer to voluntary, largely contractual self-constraints on the agent's discretion.<sup>10</sup> For our purposes in the procurement realm, though, *bonding* might be better termed “sanctions” or “punishment”: the agent bonds itself to follow the principal's ends, and if the agent strays, the agent must forfeit that bond in some sort of sanction—whether that means suffering a contractual penalty, or a civil liability, or forfeiting the agent's liberty and going to prison.

Agency theory concludes that there is always “residual loss” in any principal-agent relationship—some immutable, residual deviation by the agent from the principal's ends that cannot be erased through monitoring or bonding.<sup>11</sup> That residual loss might, on its face, suggest that using an agent is *always* a losing proposition—or, put in the language of procurement, that no function should ever be contracted out. The intuitive illogic of that extreme solution points out the other costs (the opportunity costs of not engaging a highly qualified agent, for example) that also must be considered when weighing the costs and benefits of using an agent.

## II. APPLYING AGENCY THEORY TO PROCUREMENT LAW

Applying this principal-agent model<sup>12</sup> to procurement is, on its face, relatively straightforward,<sup>13</sup> and indeed the social science literature includes a

10. See, e.g., Hannes, *supra* note 9, at 1439.

11. See Jensen & Meckling, *supra* note 9, at 5.

12. In a passage of extraordinary prescience, Jensen and Meckling themselves anticipated the broad potential applications of principal-agent theory:

Before moving on, however, it is worthwhile to point out the generality of the agency problem. The problem of inducing an “agent” to behave as if he were maximizing the “principal's” welfare is quite general. It exists in all organizations and in all cooperative efforts—at every level of management in firms, in universities, in mutual companies, in cooperatives, in governmental authorities and bureaus, in unions, and in relationships normally classified as agency relationships such as those common in the performing arts and the market for real estate. The development of theories to explain the form which agency costs take in each of these situations (where the contractual relations differ significantly), and how and why they are born will lead to a rich theory of organizations which is now lacking in economics and the social sciences generally.

*Id.* at 6–7.

13. Ohad Soudry describes the principal-agent problem in procurement as follows:

[I]n the absence of effective control mechanisms, procurement officials are likely to involve some personal preferences, derived from their private interests, career prospects, social contacts, monetary reward or merely an aversion to effort, when making procurement decisions. In the terms of the principal-agent terminology used above, a lack of accountability means that the (procurement) agent is more likely to engage in a low level rather than a high level of effort when performing his tasks. The challenge faced by public procurement regulators therefore, is to ensure that the agency costs which rise when procurement agents carry out tasks for the benefit of their principal, do not exceed the benefit derived from such a delegation of decision-making authority.

Ohad Soudry, *A Principal-Agent Analysis of Accountability in Public Procurement*, in *ADVANCING PUBLIC PROCUREMENT: PRACTICES, INNOVATION AND KNOWLEDGE* 432, 435 (Gustavo Piga & Khi V. Thai, eds., 2007).

number of applications of agency theory to procurement.<sup>14</sup> Under this model, the procuring official may be said to act as an agent for a principal (or principals). That *principal* may shift from one political culture to another. In the United States, “taxpayers,” the executive, or Congress may variously be viewed as the principal; while in a monarchy, the king may be considered the principal.<sup>15</sup> In acting on behalf of that principal (however defined), the procuring official (the “agent”) may have goals that diverge from those of the principal. That conflict of interest must be tempered by monitoring (the oversight natural to any procurement system)<sup>16</sup> and bonding (the various forms of sanctions typical in a procurement system when the agent/official is diverted by his own interests).<sup>17</sup> The more sophisticated the agent/official in relation to the principal (the king, the parliament, etc.), the more likely there is an *asymmetry of information*, and therefore, the more acute the need for principal-agent controls.

The principal-agent model can be extended to encompass the contractor in procurement. If the sovereign (or his surrogate) is the *principal*, and the contracting official is an *agent*, logically then the contractor retained by the

---

14. See, e.g., Thomas D. Jeitschko et al., *The Simple Analytics of Information and Experimentation in Dynamic Agency*, 19 *ECON. THEORY* 549, 549–551 (2002); Rosella Levaggi, *Optimal Procurement Contracts Under a Binding Budget Constraint*, 101 *PUB. CHOICE* 23, 23–25 (1999) (discussing pressures on principal to purchase agent’s information where agent bears no potential liability); Eric Maskin & Jean Tirole, *The Principal-Agent Relationship with an Informed Principal, II: Common Values*, 60 *ECONOMETRICA* 1, 2 (1992) (game theory testing assumptions regarding an informed principal, citing Department of Defense as an example of informed principal that may not share private information regarding true value of weapons system); see generally R. Preston McAfee & John McMillan, *Bidding for Contracts: A Principal-Agent Analysis*, 17 *RAND J. ECON.* 326 (1986); Dilip Mookherjee & Masatoshi Tsumagari, *The Organization of Supplier Networks: Effects of Delegation and Intermediation*, 72 *ECONOMETRICA* 1179 (2004) (using principal-agent modeling to assess principals’ optimal strategies for responding to agents’ collusion by using purchasing intermediaries); Stefan Reichelstein, *Constructing Incentive Schemes for Government Contracts: An Application of Agency Theory*, 67 *ACCT. REV.* 712 (1992) (agency theory used to design incentive contracts used by German ministry).

15. See generally Waterman & Meier, *supra* note 2, at 178–79 (discussing multiple principals).

16. In their seminal work on the principal-agent model, Jensen and Meckling also touched on *incentives* to ensure that the agent acts in the principal’s interest. See Jensen & Meckling, *supra* note 9, at 7. Applied to the world of procurement, those types of incentives to ensure optimal acquisition decisions—typically performance incentives for contract managers or supporting contractors—generally fall outside the realm of procurement law. Those incentives are not, therefore, extensively addressed here.

17. A few words here on “bonding,” a basic element of the principal-agent model. Jensen and Meckling said that “bonding” (in contrast to “monitoring”) “would take such forms as contractual guarantees to have the financial accounts audited by a public accountant, explicit bonding against malfeasance on the part of the manager, and contractual limitations on the manager’s decision-making power (which impose costs on the firm because they limit his ability to take full advantage of some profitable opportunities as well as limiting his ability to harm the stockholders while making himself better off).” *Id.* at 29. Their examples of bonding were naturally bounded by the focus of their paper, i.e., on organizational structures *within* a firm. Here, in contrast, the author uses “bonding” in a broader sense, to include (among other things) legal sanctions, to capture the wider range of “bonding” (of affirmative curbs on agents’ behavior) that may come into play in a complex public procurement system.

contracting official is a *subagent*.<sup>18</sup> And much as the distracted contracting official may fail to act in accordance with the principal's goals, to the extent that official (agent) in turn vests the contractor (subagent) with authority, the enterprise may be diverted by the contractor's (subagent's) own conflicts of interest. The *asymmetries of information* between the principal, the agent (official), and the subagent (contractor) again only sharpen the risk the contractor will be able to abuse the situation to further his own ends, and not the principal's—as will be discussed further below.

### III. THE KEY *DESIDERATA* ILLUMINATED BY AGENCY THEORY

The challenge, then, is to integrate the conceptual structure offered by agency theory with existing and accepted norms in the procurement system. In a groundbreaking 2002 article, Professor Steven Schooner described important elements of any successful procurement system—the “desiderata.”<sup>19</sup> Of those, the three key qualities are competition, integrity, and transparency.<sup>20</sup> Each of those qualities, and several other *desiderata*, including efficiency, uniformity, customer satisfaction, best value, and risk avoidance, are assessed below through the prism of the principal-agent model.<sup>21</sup>

#### A. Competition

The principal-agent model may provide its most important insights regarding *competition*—which is unsurprising because it is, at bottom, an economic model. Ironically, though, the agency model is particularly useful because it illustrates why *other* economic models fall short when applied to procurement. For example, while competitive procurement through an intermediary (or a “lead systems integrator,” as an intermediary may be known) makes sense as a simple economic model—the government/principal reduces

18. See Kenneth R. Mayer & Anne M. Khademian, *Bringing Politics Back in: Defense Policy and the Theoretical Study of Institutions and Processes*, 56 PUB. ADMIN. REV. 180, 184 (1996). In applying agency theory to the process of defense procurement, Mayer and Khademian wrote:

Public managers are the agents in a chain of accountability that begins with congressional delegation of authority and extends through intermediaries (the executive branch and structures within the Department of Defense [DOD]) who, depending on context, act sometimes as principals and other times as agents. At each stage, the key analytical task is to identify what the principals want from their agents and then explain why certain types of control structures emerge. The issue is control: who, as principal, has the authority to decide what the bureaucracy (the agent) will do, and how does the principal monitor and control behavior to determine if, and insure that, the agent is acting in accordance with his or her wishes?

*Id.*

19. Steven L. Schooner, *Desiderata: Objectives for a System of Government Contract Law*, 2002 PUB. PROCUREMENT L. REV. 103 (2002).

20. *Id.* at 104.

21. Cf. Shane Greenstein, *Procedural Rules and Procurement Regulations: Complexity Creates Trade-offs*, 9 J.L. ECON. & ORG. 159, 164–66 (1993) (assessing the goals of integrity, best value, and fairness in the procurement system, in light of demands of the principal-agent model).



transaction costs, and gains the intermediary's informational advantages as leverage against a highly sophisticated marketplace—agency theory explains why, in practice, using a “procurement intermediary” has proven so difficult. Agency theory explains that because the intermediary may, in fact, badly distort the principal's ends because of differing interests, the marginal benefits of retaining an intermediary (the lead systems integrator) often outweigh the costs (the control costs, the risks, and the potential opportunity costs) caused by interposing an intermediary between the principal (the Government) and the ultimate supplier.<sup>22</sup>

### B. Transparency

The principal-agent model also lends new perspectives on *transparency*, long a central theme in procurement reform.<sup>23</sup> Transparency in procurement—primarily the publicizing of information on contract opportunities and awards—has traditionally been assessed from the perspectives of key stakeholders<sup>24</sup> such as competing contractors, taxpayers, or the press. As a result, marginal improvements in transparency are assessed for the benefits they would afford those stakeholders. Highly quantitative studies in agency theory provide, however, other perspectives on transparency—including, for example, whether theoretically the principal can ensure better outcomes from an agent if the agent is afforded more complete information on the agent's own performance.<sup>25</sup> These new perspectives, backed by quantitative assessments, could bring important new dimensions to policy debates about the marginal value of additional transparency.

---

22. See Mookherjee & Tsumagari, *supra* note 14, at 1199–2000 (“Retaining control with regard to contracting with every relevant agent in the organization enables the Principal to limit problems of double marginalization of rents inherent in vertical side contracting relationships among agents . . . . Only in certain circumstances can delegation be justified (e.g., when authority is delegated to a well-informed intermediary and the inputs supplied are complementary). The theory thus predicts circumstances (defined by complementarity or substitutability of activities, and dispersion of information among agents) where delegation arrangements are likely to be more prevalent.”).

23. One recent initiative in transparency is a proposal to put all federal contracts online. See Enhancing Contract Transparency, 75 Fed. Reg. 26,916 (proposed May 13, 2010) (to be codified at 48 C.F.R. pt. 24); Tom Spoth, *Posting All Fed Contracts Online Alarms Contractors*, FED. TIMES, May 31, 2010, at 1, available at <http://www.federaltimes.com/article/20100530/ACQUISITION03/5300308/>.

24. A word is warranted here on “stakeholders.” In theories of a private firm, there is a tension between, on the one hand, the principal-agent theory that holds that principals must direct and control the various agents of the firm and, on the other, the “stakeholder” theory, which would take broader account of stakeholders' interests in the private firm's affairs. See, e.g., John Kong Shan Ho, *Economics of the Firm versus Stakeholder Theory: Is There a Governance Dilemma?*, 38 H.K.L.J. 399, 399 (2008). In the broader context of public procurement, however, these divisions and that tension largely dissipate. Stakeholders (e.g., legislators, taxpayers, or contractors) can themselves quite suddenly become principals and agents with a direct hand in the supply chain. Indeed, these shifting roles help make policymaking in this area challenging and dynamic.

25. See, e.g., Stanley Baiman & Konduru Sivaramakrishnan, *The Value of Private Pre-Decision Information in a Principal-Agent Context*, 66 ACCT. REV. 747, 747–48 (1991); Jacobides & Croson,



### C. Integrity and Corruption

The principal-agent model lends new clarity to concerns about *integrity* and *corruption*.<sup>26</sup> Some might argue, for example, that on its face the anticorruption regime in U.S. federal procurement law is overly cumbersome and inefficient because, beyond normal antibribery provisions,<sup>27</sup> a vast array of lesser anticorruption rules<sup>28</sup> impose additional constraints on procurement officials to discourage gratuities, constrain “revolving door” contacts, and bar the distribution of sensitive information. Agency theory suggests, however, that those additional constraints are necessary<sup>29</sup> because as the chain of authority stretches from principal to agent to subagent, the risk that the procurement actions will be diverted from the principal’s goals rises dramatically,<sup>30</sup> and so there must be special legal controls to dampen the corrupt conflicts of interest that could otherwise arise.

More broadly, by applying the principal-agent model, we can see that the extensive oversight mechanisms in the U.S. system reflect “monitoring” and

---

*supra* note 4, at 204–05 (discussing how advances in information technology have reduced principals’ monitoring problem).

26. See, for example, the clear line that Susan Rose-Ackerman draws between agency theory and public corruption:

Corruption occurs where private wealth and public power overlap. It represents the illicit use of willingness-to-pay as a decision-making criterion. Frequently, bribes induce officials to take actions that are against the interests of their principals, who may be bureaucratic superiors, politically appointed ministers, or multiple principals such as the general public. Pathologies in the agency/principal relation are at the heart of the corrupt transaction.

Susan Rose-Ackerman, *Corruption and Government*, 15 INT’L PEACEKEEPING 328, 330 (2008).

27. See, e.g., 18 U.S.C. § 201 (2006).

28. The anticorruption rules include The Procurement Integrity Act, 41 U.S.C. § 423 (2006), implemented through FAR 3.104.

29. Cf. Yeon-Koo Che, *Revolving Doors and the Optimal Tolerance for Agency Collusion*, 26 RAND J. ECON. 378, 378 (1995) (arguing that the prospect of a revolving door into industry may, in some cases, actually enhance public officials’ oversight of industry).

30. Roberto Burguet and Yeon-Koo Che discussed the failures in integrity that may arise when we interpose an agent between the buyer (principal) and the vendors:

Corruption would never be an issue if the buyer could procure directly without leaving any discretion to a third party. Delegation is often inevitable, however, since evaluating proposals requires special expertise that the buyer may not possess. Often, the procured goods and services involve new technologies and/or nonstandard designs, which are difficult to objectively measure or evaluate . . . .

This need for relying on a third-party assessment of contract proposals creates a potential for bribery and corruption. For instance, a procurement officer in charge of assessing proposals can manipulate her evaluation to “steer” the contract to a bribing company. To some extent, such manipulation can be accomplished without even creating suspicion of impropriety, since evaluating new, untested technologies can be subjective.

Roberto Burguet & Yeon-Koo Che, *Competitive Procurement with Corruption*, 35 RAND J. ECON. 50, 51 (2004). While the authors’ starting point may be questionable, it is equally likely that a “buyer” (typically a program official in federal procurement) will be as susceptible to bribery as a third party. Burguet and Che make clear that the layers of agents/intermediaries add risks of corruption. See generally *id.*

“bonding,” undertaken in order to align procurement (the actual purchasing of goods and services) with the “principal’s” (or “the public’s”) interests. Again applying the model, we can see that an active press provides low-cost monitoring (and thus reduces risk), much as whistleblowers serve as surrogate monitors and enforcers of the principal’s interest.<sup>31</sup> Bid protests, under this model, are arguably another means of monitoring and bonding—of forcing procurement officials to adhere closely to the principal’s goals, as defined by the procurement rules, including the conflict-of-interest rules.<sup>32</sup> Extending the agency model, fraud actions brought by whistleblowers under the False Claims Act<sup>33</sup> are arguably stopgap solutions to enforce monitoring and bonding on the principal’s behalf<sup>34</sup> where contracting officials have failed to detect fraud or malfeasance. Finally, under this model, those who admonish procuring officials to follow the rules, including those in the “accountability” community (auditors, lawyers, courts, and the Government Accountability Office) are merely reinforcing that same monitoring role.<sup>35</sup>

#### D. Efficiency

In his 2002 piece, Steven Schooner identified the need for “efficiency” in procurement, which he defined as another *desideratum*.<sup>36</sup> A procurement system, he argues, “is efficient when it spends the least amount of resources in the

31. See, e.g., William E. Kovacic, *Whistleblower Bounty Lawsuits as Monitoring Devices in Government Contracting*, 29 LOY. L.A. L. REV. 1799, 1808–09 (1996).

32. See, e.g., Robert M. Hansen, *CICA Without Enforcement: How Procurement Officials and Federal Court Decisions Are Undercutting Enforcement Provisions of the Competition in Contracting Act*, 6 GEO. MASON L. REV. 131, 140–44 (1997); see also Greenstein, *supra* note 21, at 159 (“Procedural rules stack the deck in favor of desired outcomes, yet permit future decision-makers to adapt to new facts and contingencies. Rules relegate monitoring responsibility to the parties that have an interest in a specific agency decision. This process sets up guidelines for all decision-makers to follow. When guidelines are not followed, the principal has a simple and significant signal that more interventionist oversight is required.”); Robert C. Marshall et al., *Curbing Agency Problems in the Procurement Process by Protest Oversight*, 25 RAND J. ECON. 297 (1994) (assessing strengths and weaknesses of the bid protest (challenge) process as a solution for principal-agent problems in procurement); Xinglin Zhang, *Supplier Review as a Mechanism for Securing Compliance with Government Public Procurement Rules: A Critical Perspective*, 16 PUB. PROCUREMENT L. REV. 325, 326–28 (2007).

33. See generally JOHN T. BOESE, *CIVIL FALSE CLAIMS AND QUI TAM ACTIONS* (2006); William E. Kovacic, *The Civil False Claims Act as a Deterrent to Participation in Government Procurement Markets*, 6 SUP. CT. ECON. REV. 201 (1998).

34. Indeed, third-party whistleblowers bring suit under the False Claims Act’s “qui tam” provisions, derived from the Latin phrase “qui tam pro domino rege quam se ipso in hac parte sequitur,” meaning “who pursues this action on the King’s behalf as well as his own.” See, e.g., *Vt. Agency of Natural Res. v. United States ex rel. Stevens*, 529 U.S. 765, 768 & n.1 (2000).

35. The economic literature offers a unique reverse perspective on those charged with ensuring accountability—those who, in the studies describing the principal-agent model, are called “supervisors” of the agents. A supervisor normally oversees the agent on the principal’s behalf. The literature points out that if the supervisor and the agent collude and thus allow the agent to diverge from the principal’s aims, the effect—a result that diverges sharply from the principal’s goals—is, at least on its face, the same result that might obtain were a bribe given to the agent. See, e.g., Roland Strausz, *Collusion and Renegotiation in a Principal-Supervisor-Agent Relationship*, 99 SCANDINAVIAN J. ECON. 497, 500–02 (1997).

36. Schooner, *supra* note 19, at 103, 107.

process of purchasing what is needed.”<sup>37</sup> That goal—to minimize transaction costs in processing procurement—squares fully with Oliver Williamson’s thesis that economic institutions “have the main purpose and effect of economizing on transaction costs.”<sup>38</sup> To minimize those transaction costs, Williamson argues, transactions must be assigned to governance structures in a discriminating way.<sup>39</sup>

Williamson’s insights—that economic institutions evolve towards transactional efficiency and to achieve that efficiency transactions will be assigned to differing governance structures—have profound ramifications for procurement, which can be assessed through the principal-agent model.<sup>40</sup> The obvious lesson is that principals will reshape and shift procurement functions in order to seek out lower transaction costs. This was certainly the case in the mid-1990s, when the Federal Government reduced its acquisition workforce dramatically and radically reduced transaction costs by streamlining procurement processes.<sup>41</sup> Since the mid-1990s, and partly because of that reduction in the procurement workforce,<sup>42</sup> government program personnel (which we will treat here as the “principals” because program personnel typically want first say in procurement decisions) have sought out alternative vehicles, often standing contracts sponsored by centralized purchasing agencies, to effect their acquisitions.<sup>43</sup> While these alternative vehicles may present lower nominal transaction costs for the government purchaser, they have been sharply

37. *Id.* at 107 (emphasis added).

38. OLIVER E. WILLIAMSON, *THE ECONOMIC INSTITUTIONS OF CAPITALISM* 17 (1985).

39. *Id.* at 18. This explains another of Steven Schooner’s *desiderata*, “uniformity” in procurement rules. See Schooner, *supra* note 19, at 109. As Schooner explains:

[T]he importance of *uniformity*, particularly in maximising transparency, competition, and efficiency, among others, cannot be overstated. A uniform procurement system suggests that all government instrumentalities buy the same way, following the same laws, rules, and practices. Such a system is efficient because sellers do not need to learn new rules in order to do business with different agencies or departments. Further, it is much easier to train all of the government’s buyers, and it permits buyers greater flexibility to work for various agencies or departments during their careers. In addition, if the government consistently uses standard provisions and clauses, the process operates more smoothly. Transactions become more routine. All parties to the transaction understand the rules to the game.

*Id.* Thus, while uniformity first affects *transaction costs*, it can have important collateral impacts on principal-agent relationships.

40. Notably, Williamson himself argues that, “[g]iven the complexity of the phenomena under review, transaction cost economics should often be used in addition to, rather than to the exclusion of, alternative approaches.” WILLIAMSON, *supra* note 38, at 18.

41. See, e.g., Steven L. Schooner, *Contractor Atrocities at Abu Ghraib: Compromised Accountability in a Streamlined, Outsourced Government*, 16 *STAN. L. & POL’Y REV.* 549, 559–61 (2005).

42. These standing catalogue-type contracts are generally known as “indefinite-delivery/indefinite-quantity” (“ID/IQ”) contracts in the United States and as “framework” agreements in Europe. See generally Christopher R. Yukins, *Are IDIQs Inefficient? Sharing Lessons with European Framework Contracting*, 37 *PUB. CONT. L.J.* 545 (2008).

43. See, e.g., REPORT OF THE ACQUISITION ADVISORY PANEL TO THE OFFICE OF FEDERAL PROCUREMENT POLICY AND THE UNITED STATES CONGRESS 219–72 (2007), available at <https://www.acquisition.gov/comp/aap/finalaapreport.html> (discussing growth of interagency contracting through ID/IQ contracting vehicles).

criticized for reducing competition and transparency, and thus eroding best value, in government purchasing.<sup>44</sup>

The less obvious, but perhaps much more deeply important, corollary of Williamson's insights is that the *agent* may be even more keen than the principal to reduce transaction costs. The government *principal*, after all, is more likely to have a broader perspective on the opportunity costs of shifting to a procurement method that offers lower transaction costs in the short run, but threatens lost value (and increased risks, for example, of corruption) in the long run. However the *agent*—the purchasing official or a surrogate—will be much less attuned to those broad systemic concerns and much more sensitive, for better or worse, to reducing transaction costs. That may, in turn, encourage the agent to *underinvest* in negotiating any given transaction because the *benefits* of careful purchasing will likely be shifted back to the principal (or, ultimately, the citizen/taxpayer affected by the government action), while the *costs* of careful purchasing will be borne by the agent/purchasing official or those to whom she answers.<sup>45</sup> Thus, by parsing the procurement process and isolating the roles of the principal and agent, we can anticipate how a drive for efficiency (for lower transaction costs) can, in practice, undermine the system overall.

#### E. Customer Satisfaction and Best Value: The Dueling Principals

Schooner's 2002 piece also spoke to "customer satisfaction" and "best value" as important *desiderata* in procurement.<sup>46</sup> "Customer satisfaction" denotes end users' satisfaction with the good or service acquired through the procurement process; "best value" means that the good or service offers optimal value for price.<sup>47</sup> But why shouldn't government end users be "satisfied" with "best value," much as a normal consumer is? In reality, end

44. See Yukins, *supra* note 42, at 560 n.52 (citing reports on scandals in ID/IQ contracting).

45. For a discussion of some of the costs of underinvestment, including the potential costs of renegotiation and breach, see Jean Tirole, *Procurement and Renegotiation*, 94 J. POL. ECON. 235, 239–40 (1986).

46. Schooner, *supra* note 19, at 103, 108.

47. Schooner described the two concepts as follows:

We also have increased our emphasis upon the concept of *best value*, or what some call *value for money*. In other words, we aspire to focus upon getting the best deal—or the best bargain—for the public's money. Such an emphasis seems logical. Unfortunately, the pursuit of best value typically requires greater buyer resources, from market research to negotiation. Similarly, obtaining best value may not always please the customer (for example, if the customer requires premium quality regardless of price).

Also, in the 1990s, the U.S. procurement system increased its emphasis on obtaining *customer satisfaction* for end users. It makes sense for buyers to try to please those for whom they serve. Unfortunately, pleasing end users, especially if the end user favours specific suppliers or demands that goods be provided quickly, frequently results in less competition and higher prices, or simply embarrassing policy decisions.

*Id.* at 108 (footnotes omitted).

users are not. The soldier in the field, for example, is seldom satisfied with the equipment bought as “best value”—which points out a divergence of interests between stakeholders and principals. “Best value” for the taxpayer may mean minimizing cost to achieve good value. An end user, however—a pilot, for example, whose life depends on having the very best aircraft—may be satisfied only with the very highest-quality item or service, regardless of cost. By pointing out that customer satisfaction and best value are *different*, Schooner highlighted a paradox in procurement, which in turn points out a central tension in the principal-agent model: there can, in fact, be *several* principals, all competing for primacy to control the long chain of the procurement system.<sup>48</sup>

The insight that several principals may be dueling to control procurement itself yields several questions. One question, discussed below, is how to identify and assess various principals’—here, stakeholders’—roles in shaping procurement. Another beguiling question is what could be done to *converge* the principals into *one*. In that hypothetical circumstance, “best value” would once again equate to “customer satisfaction”; logically, in other words, the principal who demands best value and the principal/end user who seeks “customer satisfaction” would be one.

There are any number of logical pathways to convergence.<sup>49</sup> One is to bypass the procurement supply chain and to lend purchasing authority to program officials—*not* procurement officials—to allow them to purchase the goods and services they need directly in the open market.<sup>50</sup> Many of the reforms of the 1990s<sup>51</sup> facilitated this approach because in practice those reforms increased program officials’ decentralized authority, outside the procurement system, to make purchases to meet their needs, with minimal constraints from procurement rules. By decentralizing authority to determine best value, this approach arguably gave those program officials the power to bring “best value” and “customer satisfaction” together, in their own hands. Not surprisingly, however, because program officials are themselves less sensitive to costs—they are, after all, typically driven first by program success, not low costs—this

---

48. *See id.* For a discussion of multiple political principals, with diverse preferences, competing to control policy outcomes in defense procurement, see Mayer & Khademanian, *supra* note 18, at 185.

49. One way to converge “best value” and “customer satisfaction,” as they converge for a normal consumer, is to abandon the government structure altogether and to have private individuals make all decisions regarding resource allocation. While that radical approach is outside this discussion, it does serve as an unspoken backdrop to any discussion of the procurement system: what if we just let the taxpayers buy the goods and services they need?

50. Line officials gained more authority over what to buy in part because the purchasing itself devolved to others, outside the procurement corps. *See generally* Christopher R. Yukins, *Understanding the Current Wave of Procurement Reform—Devolution of the Contracting Function*, 47 *Gov. CONTRACTOR* ¶ 255, June 8, 2005 (discussing devolution of contracting function to centralized agencies and private firms).

51. *See generally* Steven L. Schooner, *Fear of Oversight: The Fundamental Failure of Businesslike Government*, 50 *AM. U. L. REV.* 627 (2001) (discussing Clinton-era reforms).

approach arguably contributed to higher costs and other distortions in the purchasing process.<sup>52</sup>

Another approach is to bring much greater transparency to the procurement system, to empower the ultimate beneficiaries of that procurement system—the veteran receiving drugs from a government contract, for example, or the rural community receiving a new bridge—to speak to what will be purchased on their behalf. This approach, which we might call “end user empowerment,” was advanced substantially through recent reforms brought by the Obama administration. Rapid progress in information technology had already transformed the procurement system, making it much more transparent at every stage of the process.<sup>53</sup> When implementing the American Recovery and Reinvestment Act (the “Recovery Act”),<sup>54</sup> however, the Obama administration demanded even more transparency so that taxpayers and other stakeholders could “see”—and, one assumes, comment upon—how hundreds of billions of dollars in Recovery Act funds were being spent at every stage of the process.<sup>55</sup> But by sharply escalating transparency, Congress and the Obama administration in effect (and perhaps only unintentionally) shifted authority outside the normal channels of

---

52. Traditional government contracting—a contract to buy a bridge, for example—was based on firm-fixed-price contracting: the Government solicited bids for the entire project, the lowest-price responsible bidder would be selected, and the Government could shift almost all of the performance and cost risks to the awardee on the firm-fixed-price contract. In part so as to facilitate decentralized buying by line government officials, however, ID/IQ contracts (known as “framework agreements” in Europe and internationally) became more popular, beginning in the 1990s. These ID/IQ contracts gained in popularity in part because they allowed program officials to purchase through different agents—the more entrepreneurial centralized purchasing agencies that sponsored these agreements—rather than the more rigid, traditional procurement offices. Cf., e.g., R. Preston McAfee & John McMillan, *Competition for Agency Contracts*, 18 RAND J. ECON. 296 (1987) (discussing competition among agents). These ID/IQ (or “framework”) agreements offer fixed unit prices for goods and services, which may be purchased in varying quantities as government needs arise. Because of the disconnect between initial bidding and subsequent awards to meet needs as they arise, however, these “unit-price contracts” are predictably and inherently less efficient. See Christian Ewerhart & Karsten Fieseler, *Procurement Auctions and Unit-Price Contracts*, 34 RAND J. ECON. 569, 570 (2003).

53. Federal business opportunities and awards are publicized through the FedBizOpps site, [www.fbo.gov](http://www.fbo.gov). See FED. BUS. OPPORTUNITIES, <http://www.fbo.gov> (last visited Aug. 7, 2010). Extensive data on past awards are available through the Federal Procurement Data System, <http://www.fpds.gov> (last visited Aug. 7, 2010), although data are available in a more accessible form through <http://www.usaspending.gov> (last visited Aug. 7, 2010). Other databases, such as the Central Contractor Registration system, provide further information on federal contracting. See Cent. Contractor Registration, <http://www.ccr.gov> (last visited Aug. 7, 2010).

54. The American Recovery and Reinvestment Act of 2009 (“Recovery Act”), Pub. L. No. 111-5, 123 Stat. 115 (2009), was signed into law on February 17, 2009.

55. An example helps to illustrate some of the new transparency brought with Recovery Act spending. For many years, there was no advance notice of orders under the General Services Administration’s Multiple Award Schedules (“MAS”), standing contracts under which billions of dollars of orders are made every year. Agencies would order from the MAS contracts, but the agencies’ requirements would not be publicized beforehand through FedBizOpps, the normal location for publicizing federal contracting opportunities over \$25,000. See FAR 8.404(a); Yukins, *supra* note 42, at 562–63. Under the Recovery Act, however, information on prospective MAS orders to fulfill requirements using Recovery Act funding must be publicized through the FedBizOpps site, <http://www.fbo.gov>. See FAR 8.404(e); FAR Case 2009-10, American Recovery



procurement (“outside the Beltway,” to use a Washington, D.C., colloquialism<sup>56</sup>), and vested taxpayers and users with new authority over procurement. By “shattering the principal” in this way—by dispersing procurement power away from Washington, back to taxpayers and users, to converge “best value” and customer satisfaction in *their* hands—the Obama administration’s policies have shown that transparency can radically transform the way we think about procurement. With increased transparency, the “principal” guiding procurement may no longer be the head of an agency, or even Congress—it may, in time, be the end users (the veteran or the rural community) who are considered the “principals,” with a first say in how a procurement should be shaped.

#### F. *Wealth Redistribution and Risk Aversion: Understanding Stakeholders Through the Principal-Agent Model*

As the discussion above reflects, agency theory naturally highlights *stakeholders* and the role they play in procurement. The stakeholders can be remarkably diverse, to include users, program officials, members of Congress, taxpayers, the press, and many others. While the principal-agent model makes the procurement system’s cures easier to understand, it also makes them more complicated to apply, for the model itself forces us to consider each of the stakeholders in a rapidly operating procurement system. Principal-agent relationships constantly shift and mutate in a dynamic government system<sup>57</sup>—such as a procurement system—and it is vitally important to understand the stakeholders and institutions at issue, their roles, and their social and political contexts<sup>58</sup> if the principal-agent problems are to be addressed appropriately.<sup>59</sup>

The literature of agency theory suggests, for example, that agents as stakeholders may in fact manipulate the rules governing agents, not to enhance value for principals, but rather simply to enhance the position of the agents themselves.<sup>60</sup> This insight suggests that conflict-of-interest rules in

---

and Reinvestment Act of 2009 (the Recovery Act)—Publicizing Contract Actions, 74 Fed. Reg. 14,636, 14,638–39 (proposed Mar. 31, 2009) (interim rule) (to be codified in scattered sections of FAR pts. 4, 5, 8, 13, 16).

56. “The Beltway” is the familiar term for the highway that encircles Washington, D.C.

57. Waterman & Meier, *supra* note 2, at 197–98.

58. See, e.g., Dan Guttman, *Governance by Contract: Constitutional Visions; Time for Reflection and Choice*, 33 PUB. CONT. L.J. 321, 342 (2004) (noting that principal-agent theorists, among others, have urged the “importance of understanding institutions and the practical applications of this understanding”).

59. For example, while normally one would want conflict-of-interest rules in place to ensure that procuring officials (agents) did not allow personal interests to distort their purchasing decisions, if in a hypothetical state a tribal chief were the principal and all the procuring officials/agents belonged to his tight-knit tribe (thus reducing the chief/principal’s need for bonding and monitoring), it might be unnecessary to impose rigid conflict-of-interest rules.

60. See, e.g., MICHAEL BARZELAY, *THE NEW PUBLIC MANAGEMENT* 104 (Lee Friedman ed., 2001) (“Within theoretical economics, principal-agent theory centers on the structuring of incentives, which are presumed to be sole factor influencing agents’ choice among alternative effort levels and actions.”); S. David Young, *Interest Group Politics and the Licensing of Public Accountants*, 66 ACCT. REV. 809, 817 (1991) (restrictive professional rules for accounting are more likely in states where interest-group strength of Certified Public Accountants is high).



public procurement, however salutary, must be drawn with a careful eye to stakeholders—for example, to agents who are politically viable stakeholders—who may manipulate the rules to enhance their own positions.

That special attention to the distortion that agents can cause in the procurement chain helps explain another of Steven Schooner's *desiderata*, the phenomenon he described as "risk avoidance."<sup>61</sup> An "improper obsession with risk avoidance can suffocate creativity," Schooner noted, and that risk aversion can "stifle innovation and render an institution ineffective."<sup>62</sup> As Steven Kelman pointed out, because the exercise of discretion can invite adverse scrutiny, contracting officials tend to press for taking even less risk than allowed by law.<sup>63</sup> Viewed through the prism of agency theory, this risk aversion means that contracting officials (agents) will tend to take less than optimal measures of risk in the procurement process. This in turn will lead to less than optimal outcomes, as there will be reduced willingness to seek out new vendors or innovative technologies, or to use novel procurement techniques. In effect, the officials' caution, often driven largely by reputational concerns, is arguably *itself* a conflict of interest because it means that the procurement process will be diverted from its optimal outcomes.<sup>64</sup>

61. Schooner, *supra* note 19, at 103, 109. Indeed, Kathleen Eisenhardt argued that risk assessment is a separate branch of agency theory:

Agency theory is concerned with resolving two problems that can occur in agency relationships. The first is the agency problem that arises when (a) the desires or goals of the principal and agent conflict and (b) it is difficult or expensive for the principal to verify what the agent is actually doing. The problem here is that the principal cannot verify that the agent has behaved appropriately. *The second is the problem of risk sharing that arises when the principal and agent have different attitudes toward risk. The problem here is that the principal and the agent may prefer different actions because of the different risk preferences.*

Eisenhardt, *supra* note 8, at 58 (emphasis added).

62. Schooner, *supra* note 19, at 109. See STEVEN KELMAN, PROCUREMENT AND PUBLIC MANAGEMENT—THE FEAR OF DISCRETION AND THE QUALITY OF GOVERNMENT PERFORMANCE 26 (1990) ("Because exercise of discretion generates the congressional investigations and media stories, contracting officers tend to be safe rather than sorry. Given their lack of program responsibility for what is procured, they have little to compensate them for taking risks."). The World Bank, for example, which requires its borrowers to comply with a conservative set of procurement guidelines, see Whitney Debevoise & Christopher R. Yukins, *Assessing the World Bank's Proposed Revision of Its Procurement Guidelines*, 52 GOV'T CONTRACTOR ¶ 180, May 26, 2010, at 1, is highly sensitive to the reputational risk that corruption or other procurement failures could pose for the Bank. See, e.g., World Bank, *World Bank Communications Governance and Anti-Corruption Strategy in Sierra Leone*, <http://go.worldbank.org/82JU8TFZA0> (2008) (last visited July 11, 2010) (discussing importance of strong anticorruption strategies in addressing reputational risk to the World Bank).

63. KELMAN, *supra* note 62, at 26.

64. Agency theory also offers a solution to risk aversion in contracting officials. As Kathleen Eisenhardt pointed out in her review of the literature on agency theory, the "risk aversion of the agent is positively related to behavior-based contracts and negatively related to outcome-based contracts." Eisenhardt, *supra* note 8, at 62. To apply this to procurement, read the "agent" to mean "procurement official" and "contract" to mean the formal arrangement between the government and its agent, the procurement official. Applying Eisenhardt's insight, if procurement officials are judged based less on *behavior* (was scandal avoided?) and more on *outcome* (was the best item bought?), then the officials' aversion to risk should, logically, decline.

The procurement process also may be distorted by another set of agents—classes of vendors who seek, through preferences and rules, to gain a larger share of the Government’s procurement spending. Schooner termed this “*wealth distribution*,” and argued that while wealth redistribution and other socioeconomic goals are common hallmarks of procurement systems,<sup>65</sup> they are hardly something to be desired:

The author does not believe that wealth distribution is one of the procurement system’s primary goals. This does not suggest that the Congress does not use the procurement system to attempt to redistribute wealth. But those efforts are transitory for the same reasons they are controversial. Two examples demonstrate the never-ending turbulence affecting social policies . . . . Moreover, wealth distribution is merely a subset of the larger phenomenon of burdening the procurement process (or, for that matter, the process of governing) with efforts to promote social policies. These social policies, in addition to those that potentially distribute wealth to domestic manufacturers, essential military suppliers, and small (and small disadvantaged and women-owned) businesses, also mandate drug-free workplaces, occupational safety standards, compliance with labor laws, preferences for environmentally friendly purchasing practices, etcetera. Accordingly, while the author concedes that Congressional manipulation of the procurement process is a significant aspect or feature of the system, the author cannot agree that wealth distribution is a fundamental purpose of the procurement regime.<sup>66</sup>

As Schooner’s observations suggest, socioeconomic preferences, including wealth distribution policies, are really a function of politics, not procurement; as a result, agency theory, which best explains dynamics *within* the procurement system, has little to offer to explain how those socioeconomic policies emerge.<sup>67</sup> That said, agency theory *does* help to explain how socioeconomic requirements play out once those requirements are imposed, generally by statute.

For example, procurement preferences that favor domestic vendors are routinely resisted (or outright ignored) by contracting officials,<sup>68</sup> in important part because implementing those preferences can substantially raise transaction costs for procurement officials—the agents implementing the preferences.<sup>69</sup> In fact, while procurement officials may quietly applaud the socioeconomic goals behind a procurement preference (“saving American jobs,” for example) and may well tolerate the suboptimal purchasing that can result (as better or

---

65. Schooner, *supra* note 19, at 108. See generally CHRISTOPHER McCrudden, *BUYING SOCIAL JUSTICE* (2007) (comprehensive review of socioeconomic initiatives in various nations’ procurement systems).

66. Schooner, *supra* note 19, at 108 n.28.

67. Cf. Mayer & Khademian, *supra* note 18, at 185 (arguing that socioeconomic goals, such as social justice in procurement, are put forward by one set of principals in a field of competing principals).

68. See, e.g., Christopher R. Yukins & Steven L. Schooner, *Incrementalism: Eroding the Impediments to a Global Public Procurement Market*, 38 GEO. J. INT’L L. 529, 536–550 (2007) (recounting agency resistance to domestic preferences and other socioeconomic initiatives in procurement).

69. See, e.g., U.S. GOV’T ACCOUNTABILITY OFFICE, GAO-10-383, *RECOVERY ACT: PROJECT SELECTION AND STARTS ARE INFLUENCED BY CERTAIN FEDERAL REQUIREMENTS AND OTHER FACTORS* 9–15 (2010), available at <http://www.gao.gov/new.items/d10383.pdf> (labor and domestic preferences have slowed implementation of Recovery Act procurements).

cheaper foreign goods and services are excluded), ultimately the higher transaction costs caused by socioeconomic requirements can drive an acrimonious wedge between procurement officials and their political masters. Thus, while agency theory may not explain how preferences come into procurement in the first place, agency theory *does* help explain the stresses that those preferences cause. The preferences, in turn, help highlight the very different interests and perspectives of the various agents in the procurement chain.

The distortions that can be caused by political and institutional pressures from competing principals, agents, and stakeholders are only some of the many variables that make it difficult to apply a rigid economic model, such as a “pure” principal/agent analysis, to the complexities of procurement. That said, the principal-agent model does provide a valuable analytical perspective on the stresses among the various stakeholder camps in the procurement system, and the distortions that those camps cause to the system as a whole.<sup>70</sup>

#### IV. USING AGENCY THEORY TO GUIDE CONFLICT-OF-INTEREST RULES

As noted, agency theory helps to explain, in broad terms, the contours of transparency and anticorruption rules in procurement, for agency theory explains why we would anticipate—and more severely punish—some agents’ diversions more than others. Agency theory also can be used, however, for more specific ends, such as explaining the evolution of conflict-of-interest rules in the U.S. federal procurement system.

Those conflict-of-interest rules, at their heart, seek to steer agents’ (officials’) actions, through monitoring and the threat of sanctions, to align those actions with the goals of the governing principal (the legislature, for example).<sup>71</sup> In the U.S. federal procurement system, those conflict-of-interest rules have been tightened over many years in a strengthening effort to drive

---

70. Kenneth Mayer and Anne Khademian took this analysis a step further and argued that it was precisely *because of* the many competing principals—the cacophony of voices and goals, and the difficulties of achieving consensus on outcomes—that defense procurement rules must focus instead on a rigid control of *behaviors* rather than outcomes. See Mayer & Khademian, *supra* note 18, at 184–85.

71. Harold Petrowitz, writing in 1964, described a third, more utopian approach to conflicts of interest: to create a wall of separation between officials and conflicting economic interests. He wrote:

The view is commonly accepted that if the conduct of a public office can sufficiently affect the private economic interests of a government official, his administration of the office for the public good will inevitably be influenced to an unacceptable degree by this conflict between obligation to the public and desire for personal profit. The conclusion necessarily drawn then is that personal economic interests must be separated from the conduct of public office to a sufficient extent so that undue conflict will not occur. It is the purpose of conflict of interest statutes and regulations to erect the barriers needed to achieve this separation.

Harold C. Petrowitz, *Conflict of Interest in Federal Procurement*, 29 LAW & CONTEMP. PROBS. 196, 196 (1964). Since then, the rules governing conflicts of interest have taken a more nuanced

conflicts of interest from procurement. Bribery was the first outlawed conflict of interest, as it is the most “flagrant” violation of public trust;<sup>72</sup> bribery triggers, not coincidentally, a gross deviation from the principal’s goals<sup>73</sup> under cover of secrecy so that it is doubly difficult to detect and correct.

Bribery was first outlawed in the United States in the late 18th century, and in the centuries since, U.S. law has gradually tightened to constrict conflicts of interest in public procurement.<sup>74</sup> Antibribery laws were strengthened in the 1960s to improve integrity in public procurement.<sup>75</sup> In the wake of the “Ill Wind” scandals of the 1980s, the Procurement Integrity Act was passed in part to restrain conflicts of interest in procurement officials.<sup>76</sup> The next step, in the 1990s and the first decade of this century, was a renewed focus on “organizational conflicts of interest,”<sup>77</sup> which arise when an organization (rather than an individual) is too conflicted by competing interests to provide sound direction to the Government.<sup>78</sup>

Agency theory is naturally an excellent conceptual prism through which to assess these tightening conflict-of-interest rules, for an agent’s potential conflicts of interest are, of course, at the heart of the theory.<sup>79</sup> Agency theory also explains the evolution of these conflict-of-interest rules and suggests how the rules may evolve in the future. The history of conflict-of-interest law in U.S. federal procurement has clearly been one of steeper sanctions, bent on

approach. Rather than attempting to create a “barrier” between public officials (and their surrogates) and private economic pressures, modern rules systems are more likely to acknowledge that those conflicting pressures will always exist and must instead be tempered by monitoring and, where necessary, sanctions to ensure that officials (and contractors working on the officials’ behalf) are not dangerously distracted by those competing economic interests.

72. See, e.g., *id.* at 196–97 & 197 n.2 (citing a federal law pertaining to bribery of judges enacted in 1790, Rev. Stat. § 5449 (1875)).

73. As Burguet and Che explain, as the corrupt agent gains in discretion in the procurement process (“manipulation power,” as they described it), his corruption can profoundly affect the ultimate efficiency of the procurement process. Burguet & Che, *supra* note 30, at 52.

74. See Petrowitz, *supra* note 71, at 198–200, 211–12. Petrowitz provides a historical overview of statutes attempting to resolve conflicts of interest of government officials.

75. See *id.* at 203–05.

76. See generally Donald P. Arnavas & Clayton S. Marsh, *The Procurement Integrity Act*, 9 BRIEFING PAPERS COLLECTION 453 (1991).

77. The Federal Acquisition Regulation (FAR) defines organizational conflicts of interest as follows:

“Organizational conflict of interest” means that because of other activities or relationships with other persons, a person is unable or potentially unable to render impartial assistance or advice to the Government, or the person’s objectivity in performing the contract work is or might be otherwise impaired, or a person has an unfair competitive advantage.

FAR 2.101. The term “person,” it should be noted, generally includes a corporate entity under U.S. law, and typically organizational conflicts of interest stem from an *organization’s* disabling conflict, not an individual’s. See, e.g., FAR 52.203-12 (“Person means an individual, corporation, company, association, authority, firm, partnership, society, State and local government”).

78. See generally Daniel I. Gordon, *Organizational Conflicts of Interest: A Growing Integrity Challenge*, 35 PUB. CONT. L.J. 25 (2005).

79. Indeed, the U.S. Office of Federal Procurement Policy (“OFPP”) specifically cited principal-agent theory when it published for public comment a draft policy letter on the limits of outsourcing, i.e., on how to identify those functions that should be reserved for performance by

detering conflicts of interest. What has *not* been fully explored, however, is whether agency theory's alternative tool for mitigating conflicts of interest—enhanced monitoring—might play a broader role in this area of the law. The model, as described above, posits that “monitoring” and “bonding” (sanctions) can be used interchangeably, depending on transaction costs and relative effectiveness. After decades of strengthening sanctions, therefore, it may be time to use monitoring (more specifically, enhanced transparency) as an alternative, and less draconian, tool.

This shift in emphasis, to rely more on monitoring, may explain the latest initiative in U.S. anticorruption efforts: mandatory corporate self-disclosure. Under a rule that became final on December 12, 2008,<sup>80</sup> most contractors must now self-disclose certain serious violations, including fraud, certain criminal violations from Title 18 of the U.S. Code (including bribery), and any significant overpayments.<sup>81</sup> While some might view these new corporate disclosures as a natural outgrowth of the corporate compliance programs mandated at the same time,<sup>82</sup> another way to view these new requirements for self-disclosure is as part of a historical evolution towards greater control of conflicts of interest—here, through “monitoring” facilitated by corporate disclosures to the Government (backed, though, by severe threats of sanctions if the contracting corporations fail to make the required disclosures).<sup>83</sup> It is especially worth noting that the rolling progress of U.S. public conflict-of-interest rules has now swept up *private* parties that deal with the Government.

The United States has taken what appears to be a novel approach in mandating disclosures by private contractors,<sup>84</sup> and that initiative may well pres-

---

government employees. Work Reserved for Performance by Federal Government Employees, 75 Fed. Reg. 16,188, 16,189 (proposed Mar. 31, 2010). In the request for comments, OFPP asked whether “consideration should be given to establishing a ‘principal-agent’ test that would require agencies to identify functions as inherently governmental where serious risks could be created by the performance of those functions by those outside government, because of the difficulty of ensuring sufficient control over such performance[.]” *Id.* at 16,192.

80. FAR Case 2007-006, Contractor Business Ethics Compliance Program and Disclosure Requirements, 73 Fed. Reg. 67,064, 67,064 (Nov. 12, 2008) (codified in FAR pts. 2, 3, 9, 42, 52).

81. *Id.* at 67,091. See generally *Guide to the Mandatory Disclosure Rule: Issues, Guidelines and Best Practices*, 2010 A.B.A. SEC. PUB. CONT. L. 11.

82. See FAR Case 2007-006, 73 Fed. Reg. at 67,091–92 (setting forth new contractual clause, FAR 52.203-13).

83. See, e.g., FAR 9.406-2 (possible debarment for failure to disclose).

84. For developments in Europe, see, for example, SELF-CLEANING IN PUBLIC PROCUREMENT LAW 190–98 (Hermann Pünder et al. eds., 2009) (discussing principles governing corporate disclosure and remediation to avoid debarment); Keith M. Korenchuk, *The UK Gets Serious About Overseas Corruption: The Bribery Bill and SFO Guidance*, 1814 PRACTISING L. INST./CORP. L. 823, 828 (2010); U.K. Ministry of Justice, *Bribery Act 2010*, <http://www.justice.gov.uk/publications/bribery-bill.htm> (new U.K. antibribery legislation will “require the Secretary of State to publish guidance about procedures that relevant commercial organisations can put in place to prevent bribery on their behalf”); MINISTRY OF JUSTICE, DRAFT BRIBERY LEGISLATION, 2009, Cm. 7570, at 11–12 (U.K.), available at <http://www.justice.gov.uk/publications/docs/draft-bribery-bill-tagged.pdf> (draft legislative package presented to Parliament called for, among other things, an affirmative defense if corporation had “adequate procedures” in place to prevent bribery, analogous to U.S. corporate compliance systems).

age a broader shift to monitoring (disclosure) as a means of curbing conflicts of interest. If that proves true, other conflict-of-interest rules, such as those addressed to organizational conflicts of interest, may be strengthened more through monitoring and disclosure than through sanctions. Rapid advances in Internet technologies drive that shift towards transparency and help to explain why monitoring through transparency probably will become a much more important tool in ensuring that the Government's agents in procurement do not stray because of conflicts of interest.<sup>85</sup>

A heavier reliance on monitoring also will reshape how we think about principal-agent enforcement. While sanctions ("bonding") depend on a narrow cadre of enforcement professionals (auditors, prosecutors, etc.), monitoring and transparency open new opportunities for other stakeholders to supervise the procurement process, to make sure the ends of the principal are being met by the various agents in the procurement supply chain. As is discussed further below, admitting a new and diverse group of stakeholders to serve as "monitors" of agents may change the nature of who the "principal" is.

A final note on the principal-agent model and conflicts of interest: while agency theory certainly helps clarify the sprawling regime of conflict-of-interest rules, in some ways that regime stretches beyond what principal-agent theory can explain and thus makes it clear that other normative structures must be shaping the procurement system as well. For example, although most such rules constrain conflicts of interest in acquisition decisions and thus fall squarely within the four corners of agency theory, there are other conflict-of-interest rules that deal with officials' actions *after* government employment,<sup>86</sup> which do *not* seem meant to protect acquisition decisions directly. If agency theory explains conflict-of-interest rules that constrain *purchasing* decisions, that theory logically *cannot* explain rules that govern behavior after an official has left her/his post and can no longer make purchases on the principal's behalf. To explain these post-employment rules, therefore, either we must stretch the principal-agent model (sometimes beyond all recognition)<sup>87</sup> or we must consider other norms and other models to fully explain other pieces of an enormously complex procurement system. As is discussed below, the latter seems the more promising route.

---

85. Broadened disclosure requirements also blur the lines between organizational and personal conflicts of interest. If, for example, a contractor will be providing sensitive assistance to the Government and supervising other contractors, leading the Government to require the contractor's senior managers to disclose their holdings in the supervised companies, that requirement arguably spans both *organizational* conflicts of interest (the company's) and *personal* conflicts of interest (the managers'). Cf., e.g., FAR Case 2008-025, Preventing Potential Conflicts of Interest for Contractor Employees Performing Acquisition Functions, 74 Fed. Reg. 58,584, 58,584 (proposed Nov. 13, 2009) (to be codified at FAR pts. 3, 52) (proposing personal conflicts of interest rules regarding employees of government contractors performing acquisition-related functions).

86. See, e.g., FAR 3.104-3(d) (post-employment restrictions on former procurement officials).

87. See generally Böhren, *supra* note 2.



V. CONCLUSION: POTENTIAL APPLICATIONS OF  
AGENCY THEORY IN PROCUREMENT

Agency theory, if applied rigorously, offers a versatile tool to identify and solve enduring puzzles in procurement law and policy, in part by breaking down traditional boundaries in the law. For example, agency theory could help dissolve the divide between the law governing the *formation* and *administration* of public contracts. Federal procurement law in the United States has traditionally divided contract formation from contract administration and has applied two very different rule sets to formation versus administration. While contract *formation* has centered on transparency, competition, and integrity, U.S. public contract *administration* rules (first cousins to commercial contracting rules) have tended to emphasize an efficient allocation of risk between the public and private actors. Agency theory, a model that spans both formation and administration, can help integrate the two bodies of law by illustrating, for example, how strategic positions taken by agents during contract formation can play out over the course of contract administration.<sup>88</sup>

Agency theory also can break down barriers between legal doctrines, arguably artificial barriers that have splintered and slowed the advance of the law. Traditionally, for example, U.S. federal procurement law has treated *personal conflicts of interest* (a conflict of interest held by an individual),<sup>89</sup> *organizational conflicts of interest* (a disqualifying conflict of interest held by an organization, typically a contractor corporation),<sup>90</sup> and *inherently governmental functions* (uniquely sensitive functions that should not be outsourced to contractors)<sup>91</sup> as separate and distinct. The three doctrines are addressed in separate parts of the Federal Acquisition Regulation, and, as of the publication of this article,

---

88. See, e.g., Sudhindra Seshadri, *Bidding for Contests*, 41 MGMT. SCI. 561, 561–63 (1995) (“Selection and control are increasingly viewed as strategically linked stages.”); see also Patrick Bajari & Steven Tadelis, *Incentives versus Transaction Costs: A Theory of Procurement Contracts*, 32 RAND J. ECON. 387, 392–97 (2001) (using transaction cost analysis, in part to assess the shifting asymmetries of information from contract formation through administration). Susan Rose-Ackerman described how the corruption of agents—procuring officials—is a problem that spans both contract formation and administration:

Corrupt kickbacks are easy to hide in construction contracts, and the competitive nature of many bidding processes encourages firms to try to circumvent them through payoffs. In addition, once the contract is written, officials may seek to extract payoffs from the contractor and unscrupulous contractors have an incentive to pay bribes that permit them to cut corners to increase profits.

Susan Rose-Ackerman, *Briefing: Risks of Corruption in Government Infrastructure Projects*, 161 MUN. ENGINEER 149, 149 (2008).

89. See, e.g., FAR 3.104-5(c)(3) (disqualification of procurement official due to contact with contractor regarding prospective employment).

90. See, e.g., FAR 9.5.

91. See, e.g., FAR 7.5; Work Reserved for Performance by Federal Government Employees, 75 Fed. Reg. 16,188 (proposed Mar. 31, 2010) (draft policy paper regarding inherently governmental tasks).



there are at least three separate policy initiatives to address each of these doctrines in isolation.<sup>92</sup>

Agency theory, however, suggests that all three doctrines stem from the same problem: ensuring that an agent (whether an individual contractor employee or a contractor/corporation) can be trusted to achieve the principal/sovereign's ends. Viewed through the prism of the principal-agent model, the differences between the three doctrines seem more of degree than of kind. *Personal conflicts of interest*, for example, are probably treated more seriously than *organizational conflicts of interest*<sup>93</sup> only because a moral hazard encouraging actions that deviate from the principal's ends will be more tempting and immediate to an individual, and the individual's resulting deviation to further his self-interest may be more difficult to monitor (and sanction) than an organization's.

Again applying agency theory, the difference between an *organizational conflict of interest* and a function reserved as *inherently governmental* also seems one of degree: there are some "inherently governmental" functions that are *permanently* barred to contractors because of the unique authorities or resources controlled by those functions.<sup>94</sup> The Government cannot trust contractors to perform those functions, presumably because the contractors cannot be sufficiently supervised to ensure they work in the Government's interest and not in their own. Under the doctrine of organizational conflict of interest, in contrast, *some* contractors are barred from performing certain functions because they cannot be trusted to act in the Government's interest because of competing corporate interests.<sup>95</sup>

---

92. See, e.g., FAR Case 2008-025, Preventing Potential Conflicts of Interest for Contractor Employees Performing Acquisition Functions, 74 Fed. Reg. 58,584, 58,584 (proposed Nov. 13, 2009) (to be codified at FAR pts. 3, 52) (proposing amendment to the FAR to address personal conflicts of interest by employees of government contractors performing acquisition-related functions, as required by section 841(a) of the Duncan Hunter National Defense Authorization Act for Fiscal Year 2009, Pub. L. No. 110-417, 122 Stat. 4356, 4537-38 (2008)); *id.* at 58,585 (noting that organizational conflicts of interest are being addressed through separate rulemaking process, citing Notice of Advanced Rulemaking at 73 Fed. Reg. 15,961 (Mar. 26, 2008)); Work Reserved for Performance by Federal Government Employees, 75 Fed. Reg. at 16,188 (draft policy letter); Robert Brodsky, *Coming Soon: New Guidelines on Which Federal Jobs Can Be Outsourced*, Gov'tExec.com (Mar. 1, 2010), <http://www.govexec.com/dailyfed/0310/030110rb1.htm> ("The Office of Management and Budget plans to release new guidance later this month that will help federal agencies define which tasks should be performed by the government and which are suitable for outsourcing, according to the Obama administration's new procurement chief.").

93. Organizational conflicts of interest are typically addressed as contractual requirements under FAR Subpart 9.5, going to contractor qualification. See, e.g., FAR 9.507-1. Personal conflicts of interest, in contrast, are often dealt with as criminal violations. See, e.g., 18 U.S.C. § 208(a) (2006).

94. See FAR 2.101 ("'Inherently governmental function' means, as a matter of policy, a function that is so intimately related to the public interest as to mandate performance by Government employees. This definition is a policy determination, not a legal determination. An inherently governmental function includes activities that require either the exercise of discretion in applying Government authority, or the making of value judgments in making decisions for the Government. Governmental functions normally fall into two categories: the act of governing, i.e., the discretionary exercise of Government authority, and monetary transactions and entitlements.").

95. See, e.g., FAR 9.505-1.

The parallels between the inherently governmental functions and organizational conflicts of interest doctrines are obvious, and indeed agency theory suggests solutions that fully span the two doctrines: better monitoring, stronger sanctions, frank recognition of the moral hazards confronting the agents, and acknowledgment of the agents' relative informational advantages. Linking the two doctrines through agency theory also means that traditional lessons for organizational conflicts—insisting, for example, that any prophylactic measures be flexible to accommodate differences in circumstances, such as different demands for monitoring—can be applied equally well to inherently governmental functions. Agency theory, in sum, would allow policymakers to bring organizational conflicts and inherently governmental functions, and by extension personal conflicts of interest, under one theoretical roof, to avoid creating artificial doctrinal “boxes” that leave gaps in the law.<sup>96</sup>

Perhaps the most important gift that agency theory can offer procurement law, however, is the opening it offers to *other* organizational and economic theories,<sup>97</sup> to play their own parts in helping us understand the procurement system and its rules.<sup>98</sup> Auction theory,<sup>99</sup> bidding theory,<sup>100</sup> bargaining theory,<sup>101</sup>

96. Agency theory also can resolve puzzling anomalies *within* a doctrine. In U.S. law governing contractor suspensions and debarments, for example, some debarments are left to the discretion of the suspending and debarring official, while others are made automatic by statute. See, e.g., KATE M. MANUEL, CONG. RESEARCH SERV., REPORT NO. RL34753, DEBARMENT AND SUSPENSION OF GOVERNMENT CONTRACTORS: AN OVERVIEW OF THE LAW INCLUDING RECENTLY ENACTED AND PROPOSED AMENDMENTS 1–11 (2008). Agency theory suggests that the system may have evolved in this way because while the principal (Congress) generally leaves suspension and debarment to agents' (agency suspending and debarring officials') discretion, there are some congressional policies—such as enforcement of the Clean Air Act, a basis for an automatic “statutory” debarment—that might not be pursued with sufficient vigor by agency officials distracted by a conflict of interest, i.e., their own agencies' procurement needs.

97. See, e.g., Eisenhardt, *supra* note 8, at 63–64 (discussing how agency theory fits within other organizational theories).

98. See, for example, the analysis offered by Alexandro M. Manelli & Daniel R. Vincent, *Optimal Procurement Mechanisms*, 63 *ECONOMETRICA* 591, 592 (1995), who argued that where buyers value marginal quality more than do sellers, sequential offers to suppliers may yield better results than a mere price auction. This modeling may explain why in some contexts—such as the purchase of highly complex engineering or consulting services—procuring agencies prefer to use sequential negotiations to identify and retain high-quality vendors. See also Ian Ayres & Peter Cramton, *Deficit Reduction Through Diversity: How Affirmative Action at the FCC Increased Auction Competition*, 48 *STAN. L. REV.* 761 (1996) (using economic models to argue that affirmative action can improve acquisition results); Anthony G. Bower, *Procurement Policy and Contracting Efficiency*, 34 *INT'L ECON. REV.* 873 (1993) (using economic modeling to assess relative efficiencies of different contracting strategies); O. Compte et al., *Corruption and Competition in Procurement Auctions*, 36 *RAND J. ECON.* 1, 8–9 (2005) (assessing different strategies for improving competition and reducing corruption in public procurement auctions, based upon economic game theory).

99. See, e.g., Matias Eklof, *Assessing Social Costs of Inefficient Procurement Design*, 3 *J. EUROPEAN ECON. ASS'N* 826 (2005) (using auction theory to assess different procurement methods' relative costs and benefits).

100. See, e.g., James J. Anton & Dennis A. Yao, *Second Sourcing and the Experience Curve: Price Competition in Defense Procurement*, 18 *RAND J. ECON.* 57 (1987) (discussing models for using second-sourcing to contain costs).

101. See, e.g., Guofo Tan, *Optimal Procurement Mechanisms for an Informed Buyer*, 29 *CAN. J. ECON.* 699 (1996), available at <http://www.jstor.org/stable/136258>.

transaction-cost economics,<sup>102</sup> and other forms of economic modeling<sup>103</sup> have important roles to play in explaining the mechanics of procurement, and have been given far too little consideration in the legal literature.<sup>104</sup> As procurement laws the world over continue to evolve, these various organizational and economic models, including agency theory, will play a vital role in helping us to understand, and improve, the procurement systems that play such an important part in the welfare of so many nations.

---

102. See, e.g., OLIVER E. WILLIAMSON, *THE MECHANISMS OF GOVERNANCE* 54–92 (1996) (chapter 3 on Transaction Cost Economics); Bajari & Tadelis, *supra* note 88; John D. Huber & Charles R. Shipan, *The Costs of Control: Legislators, Agencies, and Transaction Costs*, 25 LEGIS. STUD. Q. 25 (2000), available at <http://www.jstor.org/stable/440392>.

103. See, e.g., David P. Baron & David Besanko, *Monitoring, Moral Hazard, Asymmetric Information, and Risk Sharing in Procurement Contracting*, 18 RAND J. ECON. 509 (1987); Morton Bennesen & Christian Schultz, *Adaptive Contracting: The Trial-and-Error Approach to Outsourcing*, 25 ECON. THEORY 35 (2005) (pilot outsourcing contracts with incomplete terms allow principal/Government to assess strategies for broader outsourcing); Steven D. Levitt, *Optimal Incentive Schemes When Only the Agents' "Best" Output Matters to the Principal*, 26 RAND J. ECON. 744 (1995) (discussing optimal structure where principal cares about the agent's output only if it is the "best," e.g., the world's leading weapons system); Steven D. Levitt & Christopher M. Snyder, *Is No News Bad News? Information Transmission and the Role of "Early Warning" in the Principal-Agent Model*, 28 RAND J. ECON. 641 (1997) (discussing optimal structures to ensure that agent shares information with principal); Sudhindra Seshardi et al., *Multiple Source Procurement Competitions*, 10 MKTG. SCI. 246, 246–47 (1991) (using economic models to assess costs and benefits of multiple awards).

104. Mayer & Khademian, *supra* note 18, at 184, argued that defense procurement *must* be understood within the broader context of organizational and political theory. Otherwise it will be too easy to lose sight of the inherent dangers in procurement—agents' and institutions' inherent conflicts of interest, for instance—and to rush headlong to liberalize rules. *Id.* ("By simply advocating that procurement be deregulated for the sake of efficiency, reformers ignore the central management challenges of ensuring accountability and the inevitable disputes among competing principals over goal definition and outcome evaluation.").