

INFORMATION ASYMMETRY AND THE CONTRACTING OUT PROCESS

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Abstract

The private delivery of public services is an essential component of the New Public Management movement that seeks to make government agencies more efficient. However, proponents of the contracting out strategy who support the virtues of competition must also acknowledge the potential asymmetric information between government and vendors in the contracting out process. Such asymmetric information can impact both efficiency and quality outcomes. This paper discusses the contracting out strategy and the inherent asymmetric information in the process. It suggests that an appreciation by public managers of the information asymmetry in the contracting out process would enhance contracting out outcomes in terms of cost reduction and quality.

Keywords: Public Sector Organizations, Principal-Agent Theory, Contracting Out, and Privatization

Introduction

Public agencies are often confronted with the issue of whether to contract out the delivery of public services. The contracting out strategy became popular in the public sector because of the perception that governments are intrinsically inefficient (Huque, 2005). While proponents, who often have roots in public sector economics cite efficiency and cost reduction as reasons to contract out, critics, who often have roots in traditional public administration counter that contracting out tends to sacrifice key public interest values (e.g. equality of treatment) and reduces service delivery capacity (Brown et al., 2006). The private sector is usually considered to be more economic, efficient and effective than the public sector. Thus, it has been suggested that the remedy for what ails government is to change the way government does business by making it more business-like (Kettl, 1993). The assumption is that there are benefits in terms of efficiency and effectiveness in exposing public sector activities to market mechanisms, and that government can learn from the private sector despite contextual differences (Larbi, 2006). The contracting out strategy has gained much prominence in recent years, such that a majority of government agencies in the United States and most western countries use it as the dominant mechanism for providing public services. Although the use of contracting varies across areas, contracts have been used for every service that local, state, and federal governments provide. Studies indicate that most governmental units in the United States contract out the delivery of services to their citizens. In fact, in a study by Council of State Governments in the United States in 1997, it was found that 80 percent of all privatization activities in both state and local governments consisted of contracting out. A study by DeHoog and Salamon (2002) found that direct provision of goods or services by government bureaucrats accounted for only 5 percent of the activity of the federal government in 1999. Even with income transfers, direct loans, and interest payments counted as “direct government”, the direct activities of the federal government

amount to only 28 percent of its activities. Similarly, a follow-up study by Choi et al. (2005), found that roughly 60 percent U.S. government agencies used contracts with other governments, 70 percent contract-out with non-profit entities, while 80 percent engage in contracts with private firms.

One major issue in the contracting out process is the asymmetric information that exists between vendors (contractors) and governments. Indeed, most incentive contracts literature start with the premise that there is an admitted principal-agent conflict from asymmetric information, opportunistic behavior, and monitoring costs in the contracting out process (Paroush & Praeger, 1999). Consequently, contracting can improve service delivery or it can be a disaster, depending on the underlying market conditions and management efficacy (Brown et al., 2006). Regardless of one's ideological disposition towards the issue of contracting out, it seems obvious that a viable option is to devise mechanisms that would optimize its benefits while mitigating its shortcomings. This paper discusses the contracting process, and the inherent information asymmetry between governments and vendors, and posits that it is imperative for public managers to be mindful of how this phenomenon can impact the outcome of this mode of service delivery.

Contracting Out

There seem to be a general consensus among researchers and practitioners alike, on the need for greater private sector involvement in the delivery of public services. This move towards the current wave of New Public Management has been met with debates regarding the consequences of privatization strategies. Debates on the issue centers mostly on the scale of such privatization strategies, and whether certain services are so "public" in nature that they should not be provided by the private sector. Privatization comprises of a variety of methods, such as, sale of state assets, deregulation, franchises, grants, subsidies, service shedding, volunteerism, self-service, user fees, and contracting out - the private provision of public services, such as trash collection, or education (Wooldridge et al., 2002; Boyne, 1998; Christensen & Pallensen, 2004). New Public Management reforms attempt to achieve organizational change in order to enhance management capacity in government and introduce performance incentives and the disciplines of market mechanism (Larbi, 2006). Of the various forms of privatization strategies, contracting out seems to be the most utilized mode of privatization in developed countries (Brudney et al., 2005; Brown et al., 2003; Wooldridge et al., 2002). This mode of public service delivery normally involves a service currently being provided by government, which becomes a candidate for delivery by a private firm. When a service is contracted, the service is still controlled by government although the government usually selects the producer that will deliver the service.

While contracting out involves contracts with for-profits or non-profits, governments also contract out with other governments (Shafritz & Russell, 2005; Huque, 2005; Feildheim, 2007). These three forms of contracting arrangements may have different sets of motivations. For example, private firms, whether they are publicly or privately held, are motivated by profit, and consequently may focus more on innovation and efficiency. Private firms may also favor reducing expenses, particularly if this means pursuing their own (profit) goals at the expense of the government's objectives. In contrast, nonprofit organizations are more inclined to share similar missions with government, and thus may be more reliable contract partners (Hansman, 1987; Salamon, 1995). Rather than behaving opportunistically, a nonprofit might draw on its

own private philanthropic resources (e.g., volunteers and endowments) to augment services it delivers under government contract (Brown et al., 2006; Huque, 2005; Brown et al., 2003). Since non-profits are regulated as tax-exempt organizations and are prohibited from distributing profits to their employees or volunteer boards, there may be fewer incentives for them to engage in opportunistic behavior, in comparison to private firms. Contracting with vendors that purportedly share the same goals is not without risks. Van Slyke (2003) for example, found that governments often establish long-term contract relationships with nonprofits for social services, but then they neglect oversight and monitoring responsibilities. This may enable nonprofits that exclusively rely on public sector contracts to begin to behave like conventional monopolists in order maintain their resource streams. Finally, other governments tend to share similar values with the contracting government, since they have the same public mission, and a workforce more committed to public values (Fieldheim, 2007; Johnston & Seidenstat, 2007). Other governments, for instance are often subject to the same legal requirements as the contracting government, such as promoting service quality, and equity at the expense of efficiency and innovation. However, intergovernmental contracts may be equally plagued by the inefficiencies, lack of innovation, weak incentives, and other bureaucratic ills that usually affect direct government service delivery (Frederickson, 1997; Boyne, 1998; Brown et al., 2006).

The use of contracting out is expected to lower costs of service provision through the discipline of the market and open competition. While it has been effectively used by both public and private organizations for simple tasks such as cleaning and security services, problems may be encountered in more complicated out-sourced projects as a result of the inability of government agencies to effectively monitor the activities of contractors. Using market forces as an organizing principle for social activity has certain advantages (Schultz, 1977; Dunleavy & Hood, 1994). First, market-like arrangements not only minimize the need for coercion as a means for organizing society, but also reduce the need for emotional considerations as the motivating forces behind social improvements. Second, they reduce the need for hard-to-get information. Third, the few who suffer losses as a result of efficiency in the marketplace are not able to seriously impede such efficiency-creating changes. Fourth, they seek to make the public sector less insulated from the private sector in terms of personnel, reward structure, and methods of doing business. Lane (2000) adds that using and mixing markets and bureaucracies through contracting out can enhance both efficiency and accountability as it combines market competition with a more rigid performance control system. Thus, contracting out can help reduce the costs of public service provision, offer users of public services more choices and variety, and improve the performance and quality of public service delivery. It also has the added benefit of ensuring flexibility for public agencies in adjusting to new pressures and changes in service demands. In this way, public sector organizations can focus on core activities and thus maximize some measures of efficiency (Christensen & Laegreid, 2001; Grimshaw et al., 2002).

Factors to Consider in the Contracting Out Process

As a general rule, contracting out as a tool of governance is more appropriate than direct provision under a number of conditions. Contracting out tend to be more appropriate for tasks that can be more precisely specified in advance. Examples of precisely specified tasks include data entry with a specified level of accuracy, janitorial services, garbage collection, etc. (DeHoog & Salamon, 2002; Huque, 2005; Hodge, 1999). Contracting out may not be feasible if the quality and cost configurations are not well specified. This may result in low bid prices and

low quality of service (Taylor, 2005). Several studies indicate that eagerness to cut costs by accepting the lowest bid accounts for one of the major reasons for sub-optimal outcomes in the contracting out process (Taylor, 2005; Johnston & Seidenstat, 2007; Jang, 2006). Another factor that favors contracting out is the ease of measuring contractor's performance without difficulty. The easier it is to measure performance, the fewer the danger of the contractors shirking their responsibilities. If measuring performance is difficult, it may be necessary to use direct provision as an alternative to contracting out. One advantage of direct provision is that it is generally easier to supervise public agency employees closely than to supervise contractors. Contracting is also appropriate if there is high competition among potential private providers. This has been cited as one of the main justifications for contracting out, since competition leads inevitably to cost reductions (Hodge, 1999; Huque, 2005; Johnston & Seidenstat, 2007; Dijkgraaf & Gradus, 2003). On the flip side, there is the possibility that competition may drastically reduce after the initial award because losing bidders may exit the new market, thereby making the initial winner to hold the government hostage to monopolistic exploitation (DeHoog & Salamon, 2002; Kamerman & Kahn, 1989; Vitale, 2005). Therefore, the more there is a significant market for a product or service outside the government, the less the danger the government will be held hostage.

It is important that organizations focus on their core functions while contracting out other peripheral activities. Most public agencies prefer to devote a significant portion of their time and resources to their core functions. The more an activity belongs to an agency's core policy making, regulatory, enforcement, and key service delivery functions, the more it should be provided in-house and not be contracted out. Indeed, Keane et al. (2002) report that in a survey of directors of 380 local health departments in the United States, fifty percent claimed that contracting out helped their department's performance of core functions. These directors believe that by not directly providing certain peripheral services, their departments could better focus on the core functions. Similar results are reported by Ashton et al. (2003), Lian & Liang (2004), and Loevinsohn & Harding (2005). Focusing on core functions is also applicable to areas that reflect government's monopoly on the legitimate use of coercion, for example, the internal revenue service (IRS), prisons, diplomatic duties, and welfare benefit determination decisions (DeHoog & Salamon, 2002; Keane et al., 2002; Choi et al., 2005). A high fluctuation in demand for services should also be a major determinant in the decision to contract out. If the demand for a service or product is irregular, then the service can be contracted out just for the duration of the demand. It is easier not to renew a contract for which the demand is irregular over time than it is to consistently hire civil servants on an ad hoc basis, which may exacerbate the impact of contracting out on public sector unemployment (Feldheim, 2007; Fernandez et al., 2007). Finally, the lack of availability of skilled staff for public agencies is another factor that favors contracting. When private contractors have an easier time than governments in hiring people with skills the government needs, the service for which the skills are needed should be contracted out. The more the government needs people with certain skills to deliver products or services, the more desirable contracting out as a tool of choice becomes (Brudney et al. 2005; Brown et al. 2003).

Basic Steps in Contracting Out

Most contracting out literature suggest a number of crucial steps as a prerequisite for more acceptable outcomes in the contracting out process. The first stage concerns the issue of service planning and contract initiation, that is, the make-or-buy decision (DeHoog & Salamon, 2002; Dean & Kiu, 2002; Johnston & Seidenstat, 2007). This involves deciding whether the service

should be performed in-house (make) or contracted out (buy). Some portion of a service could still be produced in-house, while another part could be done by an outside agency (Brown et al., 2006). Decisions at this stage may also concern whether the contract can be awarded to a single contractor or to multiple contractors.

The second stage involves solicitation for bids. This consists of preparing and advertising the Request for Proposal (RFP). The solicitation package should clearly spell out the specification of service performance standards, penalties, and incentives. Efforts should be made to ensure that the language and procedures of the document comply with federal, state, or agency rules and regulations (Brown et al., 2003; DeHoog & Salamon, 2002).

After soliciting and advertising the RFP, agency personnel should preview the various proposals (also called Expression of Interest) in order to determine the most capable contractors in terms of competence, cost, and if possible past performance history. While all evaluation criteria should be based on what was in the advertised RFP, reviewers may also use their own judgments to determine how well the proposal fits the specifications. This involves ensuring that there is a competitive bidding process, and availability of sufficient pool of competent contractors (Brown et al., 2006; Huque, 2005; Hodge, 1999). Emphasis should not only be placed on the lowest bidder since this may result in poor service quality and sometimes post-award upward revision of costs.

After a contract has been awarded, public managers must focus on proper management of the contract. Several accountability methods are needed to adequately review contract compliance and service performance. This may include monthly or quarterly reports by contractors, random check of the files, and financial documentation of costs. Other monitoring mechanisms include communicating with service clients, and executing incentive programs (Kelman, 2002; Brown et al., 2003; Huque, 2005). Proper vendor monitoring tends to reduce contractor “shirking”, increase service quality, reduce costs, and consequently improve the returns on contracting (Dean & Kiu, 2002; Paroush & Praeger, 1999; Taylor, 2005; Sclar, 2000).

Finally, at the end of a contract period, governments may decide to terminate or renew a contract depending on agency needs and/or contractor performance. Conditions that may lead to contract termination include vendor’s poor performance, funding cuts for the service being provided, or a shift in service priorities (DeHoog & Salamon, 2002). Poor vendor performance may result in the service contract being awarded to another vendor during another competitive bidding process. In such a case, agency personnel should investigate why the initial contract was awarded to an incompetent contractor.

Information Asymmetry from Principal-Agent Conflict

Information asymmetry is at the core of principal-agent theory. An agency relationship exists when a government (the principal) contracts with a vendor (the agent) for the production/delivery of goods or services in which the vendor has expertise (Finkle, 2005; Larbi, 2006; Brown et al, 2006; Halachmi, 2000). Principal-agent theory tries to resolve the problem that arises when the desires and goals of the principal and agent are in conflict, and when it is difficult or expensive for the principal to verify the agent’s performance. Such difficulties arise due to incomplete information, incompleteness of the contracts, and the problem of monitoring behavior (Gauld, 2007). The theory assumes that the principal and agent are engaged in

cooperative behavior, but have differing attitudes toward risk (Eisenhardt, 1989; Ting et al., 2007), and provides a guide on how both parties can best structure a relationship to maximize the chances that the goals of the principal are achieved. Central to this assumption is a belief that the agent does not share the principal's goals and thus will not accomplish them adequately if left to its own devices, a behavior referred to as "shirking". According to Huque (2005), it is virtually impossible to eliminate shirking by the agent. Indeed Kettl (1993) suggests that shirking exists irrespective of the degree of monitoring. Thus, the goal is not to completely eliminate shirking, but reduce it to a level, which ensures that the goals of the principal are achieved.

Information asymmetry occurs when the agent has relevant information that the principal does not have. Such asymmetric information usually occurs with regards to possible quality and cost configurations of projects in the contracting process (Taylor, 2005; Finkle, 2005). This raises the probability that the agent can behave in ways that enhances opportunism (Bessire, 2005; Eisenhardt, 1989). A consequence of such opportunism is agency costs, which are costs that arise when the agent acts self-interestingly, and in bad faith. Agency costs help to address contractual difficulties, which arise from information asymmetries and anticipated agent opportunism.

Agency cost covers all costs associated with addressing potential or actual opportunism, and includes devising mechanisms to monitor agent behavior, and to ensure that the agent behaves as stipulated in the contract (Stan et al., 2007; Wankhade & Dabade, 2006). This may consist of providing incentives and/or investing in monitoring of agent's performance. Studies suggest that incentive-based contracts can be used to motivate agents. Indeed, Zhao (2005) concludes that when risk is moderate, more incentives should be used to motivate agents to act in the principals' best interests. However, as the level of risk increases, more fixed fees and fewer incentives may be more effective. Two central themes in principal-agent theory are moral hazard and adverse selection. Moral hazard refers to lack of effort on the part of the agent, since it is impossible for the principal to monitor all the agent's actions (Gauld, 2007; Brown et al., 2006; Muller & Turner, 2005). Adverse selection refers to the misrepresentation of ability by the agent to the principal. The agent may claim to have certain skills and abilities when he or she is selected to perform the contract. Adverse selection arises because the principal cannot completely verify these skills or abilities either at the time of selection or while the agent is working (Nyman et al., 2005; Rai & Kim, 2002; Zeng et al., 2007). In the case of unobservable behavior (due to moral hazard or adverse selection), the principal can discover the agent's behavior through incurring agency costs, by investing in information systems, such as budgeting systems, reporting procedures, board of directors, and additional layers of management (Zeng et al., 2007; Wankhade & Dabade, 2006). Such investments reveal the agent's behavior to the principal.

The principal-agent model focuses on determining the contract that is most efficient under varying levels of outcome uncertainty, risk aversion, information, and other variables. It tries to determine whether the optimal contract between the principal and agent is based on behavior or outcome. It assumes an easily measured outcome, and an agent who is more risk averse than the principal (Eisenhardt, 1989; Gomez-Mejia et al., 2005; Brown et al., 2006; Nyman, 2005). A case in point is when the principal knows what the agent has done. Given that the principal is buying the agent's behavior, a contract based on behavior is more efficient. An essential element of the task performed by the agent is the programmability of the task. Task programmability influences the ease of measuring behavior. Programmability is defined as the degree to which an

appropriate behavior by the agent can be specified in advance (Eisenhardt, 1989; Zeng et al., 2007). For example, the job of a retail sales cashier is much more programmed than that of a high-technology entrepreneur (DeHoog & Salamon, 2002; Borins, 2001; Lai et al., 2007). The behavior of agents engaged in more programmed jobs is easier to observe and evaluate. Very programmed tasks readily reveal agent behavior. Therefore, the more programmed the task, the more attractive are behavior-based contracts because information about the agent's behavior is more readily determined (Finkle, 2005; Eisenhardt, 1989; Brown et al., 2006; Khalil et al., 2007).

Alternatively, a contract can be based on outcome. Outcome-based contracts motivate behavior by aligning the agent's preferences with those of the principal, but at the price of transferring risk to the agent based on the level of outcome uncertainty. Other factors besides behavior can affect outcome, such as, government policies, economic climate, competitors' actions, and so on. (Eisenhardt, 1989; Zeng et al., 2007; Stan et al., 2007). When outcome uncertainty is low, the costs of shifting risk to the agent are low and outcome-based contracts are attractive. As uncertainty increases, it becomes increasingly expensive to shift risk despite the motivational benefits of outcome-based contracts. Thus, when outcomes are difficult to measure outcome-based contracts are less attractive. In contrast, when outcomes are readily measured, outcome-based contracts are more attractive (Nyman, 2005; Bessire, 2005; Izquierdo & Cillan, 2004; Gomez-Mejia et al., 2005).

Finally, it seems reasonable to assume that when principals and agents engage in a long-term relationship, the principal will learn about the agent more easily, thereby reducing information asymmetry. In such a case, behavior-based contracts are more appropriate. On the other hand, in short-term agency relationships, the information asymmetry between principal and agent is likely to be greater, thus making outcome-based contracts more attractive. Consequently, the length of the agency relationship is positively related to behavior-based contracts and negatively related to outcome-based contracts (DeHoog & Salamon, 2002; Zhao, 2005; Gauld, 2007; Eisenhardt, 1989). Several studies indicate that long-term relationship enhances trust, and contributes to better contracting outcomes. Indeed, Domberger (1998) suggests that contracting out appears to yield the greatest benefit when it combines market discipline with long-term, cooperative relationships, by building trust between both parties. A high level of trust is important for establishing a cooperative relationship between a principal and an agent, and establishing a workable contract. Langfeild-Smith et al. (2000) also argue that close cooperative relationships can be an important contributor to the success of contract management. Additionally, O'Looney (1998) indicates that contract managers should explore the possibility of trust-based management as long as there are clear expectations on the part of both parties and a desire by both parties to build trust-based relationships. Long-term cooperation in contractual relationships is more effective in a business environment characterized by trust, interdependence and commitment (Izquierdo & Cillan, 2004).

Determinants of Agent Opportunism

While information asymmetry is a major cause of agent opportunism, other factors can also contribute to this phenomenon. These include task complexity, contestability, and asset specificity (Ting et al., 2007; Lai et al., 2007; Muller and Turner, 2005; Globberman & Vinning, 1996). Task complexity refers to the degree of difficulty in specifying and monitoring the terms and conditions of a transaction. Complex tasks involve uncertainty about the nature and costs of the production process, and imply specialized knowledge or certain characteristics that are only

initially known to vendors or other experts. High task complexity tends to be associated with new sophisticated processes where technological spillovers are more likely (Gauld, 2007; Globerman & Vining, 1996; Finkle, 2005). It also increases the probability of third party externalities (effects on other government activities). Indeed, Ting et al (2007) explored the antecedents and consequences of opportunism and concluded that information asymmetry and uncertainty due to task complexity are major causes of agent opportunism.

The second factor that affects opportunism is contestability. This refers to the ease with which potential service providers can compete for the contract. This is one of the factors that public managers should consider before engaging in contracting out, since it facilitates competition among vendors. In contestable markets, competition for contracts can help overcome principal-agent problems (Lai et al., 2007; Borins, 2001; Muller & Turner, 2005). Even when only a few firms are initially available to contract with, many firms would quickly become available if the price paid by government exceeds the average cost incurred by vendors. The degree to which the activity being contracted for is contestable affects opportunism costs. This means that the higher the level of contestability, the lower the likelihood for agent opportunism. When there is low contestability, a potential vendor would tend to offer services at a much higher price for two reasons. First, the vendor cannot be quickly replaced, and second, there is a high risk of contract breach externalities (the potential risk when the vendor provides services that are related to a network of other services). For example, a firm carrying out government computer operations may threaten to withdraw service in a way that jeopardizes the payment of all government checks (Globerman & Vining, 1996; Gauld, 2007).

Finally, asset specificity can affect opportunism. An asset is specific if it makes a necessary contribution to the production of a good and has much lower value in alternate uses (Brown et al., 2006; Ting et al, 2007). Asset specific contracts are sometimes referred to as “sunk asset” since they have little or no alternative use. Such contracts can raise the potential for opportunism by either party. The contracting party who commits assets is vulnerable to “hold up”. This means that no matter what prices are agreed to in the contract, the other party can renege by offering lower prices that only cover incremental costs. Investing in a high asset-specific service can leave vendors vulnerable to a single service purchaser (Brown et al., 2006; Stan et al., 2007). It may also unduly raise the costs for vendors to compete in the market, thereby making it unlikely that such vendors will remain in the market for future contract bidding. On the other hand, asset-specific services can unduly privilege vendors that win the first contracts, thus constraining future competition and holding government agencies captive to a monopolistic service provider (Larbi, 2005; Nyman et al., 2005; Brown et al., 2006; Globerman & Vining, 1996). Such monopolistic conditions may allow winning vendors to exploit the government by raising prices or reducing service quality.

Conclusion

The New Public Management (NPM) movement calls for a range of reforms in delivering public services. Contracting out, as one of the tools of NPM aims to increase the efficiency of the public sector through the use of market mechanisms by having the private sector deliver public services while the government retains ownership of the service. However, while there are potential benefits, the difficulties involved in the contracting process have been highlighted in many studies (Huque, 2005; Hodge, 1999; Keane et al., 2002). Information asymmetry constitutes an important aspect of the cooperative relationship between governments (as principals) and vendors (as agents) in the contracting out process. This is because vendors are unlikely to

divulge all relevant information to governments during the various stages of contracting. It is therefore incumbent upon public managers to be cognizant of the potential for such asymmetric information, and devise mechanisms to reduce its impacts on contracting out outcomes. Reducing agent shirking through stringent monitoring would increase agency costs and may make the agent view the whole process in an adversarial manner (Huque, 2005). In addition to increasing incentives for agents to act in interest of the principal, and improving the system of monitoring, it seems that building a spirit of trust and cooperation between both parties may reasonably reduce the principal-agent problem (Taylor, 2005; Huque, 2005; Domberger, 1998; Izquierdo & Cillan, 2004).

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