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Integrating Organizational Economics and Resource Dependence Theory to Explain the Persistence of Quasi Markets

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Abstract: The past few decades have been characterized by a growing body of profit-seeking public service areas with the understanding that profit-seeking organizations will deliver public services more efficiently than government can. These sectors include, but are not limited to, health care, corrections, education and garbage collection. Governments have created quasi markets to attract private providers of services in these sectors, with varying results. Organizational economics has provided the primary explanation for quasi markets, but questions about the sought-for efficiencies actually realized through these markets persist. We integrate resource dependence theory and organizational economics to provide a more comprehensive explanation of the persistence of quasi markets.

Keywords: agency theory; property rights; transaction costs; efficiency; public service sector

1. Introduction

This paper conceptually explores resource dependence as a factor explaining the relative efficiency of profit-seeking firms in quasi markets. Governments often outsource public services, such as correction facilities, education, garbage collection and health care to private, for-profit firms, thereby creating quasi markets. Quasi markets differ from traditional markets in several aspects. They are created by governments, to attract providers of social services traditionally delivered by the public organizations. Because social goals must be met, the government monitors and regulates the private providers. There is competition among firms, but funding typically is provided by government and entry by suppliers is constrained by the controlling organization/government (Ferlie 2002). Quasi markets are created because it is presumed that private organizations will deliver public services more efficiently than public organizations can due to profit-seeking motivations. Estimating the relative efficiency of providing the services themselves or contracting with private firms for the services, governments often conclude that buying services is better (lower cost) than making them.

Organizational economics has historically been concerned with theorizing and measuring the relative efficiency of public and private production. Over the years, a relative consensus has emerged in the theoretical organizational economics literature about the superior efficiency of public services delivered by private firms (Shleifer 1998). However, there have always been questions about the sought-for efficiencies empirically realized through quasi markets. Even without a full understanding of the benefits of outsourcing, government delegation to profit-seeking organizations is common (Brown et al. 2006) and quasi markets persist.

The persistence of quasi markets is due, at least in part, to the fact that the firms to whom economic activity is contracted often form dependencies on both government revenue and the policies that allow

them to enter the markets for public services and government contracts. Governments, as particularly heavy-handed resource streams, can use these dependencies to constrain profit-maximizing behavior (that fails to achieve social goals) by threatening funding reduction or policy shocks that affect and profitability and survival of organizations (Coupet 2017; Froelich 1999). In doing so, governments can influence organizational operations at profit-seeking firms, raising costs by requiring certain investments and setting minimum standards to improve the quality or quantity of social outputs governments contract for. By affecting operational decisions, these resource dependencies can influence the efficiency of the private firms that governments contract to.

To clarify the role of resource dependence as a factor explaining the relative efficiency of profit-seeking firms in quasi markets, we first examine organizational economics wisdom in quasi markets (Section 2), including discussions of agency theory, property rights, transaction costs and probity hazard. We next examine how organizations operate in quasi markets, and answer the question “how does a mix of firm types persist?” before moving to resource dependence, quasi markets and efficiency (Section 3). Section 4 contains our summary and conclusions.

2. Organizational Economics and the (Troubled) Efficiency Axiom

Even as public managers move toward management of the interests of numerous stakeholders, efficiency still matters in public service delivery (Warner and Hefetz 2008). However, what is meant by efficiency varies paradigmatically. For public management scholars, this has typically meant managerial or technical efficiency, where public decision makers seek out, given a particular goal or set of goals, methods to achieve these goals at the lowest cost (Van der Meer and Rutgers 2006). This involves maximizing a set of outputs given a set of inputs (Andrews and Entwistle 2013), and despite longstanding controversy about the role of efficiency in public service delivery, emphasis on this kind of efficiency by public managers is resounding, even if as a secondary objective (Andrews and Entwistle 2014).

An emphasis on managerial efficiency has led to increased contracting to profit seeking firms for public-service provision, creating spaces where profit-seeking firms compete with public organizations. These spaces, known as quasi markets in the management literature (Ferlie 1994, 2002), are created intentionally by governments, with managerial efficiency in mind. Specifically, the hope is that the increased competition that motivates profit-seeking firms’ downward pressure on costs can lower the overall costs of public services, forcing public organizations to either adapt or be overtaken by profit-seeking competitors.

The public sector’s propensity to delegate public service to profit-seeking organizations has increased the relevance of management literature in explaining relative public/private performance (Mahoney et al. 2009). In management research, contracting economic activity typically handled in the public sphere to profit-seeking firms is often seen as “delegating to the market”, that is, to competitive spaces where efficiency reigns. However, organizational economics has provided an important framework for how quasi-market economic activity can be understood differently, explaining that profit-seeking activity in the public sphere is generally not just delegation of activity to a frictionless marketplace, but rather, to organizations bounded by transactions costs (Coase 1960).

According to Coase (1937), all transactions involve costs, including search, information, bargaining and contracting, as well as monitoring and enforcing contracts. Coasian strands of institutional economics argue that economic activity should be conducted within the institutions with the least transactions costs. As Coasian institutional economics extended into Agency and Property Rights paradigms, understanding the nature of public and private transactions costs helped develop an axiomatic privatization logic that argues for the superior efficiency of profit-seeking firms.

2.1. Agency Theory and Public Organizations

Agency theory is a central doctrine of organizational economics thought with regard to contracting and privatization. Agency theory assumes an inability of owners of economic activity (governments,

in this case) to completely contract with their managers, leading to goal divergence between the organizational bodies and the agents to which the goals of the organization are delegated (Arrow 1984; Eisenhardt 1989). Incentive misalignment due to goal divergence can play a significant role in contracting wherever there is separation of ownership and management (such as shareholders and professional managers) and this is not unique to public organizations (Eisenhardt 1988; Laffont and Tirole 1991; Milgrom and Roberts 1992; Tosi et al. 1997, 2000). This indicates that incentive misalignment in the space between ownership and management is a feature of both public and proprietary organizations, suggesting that governments' "delegation to the market" is within the boundaries of the firm and is rife with transaction costs.

Public organizations are owned by governments, which are often bogged down by lobbies and the competing interests of multiple constituencies, and therefore have multiple, complex, and possibly even competing goals. Social goals of public organizations are often numerous and conflicting (Julnes and Holzer 2001; Moe 1989; Wamsley and Zald 1973). Public corrections institutions must satisfy taxpayers, politicians, and to some degree, inmates (Provan and Milward 2001). Public schools must satisfy education goals, but also inclusion, socialization and other social goals. Further complexity arises from the fact that many social goals are difficult to accurately measure, making contracts based on efficiency difficult, if not impossible, to write and enforce (Brown et al. 2006; Milgrom and Roberts 1992).

Therefore, it is not difficult for goal divergence to characterize the relationship between the government and the agents it elects or appoints to pursue social goals organizationally, such as managers of government owned hospitals, prisons and schools. Public managers who—whether as a result of intentionally putting their own goals ahead of the organization's, or of simply misunderstanding the organization's complex goals—yield to goal divergence, may invest sub-optimally in organizational objectives (Cuervo and Villalonga 2000; Dharwadkar et al. 2000; Laffont and Tirole 1991). Shleifer (1998) notes that "weak incentives of government employees with respect to both cost reduction and quality innovation underlie the basic case for the superiority of private ownership (p. 9) and "with few exceptions, the evidence on privatization points to both cost reductions and quality improvement in private relative to public firms (World Bank 1995)" (p. 10).

Managers of profit seeking organizations have at least two measures, profit and stock price (for publicly traded organizations), to which they are held accountable by owners. This eliminates, or at least mitigates, goal divergence leaving managers with incentives to prioritize the organization's goals above their own. In the absence of such market-based control mechanisms, organizational decision-making can be subject to greater principal-agent sources of inefficiency, such as managers in public organizations prioritizing short-term and personal aspirations over the long-term strategic viability and performance of the organization (Rainey et al. 1976; Tuckman 1998; Zahra et al. 2000). Goal divergence, coupled with insufficient accountability for meeting organizational goals, creates counterproductive incentives that may result in managerial inefficiency in public organizations. Hence, private organizations are expected to be more efficiently run.

Property Rights and Public Organizations

Property rights theory supplements agency theory in quasi-market spaces by emphasizing how the nature of ownership affects efficiency. In non-public companies, ownership is well defined and owners can set measurable goals (such as profitability, firm value or stock price) to monitor managers' performance. Conversely, public stakeholders are numerous, minimizing the effect each stakeholder has on organizational decisions made by public bureaucracies and reducing the incentive that each owner has to police managerial decisions (Alchian 1965; Perry and Rainey 1988; Pfeffer 1992).

The nature of property rights differs sharply in proprietary organizations. In firms not publicly traded, ownership has a large stake in the efficiency of the organization, and thus, high incentive to police inefficient managerial behavior. Stockholders of firms that are publicly traded police efficiency through stock price signals, since they can use the market to sell their interest in the firm (Demsetz 2002).

On the other hand, public shareholders cannot sell their stake in the organization in the market. As a result, there can be no takeovers or bankruptcies, thus there is no market penalty for inefficiency on the part of managers, potentially allowing costly inefficiency to persist (Alchian and Demsetz 1973). Consequently, private property rights reinforce agency theory in predicting that private organizations can be expected to be more efficiently run.

2.2. Theory vs. Reality

Both agency and property rights paradigms conclude that delegating social welfare activity to proprietary organizations should be more efficient. The empirical evidence, however, is not conclusive. Studies comparing the relative efficiency of public and proprietary firms in quasi markets often find little or no difference in efficiency (Atkinson and Halvorsen 1986; Bel and Warner 2008; Borcherting et al. 1982; Bozec and Dia 2007; Caves and Christensen 1980; Cullinane et al. 2005; Delmas and Tokat 2005; Estache and Rossi 2002; Johansen and Zhu 2014). Hence, the evidence suggests a viability of public organizations not completely explained by the agency and property rights paradigms.

There is much public service delivery through quasi markets (Hefetz and Warner 2004), but many public organizations in the same sectors survive. This practical equilibrium is manifest in the missing robust evidence of a more efficient proprietary sector and also privatization's apparent disdain of what are often multiple, complex social goals (Denhardt and Denhardt 2000; Stark 2002). Quasi-markets, then, seem to be what we have left of a public sector needing to meet multiple, complex societal needs but yearning to do so efficiently.

With this equilibrium, we are still left with questions. Primarily, despite an efficiency axiom that largely fails, why do public managers still seek to contract with proprietary organizations? The arguments around comparative efficiency in public management, even in an equilibrium where both public and profit-seeking organizations exist in the same space, largely frame (a) the pursuit of complex social goals; and (b) emphasizing efficiency as oppositional goals. The evidence suggests that this might be the case empirically, but it is central to public management that proprietary organizations manage multiple public goals more efficiently. It seems fitting that understanding quasi market productivity requires moving toward understanding multiple, complex societal goal pursuit and efficiency as inextricable.

Because governments have manifold social welfare goals which are complex and change over time, it is impossible for them to draft the complete, long term contracts that would be necessary for private firms to invest in facilities such as hospitals, prisons and schools. Recent research has built on the presence of transactions costs inherent in contracting to better understand viable solutions to the difficulties governments face writing complete, enforceable contracts (Brown et al. 2006). Proposed solutions include long-term relationships built on trust (Nyhan 2000; Vincent-Jones 2006) and third-party arbitrators to impose new terms *ex post*. The problem is that these solutions require relaxation of assumptions foundational to organizational economics theories with foundations in Coase's costs of transacting (Coase 1937). For example, introducing a third party to renegotiate contract terms *ex post* based on changes in external conditions imposes many of the same transactions costs (e.g., principal-agent transactional distance) that characterize the original contracting problems between governments and the firms with which they look to contract (Klein et al. 1978; Sabin 2001). Additionally, in the case of quasi markets, there is an imbalance of bargaining power due to the dependence the private firms have on the government.

2.3. Transaction Costs and Public Organizations

The idea that government organizations can make a product/service instead of buying it from the market suggests that the public sector is a viable vehicle for economic activity. However, before Coase's (Coase 1937) paper, organizational scholars typically viewed the role of public organizations as correction mechanisms for market failures (externalities, public goods, etc.) for which price

mechanisms fail to compensate. Coase (1937) theorized that transaction costs are inevitable and a feature of every contractual and principal-agent design and suggested that the presence of transaction costs in economic activity of all forms means that, for all organizational forms there is at least one economic activity for which it is best suited.

Organizations, Coase argued, are bounded by the types of economic activity they can facilitate at lower transaction costs than in a market environment. Transactions cost theory is generally concerned with these organizational boundaries, and theorizes that firms are more efficient conductors of economic activity when transactions costs present in markets make the costs of this economic activity higher than within the organization itself. That is, it will be more efficient (lower cost) to manage the activity within a firm than in the market.

Introducing proprietary organizations into sectors where public organizations generally operate, like education, healthcare, or corrections, has generally been framed as a solution for transaction costs endemic in public sector economic activity: politicization, difficulty identifying social goals and measuring social progress, etc. Based on transaction costs, Williamson (1999, p. 316) argues that the public organization can be a viable form of economic production when no alternative form of production is feasible and implementable with expected net gains (the remediableness criterion). Clearly government deciding to “buy” from proprietary organizations what is typically in the public domain would not involve delegating this economic activity to a frictionless market, but to a set of organizations with their own sets of transactions costs (Williamson 1999). For transaction cost theory, delegating social economic activity like health care and education to other forms of organizations would only be more efficient if the transactions costs at proprietary firms were lower than those incurred by the public organization.

Probity Hazard—The Extra Transaction Cost

The growth of quasi markets in the past several decades indicates that governments contract for services in hopes of efficiency gains (MacLeod 1999). In doing so, Williamson (1999) suggests that government takes on “probity hazards”, a mathematically positive transaction cost involving negative social consequences of profit-maximizing behavior in quasi-markets. These costs are usually associated with opportunism, a feature of most organizational designs (Coase 1960; Milgrom and Roberts 1992). Opportunism is when managers act without regard to how their actions may negatively affect others. For example, prison managers may purchase inexpensive food without regard to the health consequences for the inmates and private garbage collectors may ignore recycling without regard to the effect on the environment. Williamson categorizes probity hazard—including the complexity of social goods and services, opportunism, and bounded rationality—as a defining transaction cost of delegating economic activity to profit-seeking organizations. As such, probity hazard is an additional transaction costs that may outweigh other transaction costs.

In the proprietary sector, profit motivates both opportunism and pursuit of sub-goals, and in spaces where narrow focus on profit creates negative social externalities, the ability for governments to contract effectively is often impossible, because of the probity hazard costs (Williamson 1999). Profit seeking organizations, for instance, might have incentives to sell sensitive information, which the government has contracted with them to collect, to a high-bidding third party, an (opportunistic) action with negative social externalities too dire to contract for a priori or to correct for with an arbitrated price *ex post*.

If social economic activity should be delegated to the organizational form having the lower transaction costs, how is probity hazard factored in? When there is probity hazard, social economic activity left to the public sector fits the “remediableness criteria”; economic activity in public organizations exists because the transactions costs are lowest, making the public organization by definition the most efficient way to facilitate some economic activity (Williamson 1999). According to Williamson examples include “foreign affairs, the military, foreign intelligence, managing the money supply and possibly the judiciary” (Williamson 1999, p. 321).

What stands out between the agency/property rights and transaction costs approaches to these questions is that agency/property rights theory suggests that economic activity can only be efficient if left for proprietary firms. Williamson's remediableness criteria suggests that, when transactions costs are paramount, economic activity is often conducted most efficiently in the public sector, because of the additional costs associated with probity hazard.

2.4. How Does a Mix of Firm Types Persist?

A major contribution of the transactions cost literature is the recognition of the space between government (as an ownership structure) and the public agencies to which government sends resources and economic activity. This space is defined by transaction frictions within the space that separates them, both in incentive alignment issues in the agency/property rights perspectives and the transactions costs governments must consider when choosing to delegate economic activity to either public or profit-seeking organizations. The choice to delegate economic activity to profit seeking firms is often referred to as delegating "to the market".

As Coase (1960) points out, this production is not in fact delegated to a frictionless market, but to some profit-seeking organization with inherent transactions costs. In this space, government chooses to which of the two organizational forms it will delegate economic activity. The separation of government and the organizations to which they choose to delegate activity is useful, but these spaces often see mixed organizational forms in the same sectors, so the publicness of any set of organizations is often unclear (Bozeman and Bretschneider 1994; Warner and Hefetz 2008). Therefore, government is not choosing whether or not to delegate; it is only choosing which organization to which to delegate.

While transaction cost theory suggests that public organizational forms have roles in this space, it also suggests that the organizational form with the higher summed transactions costs is less efficient, and that governments would eschew this option for social economic production. Transaction cost theory then explains why some social economic activity is delegated to the public sector. Complex political goals and imprecise social goals that make contracting difficult (expensive) may allow public organizations to meet the remediableness criterion in some sectors, including those where governments have introduced quasi markets. That is, it is possible that private organizations will find it as expensive to meet prescribed (complex and imprecise) goals as it is for the government that contracted to them. This may be because the government influences private production through regulation and monitoring, keeping in mind that the government faces two alternatives, (1) to "make" the service or (2) to influence the production process of the proprietary firm that has contracted to make the service.

Transaction cost theory, however, has little to say about quasi markets: spaces where the same social economic activity is provided by a mix of public and profit-seeking organizations. If transactions costs are paramount, then it should follow that any sector would consist overwhelmingly of one type of economic organization, that is, whichever has the lowest transaction costs.

Transaction cost theory explicitly downplays the production function of public services in favor of highlighting market frictions (Williamson 1999). For transaction cost theory, there are two mutually exclusive connotations of efficiency: one where production costs and transaction costs are completely separate mechanisms of efficiency and another where transactions costs are the featured mechanism for analysis (Williamson 1975). However, contracting governments are often motivated not just by perceived transactions costs, but also by technical efficiency and productivity gains. Legislation encouraging profit-seeking organizations to enter government service sectors is enacted for the primary purpose of improving the productivity of public resources (Sharkansky 1980; Villalonga 2000; Warner and Hefetz 2008). Governments then, seeking the productivity gains associated with privatization, often allow rent collection by proprietary organizations while trying to manage the accompanying probity hazard (Bovaird 2004; Cabral et al. 2013; Laffont and Tirole 1991). In short, both production costs and transactions costs matter. Transaction cost theory says little about how they are related.

The potential relationship is very important: technical efficiency gains are the impetus for contracting economic activity, even in the face of transactions costs. Transactions costs are inevitable,

and introducing other agents can increase the transactions costs, especially in introducing probity hazard. How then can we understand the tools governments have in reigning in probity hazard while encouraging efficiency? We argue that resource dependence links the complex social goals of government and the pursuit of efficiency. Understanding organizational economics' framing of opportunism as a transaction cost helps build this linkage.

There are a host of models used to distinguish between public and private organizational forms (Perry and Rainey 1988). Among these, Laffont and Tirole (1991) distinguish public and private organizations by the scope of internal and external control, where internal control is control of inputs and the cost minimization process, and external control is the control of all variables linking the organization to its environment, i.e., customers and resource streams. For Laffont and Tirole (1991), in public organizations, government is directly responsible for both the internal and external controls of organizations involved in social economic activity. Profit seeking firms in quasi markets are owned by shareholders, who hold rights over internal control (delegated to management) and government should be involved only in the space of external control. They note, however, that these ownership structures are fluid. This is because government, with the ability to make and enforce laws, can change the ownership structures of quasi market firms (Wamsley and Zald 1973). Quasi market firms, then, often must manage government's power as a means of survival (Thompson 2011).

This is especially the case when legitimacy and probity hazard are issues (Casciaro and Piskorski 2005; Pfeffer and Salancik 2003). In the case of quasi markets, probity hazards often arise *ex post* (Amirkhanyan 2008; Williamson 1999), motivating governments to leverage their power to gain internal control. Laffont and Tirole (1991) characterize government's attempts to gain internal control as often prohibitively costly. They suggest that quasi market firms' dependence on government resources becomes a mechanism for governments taking on internal control, using the threat of policy shocks or revenue constraints to affect inputs and outputs, which affects productive efficiency.

3. Resource Dependence, Quasi-Markets, and Efficiency

Resource dependence theory positions all organizations as part of an environment: a network of organizational and societal bodies upon which the organization depends for survival (Pfeffer and Salancik 2003). With origins in a body of work investigating the role environments play in shaping the behavior of organizations (Levine and White 1961; Thompson 2011), resource dependence theory emphasizes firms' dependence on its environment for key resources. The scarcity of resources creates uncertainty for firms, that, motivated to reduce this uncertainty, act in two major ways: firms (1) form diverse linkages with their environment, lessening dependence on any one environmental source and (2) strengthen ties with existing environmental actors through constraint absorption, where the dependent organization attempts to facilitate mutual dependence in an effort to absorb control of the scarce resource on which they are dependent (Pfeffer and Salancik 2003). Environmental actors, however, often have little incentive to cede control of valued resources, and rarely do, often choosing instead to exploit the power imbalances that result from external dependencies on organizational resources (Casciaro and Piskorski 2005).

Governments often use the power accompanying resource dependence to influence organizational operations, such as procurement, staffing and reporting, adding up to what can be an active role in the governance of organizations that depend on government resources (Froelich 1999; Tolbert 1985). In quasi markets, where there is a desire to monitor and control probity hazards such as opportunism, similar behavior can be expected.

The corrections sector serves as an illuminating example of resource dependence and government influence on operations in quasi markets. Hart, et al.'s (Hart et al. 1997) study of prison privatization concluded that proprietary prisons, contracted by governments to house inmates, have an incentive to reduce costs. Unfortunately, this incentive tends to be so great that proprietary prisons are likely to reduce costs to below acceptable quality standards (a complex social goal)—a probity hazard.

Hypothetically, the governments which delegate economic activity to prisons can reduce this probity hazard by setting a quality floor, requiring proprietary prisons, for example, to increase the quality of food served to inmates. Doing so increases per-inmate costs, so the prison, motivated solely by profit, would be unlikely to adopt higher standards voluntarily. Governments, do, however control where arrested prisoners are sent, the leased land, and the laws allowing the proprietary prison to operate. Control of these key resources can be leveraged to force operational changes on the private prison firm. In doing so, the defining characteristics of proprietary prisons become blurred, at least with regard to efficiency advantages.

The proposed efficiency advantages of proprietary delegation are deeply rooted in the idea that economic decisions are not political decisions in these organizations. If governments can (and in the case of probity hazard, must) control internal economic decisions, then proprietary organizations in quasi markets are perhaps less distinguishable from their public counterparts than organizational economics suggests.

Proprietary firms in quasi markets often depend very heavily on government for resources. This is the case by definition: quasi markets—and the opportunities for profit in them—form as a result of changes in government policy to encourage the entry of proprietary firms (Ferlie 1994). Hence, the survival of proprietary firms in quasi markets depends on the continued presence of amicable social policy, policy that can be changed by the bureaucratic structures and political processes that created it. Many proprietary quasi-market firms depend heavily on direct or indirect transfer payments from government as primary sources of revenue (Warner and Hefetz 2008). This is crucial to resource dependence theory: the more scarce resources are, the more firms are threatened by the removal of these resources. The revenue streams of proprietary higher education firms, for instance, are on average composed of 85% federal transfer payments (Coupet 2014). The threat of the removal of federal resources would likely mean the death of any firm that did not comply with a government input or output floor.

Resource dependence theory generally promotes explaining efficiency, seeking to construct power between organizations as the unit of analysis (Pfeffer and Salancik 2003; Ulrich and Barney 1984). Efficiency, Pfeffer and Salancik say, involves “assumptions of causality and a level of theoretical understanding seldom possessed by analysts of social systems” (Pfeffer and Salancik 2003, pp. 33–34). Resource dependence theory frames efficiency as a strictly internal phenomenon, and “because of the increasing interconnectedness of organizations, inter-organizational effects are mediated more by regulation and political negotiation than by impersonal market forces” (Pfeffer and Salancik 2003, p. 94). The external power that influences organizations, then, should be the predominant unit of analysis, and the concept of efficiency is strictly an internal one.

The interrelatedness of power and efficiency in quasi markets erodes this distinction, as the internal input/output function that resource dependence theory largely ignores can be affected externally, by “other criteria” (Pfeffer and Salancik 2003, p. 35). Government’s use of the power associated with resource dependence suggests a movement from a variable in the proprietary quasi market firm’s scope of external control to active internal control. Resource dependence theory suggests that external calls for efficiency are generally mistaken for other demands, like changes in the type of inputs or outputs. In quasi markets, though, explicit calls for efficiency make up much of the government demands of quasi markets. In fact, a competitive advantage in the ability of non-public organizations to minimize the operational costs of social output is a main impetus for mixed organizational forms in quasi markets (Tuckman 1998). In quasi-market sectors, productive efficiency is a core concern for both internal and external stakeholders, and thus should be at the forefront of inter-organizational exchanges more than in other sectors.

As an example, Pfeffer and Salancik (2003) use an allegation made by many external stakeholders in the U.S. in the 1960s and 1970s that universities “produced radical students” as an output, which resulted in reduced fundraising, budgets, and enrollment (p. 81). Funding withdrawal has direct and relevant consequences for the efficiency of universities, such as whether or not investments that enable

scale economies are affordable (Coupet and Barnum 2010). More important, though, is that external organizations have many ways to wield power, including pushing for (or sometimes simply making) structural changes that directly affect the quality and quantity of inputs used relative to output, thereby affecting productive efficiency.

In quasi markets, the ability to make these structural changes is arguably more pronounced because formal control often accompanies external funding. The aforementioned government concerned with the production of radical students that might help overthrow it, for instance, might place key members on the organization's board specifically to influence admissions and strategic direction. In higher education, it has been demonstrated that board structure can significantly affect productivity (Knott and Payne 2004). In the above example, subsequent prioritizing of conservative political stances by the board could reduce the likelihood that the best managers (i.e., those able to produce efficiently) would be hired. Resource dependence can change organizational culture and market focus in a range of sectors (Dooley 1969).

Additionally, government intervention into the operations of quasi-market firms can involve not only forcing operational changes, but also setting an "output floor" with regulation. Proprietary colleges, for example, can have funding removed if a certain percentage of students default on federal loans, while private garbage collectors may be required to increase recycling or lose their license to operate. If private firms are unable to raise production to meet the imposed output floor, they often face closure via the removal of public resources. The firms would not voluntarily set the same output floor, because their primary stakeholders hold them accountable for a return on capital, not social welfare. Taking into account social welfare goals can only be justified to the firm's primary stakeholders if the firm is dependent upon public support such as funding and licensing.

Resource dependence theory has mostly been developed separately from efficiency paradigms in management research (Ulrich and Barney 1984). Linking the two concepts in the context of quasi markets might empower resource dependence theory as a tool to explain organizational efficiency. Governments can use resource dependence to change inputs in organizations dependent on their resources, so that external dependencies drive changes in efficiency.

A major theme of Resource Dependence is that organizations try to decrease their dependence on any sole resource stream, so as to decrease the power held by the resource-wielding entity and to isolate the dependent firm from exogenous shocks to these resources. This, however, can be tricky for quasi-market organizations, whose revenue streams are often comprised so heavily of government transfer payments and whose existence depends almost exclusively on opportunities created by policy makers. Therefore, proprietary firms in quasi markets will incur additional costs due to their dependence on the government, which created their opportunity, and their efficiency may be similar to that of the public organizations they compete with. The empirical evidence seems to support this.

4. Summary and Conclusions

Quasi markets persist because an equilibrium between public and private providers has evolved as governments learn to wield their power over the resources that private providers depend on to survive. Outsourcing of government services was predicated on the assumption (from organizational economics) that private providers would be able to offer services at lower cost than public organizations. However, empirical studies of the efficiency of private providers have returned inconclusive results, which raised the question: why does the evidence not support the theory?

We approached this question by looking for additional theory that, along with agency, private property and transaction costs theories, might help us reconcile theory with the empirical evidence. Resource dependency theory does this nicely. As is predicted by organizational economics, private providers can operate more efficiently (at lower cost), if they can control their internal operations. However, they may not meet the social goals that the public organizations have, because they prioritize profits above social goals. This leads to friction with the government, which invited them into the market. The government responds by wielding its considerable power over the resources of the private

providers, forcing them to incur additional costs to meet the complex and ever-changing social goals expected in the sector. That is, the government comes to have considerable control over the internal operations of the private firms.

Returning to the prison example: the quality of inmate accommodations is determined democratically in publicly run prisons. Proprietary prisons are likely to be pressured through their resource dependence to match the public standard. This may explain why private prisons serve only a small fraction of the prison population in the U.S. According to the [Pew Research Center \(2017\)](#), in 2015 only 8% of prison inmates in the U.S. were in private prisons, up from 5% in 1999. The costs of the private firms can increase to the point where they are approximately the same as the public providers', without the government closing the quasi market, which explains the persistence of quasi markets as well as the persistence of public providers, creating an equilibrium of sorts.

Therefore, why do governments continue to create quasi markets? Presumably, they do so because a priori they expect private firms to deliver efficiency to the industry—and theory backs this up. However, once installed, the government may discover that, due to probity hazard, the private firms are not meeting important social goals and moves to gain some control over internal operations to guarantee that social goals are met. Requiring quality inputs and procedures raises the costs of the proprietary firms, and *ex post*, the government finds that the cost efficiency it sought cannot be realized if social goals are paramount. The complexity and rapid change of social goals make it impractical, if not impossible, for governments to predict what will be required to meet these goals, and therefore they cannot write complete contracts with the private firms before they enter the quasi market for an account of the role of incomplete contracts and transactions costs see ([Williamson 1981](#)).

On the supply side of the market, the private firms are happy to enter the market because, a priori, they expect to be able to maximize profits by controlling their internal operations and managing relationships in their external environment. However, once they are operating they find that they are exceptionally dependent on one provider of resources, the government, which invited them to enter. This dependence makes them vulnerable to the power of the government. *Ex post* they discover that, in order to continue operating successfully, they must accept regulation of resources and procedures, which raises their costs and lowers their profits. As long as they can make a sufficient, although not maximum, profit they will remain in the market.

Agency theory, property rights and transaction costs explain why quasi market come into being, while resource dependence theory helps us understand why quasi markets persist, with both public and private for-profit organizations providing services. This explanation of the persistence of quasi markets demonstrates the value of integrating theories from economics and management literatures to explain outcomes in complex economic arenas, while reconciling theory and reality.

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References

- Alchian, Armen A. 1965. Some economics of property rights. *II Politico* 30: 816–29.
- Alchian, Armen A., and Harold Demsetz. 1973. The property right paradigm. *The Journal of Economic History* 33: 16–27. [[CrossRef](#)]
- Amirkhanyan, Anna. 2008. Privatizing public nursing homes: Examining the effects on quality and access. *Public Administration Review* 68: 665–80. [[CrossRef](#)]
- Andrews, Rhys, and Tom Entwistle. 2013. Four faces of public service efficiency: What, how, when and for whom to produce. *Public Management Review* 15: 246–64. [[CrossRef](#)]
- Andrews, Rhys, and Tom Entwistle. 2014. *Public Service Efficiency: Reframing the Debate*. Abingdon: Routledge.
- Arrow, Kenneth. J. 1984. *The Economics of Agency* (No. TR-451). Stanford: Stanford University, California Institute for Mathematical Studies in the Social Sciences.
- Atkinson, Scott E., and Robert Halvorsen. 1986. The relative efficiency of public and private firms in a regulated environment: The case of US electric utilities. *Journal of Public Economics* 29: 281–94. [[CrossRef](#)]

- Bel, Germa, and Mildred Warner. 2008. Does privatization of solid waste and water services reduce costs? A review of empirical studies. *Resources, Conservation and Recycling* 52: 1337–48. [\[CrossRef\]](#)
- Borcherding, Thomas E., Werner Pommerehne, and Friedrich Schneider. 1982. *Comparing the Efficiency of Private and Public Production: The Evidence from Five Countries*. Zurich: Institut für empirische Wirtschaftsforschung, Universität Zürich.
- Bovaird, Tony. 2004. Public-private partnerships: From contested concepts to prevalent practice. *International Review of Administrative Sciences* 70: 199–215. [\[CrossRef\]](#)
- Bozec, Richard, and Mohamed Dia. 2007. Board structure and firm technical efficiency: Evidence from Canadian state-owned enterprises. *European Journal of Operational Research* 177: 1734–50. [\[CrossRef\]](#)
- Bozeman, Barry, and Stuart Bretschneider. 1994. The 'publicness puzzle' in organization theory: A test of alternative explanations of differences between public and private organizations. *Journal of Public Administration Research and Theory* 4: 197–224.
- Brown, Trevor L., Matthew Potoski, and David M. Van Slyke. 2006. Managing public service contracts: Aligning values, institutions, and markets. *Public Administration Review* 66: 323–31. [\[CrossRef\]](#)
- Cabral, Sandro, Sergio G. Lazzarini, and Paulo Furquim Azevedo. 2013. Private entrepreneurs in public services: A longitudinal examination of outsourcing and statization of prisons. *Strategic Entrepreneurship Journal* 7: 6–25. [\[CrossRef\]](#)
- Casciaro, Tiziana, and Mikolaj J. Piskorski. 2005. Power imbalance and inter organizational relations: Resource dependence theory revisited. *Administrative Sciences Quarterly* 50: 167–99. [\[CrossRef\]](#)
- Caves, Douglas W., and Laurits R. Christensen. 1980. The relative efficiency of public and private firms in a competitive environment: The case of Canadian railroads. *The Journal of Political Economy* 88: 958–76. [\[CrossRef\]](#)
- Coase, Ronald H. 1937. The nature of the firm. *Economica* 4: 386–405. [\[CrossRef\]](#)
- Coase, Ronald H. 1960. The problem of social cost. *Journal of Law & Economics* 3: 1–44.
- Coupet, Jason. 2014. The Effect of Resource Dependence on Quasi-Markets. Doctoral dissertation, University of Illinois at Chicago, Chicago, IL, USA.
- Coupet, Jason. 2017. Strings attached? Linking Historically Black Colleges and Universities public revenue sources with efficiency. *Journal of Higher Education Policy and Management* 39: 40–57. [\[CrossRef\]](#)
- Coupet, Jason, and Darold Barnum. 2010. HBCU efficiency and endowments: An exploratory analysis. *International Journal of Educational Advancement* 10: 186–97. [\[CrossRef\]](#)
- Cuervo, A., and Belen Villalonga. 2000. Explaining the variance in the performance effects of privatization. *Academy of Management Review* 25: 581–90.
- Cullinane, Kevin, Ping Ji, and Teng-fei Wang. 2005. The relationship between privatization and DEA estimates of efficiency in the container port industry. *Journal of Economics and Business* 57: 433–62. [\[CrossRef\]](#)
- Delmas, Magali, and Yesim Tokat. 2005. Deregulation, governance structures, and efficiency: The US electric utility sector. *Strategic Management Journal* 26: 441–60. [\[CrossRef\]](#)
- Demsetz, Harold. 2002. Toward a theory of property rights II: The competition between private and collective ownership. *The Journal of Legal Studies* 31: S653–S672. [\[CrossRef\]](#)
- Denhardt, Robert B., and Janet V. Denhardt. 2000. The new public service: Serving rather than steering. *Public Administration Review* 60: 549–59. [\[CrossRef\]](#)
- Dharwadkar, Bavi, Gerald George, and Pamela Brandes. 2000. Privatization in emerging economies: An agency theory perspective. *Academy of Management Review* 25: 650–69.
- Dooley, Peter. 1969. The interlocking directorate. *The American Economic Review* 59: 314–23.
- Eisenhardt, Kathleen M. 1988. Agency-and institutional-theory explanations: The case of retail sales compensation. *Academy of Management Journal* 31: 488–511. [\[CrossRef\]](#)
- Eisenhardt, Kathleen M. 1989. Agency theory: An assessment and review. *Academy of Management Review* 14: 57–74.
- Estache, Antonio, and Martin A. Rossi. 2002. How different is the efficiency of public and private water companies in Asia? *The World Bank Economic Review* 16: 139–48. [\[CrossRef\]](#)
- Ferlie, Ewan. 1994. The creation and evolution of quasi markets in the public sector: Early evidence from the National Health Service. *Policy & Politics* 22: 105–12.
- Ferlie, Ewan. 2002. Quasi strategy: Strategic management in the contemporary public sector. In *Handbook of Strategy and Management*. Newcastle upon Tyne: SAGE, pp. 279–98.

- Froelich, Karen A. 1999. Diversification of revenue strategies: Evolving resource dependence in nonprofit organizations. *Nonprofit and Voluntary Sector Quarterly* 28: 246–68. [CrossRef]
- Hart, Oliver, Andrei Shleifer, and Robert W. Vishny. 1997. The proper scope of government: Theory and an application to prisons. *The Quarterly Journal of Economics* 112: 1127–61. [CrossRef]
- Hefetz, Amir, and Mildred Warner. 2004. Privatization and its reverse: Explaining the dynamics of the government contracting process. *Journal of Public Administration Research and Theory* 14: 171–90. [CrossRef]
- Johansen, Morgen S., and Ling Zhu. 2014. Market competition may not reduce costs or lead to greater efficiency in hospitals. *LSE American Politics and Policy*. Available online: <http://eprints.lse.ac.uk/58474/> (assessed on 30 January 2017).
- Julnes, Patria, and Marc Holzer. 2001. Promoting the utilization of performance measures in public organizations: An empirical study of factors affecting adoption and implementation. *Public Administration Review* 61: 693–708. [CrossRef]
- Klein, Benjamin, Robert G. Crawford, and Armen A. Alchian. 1978. Vertical integration, appropriable rents, and the competitive contracting process. *Journal of Law and Economics* 21: 297–326. [CrossRef]
- Knott, Jack H., and A. Abigail Payne. 2004. The impact of state governance structures on management and performance of public organizations: A study of higher education institutions. *Journal of Policy Analysis and Management* 23: 13–30. [CrossRef]
- Laffont, Jean-Jacques, and Jean Tirole. 1991. Privatization and incentives. *Journal of Law, Economics, and Organization* 7: 84–105. [CrossRef]
- Levine, Sol, and Paul E. White. 1961. Exchange as a conceptual framework for the study of interorganizational relationships. *Administrative Science Quarterly* 5: 583–601. [CrossRef]
- MacLeod, W. Bentley. 1999. Comment on “public and private bureaucracies: A transaction cost economic perspective,” by Oliver Williamson. *Journal of Law, Economics, and Organization* 15: 343–44. [CrossRef]
- Mahoney, Joseph T., Anita M. McGahan, and Christos N. Pitelis. 2009. Perspective—The interdependence of private and public interests. *Organization Science* 20: 1034–52. [CrossRef]
- Milgrom, Paul R., and John D. Roberts. 1992. *Economics, Organization and Management*. Englewood Cliffs: Prentice-Hall.
- Moe, Terry M. 1989. The politics of bureaucratic structure. In *Can the Government Govern?* Edited by John Chubb and Paul Peterson. Washington: The Brookings Institute, pp. 267–329.
- Nyhan, Ronald C. 2000. Changing the paradigm: Trust and its role in public sector organizations. *The American Review of Public Administration* 30: 87–109. [CrossRef]
- Perry, James L., and Hal G. Rainey. 1988. The public-private distinction in organization theory: A critique and research strategy. *Academy of Management Review* 13: 182–201.
2017. Pew Research Center. Available online: <http://www.pewresearch.org/fact-tank/2017/04/11/u-s-private-prison-population-has-declined-in-recent-years/> (accessed on 20 June 2017).
- Pfeffer, Jeffrey. 1992. *Managing with Power: Politics and Influence in Organizations*. Boston: Harvard Business Press.
- Pfeffer, Jeffrey, and Gereald Salancik. 2003. *The External Control of Organizations: A Resource Dependence Perspective*. Palo Alto: Stanford University Press.
- Provan, Keith G., and H. Brinton Milward. 2001. Do networks really work? A framework for evaluating public-sector organizational networks. *Public Administration Review* 61: 414–23. [CrossRef]
- Rainey, Hal G., Robert W. Backoff, and Charles H. Levine. 1976. Comparing public and private organizations. *Public Administration Review* 36: 233–44. [CrossRef]
- Sabin, Cameron L. 2001. The adjudicatory boat without a keel: Private arbitration and the need for public oversight of arbitrators. *Iowa Law Review* 87: 1341–46.
- Sharkansky, Ira. 1980. Policy making and service delivery on the margins of government: The case of contractors. *Public Administration Review* 40: 116–23. [CrossRef]
- Shleifer, Andrei. 1998. *State versus Private Ownership*. No. w6665; Cambridge: National Bureau of Economic Research.
- Stark, Andrew. 2002. What is the new public management? *Journal of Public Administration Research and Theory* 12: 137–51. [CrossRef]
- Thompson, James D. 2011. *Organizations in Action: Social Science Bases of Administrative Theory*. Piscataway: Transaction Publishers.

- Tolbert, Pamela S. 1985. Institutional environments and resource dependence: Sources of administrative structure in institutions of higher education. *Administrative Science Quarterly* 30: 1–13. [\[CrossRef\]](#)
- Tosi, Henry L., Jeffrey P. Katz, and Luis R. Gomez-Mejia. 1997. Disaggregating the agency contract: The effects of monitoring, incentive alignment, and term in office on agent decision making. *Academy of Management Journal* 40: 584–602. [\[CrossRef\]](#)
- Tosi, Henry L., Steve Werner, Jeffrey P. Katz, and Luis R. Gomez-Mejia. 2000. How much does performance matter? A meta-analysis of CEO pay studies. *Journal of Management* 26: 301–39. [\[CrossRef\]](#)
- Tuckman, Howard P. 1998. Competition, commercialization, and the evolution of nonprofit organizational structures. *Journal of Policy Analysis and Management* 17: 175–94. [\[CrossRef\]](#)
- Ulrich, David, and Jay B. Barney. 1984. Perspectives in Organizations: Resource Dependence, Efficiency, and Population. *The Academy of Management Review* 9: 471–81.
- Van der Meer, Hendriekje, and Mark R. Rutgers. 2006. Reinstating Efficiency: Recapturing the Substantial Meaning of Efficiency in Public Administration. Paper presented at Annual Conference of the European Group of Public Administration, Milan, Italy, September 15.
- Villalonga, Belen. 2000. Privatization and efficiency: Differentiating ownership effects from political, organizational, and dynamic effects. *Journal of Economic Behavior & Organization* 42: 43–74.
- Vincent-Jones, Peter. 2006. *The New Public Contracting: Regulation, Responsiveness, Relationality*. Oxford: OUP Catalogue.
- Wamsley, Gary L., and Mayer N. Zald. 1973. The political economy of public organizations. *Public Administration Review* 33: 62–73. [\[CrossRef\]](#)
- Warner, Mildred E., and Amir Hefetz. 2008. Managing markets for public service: The role of mixed public-private delivery of city services. *Public Administration Review* 68: 155–66. [\[CrossRef\]](#)
- Williamson, Oliver E. 1975. *Markets and Hierarchies: Analysis and Antitrust Implications: A Study in the Economics of Internal Organization*. Champaign: University of Illinois at Urbana.
- Williamson, Oliver E. 1981. The economics of organization: The transaction cost approach. *American Journal of Sociology* 87: 548–77. [\[CrossRef\]](#)
- Williamson, Oliver E. 1999. Public and private bureaucracies: A transaction cost economics perspective. *Journal of Law, Economics, and Organization* 15: 306–42. [\[CrossRef\]](#)
- World Bank. 1995. *Bureaucrats in Business*. London: Oxford University Press.
- Zahra, Shaker A., R. Duane Ireland, Isabel Gutierrez, and Michael A. Hitt. 2000. Privatization and entrepreneurial transformation: Emerging issues and a future research agenda. *Academy of Management Review* 25: 509–24.



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