

CAPABILITIES AND STRATEGIC ENTREPRENEURSHIP IN PUBLIC ORGANIZATIONS

PETER G. KLEIN¹, JOSEPH T. MAHONEY^{2*}, ANITA M. MCGAHAN³, and CHRISTOS N. PITELIS⁴

¹Division of Applied Social Sciences, and Truman School of Public Affairs, University of Missouri, Columbia, Missouri, U.S.A.

²Department of Business Administration, College of Business, University of Illinois at Urbana-Champaign, Champaign, Illinois, U.S.A.

³Rotman School of Management and Munk School of Global Affairs, University of Toronto, Canada

⁴Centre for International Business and Management, Judge Business School, University of Cambridge, Cambridge, U.K.

Public organizations are relatively understudied in the strategic entrepreneurship literature. In this article, we submit that public organizations are usefully analyzed as entities that create and capture value in both the private and public sectors and that a capabilities lens sheds important new insights on their behavior. As they try to create and capture value, public organizations can act entrepreneurially by creating or leveraging bundles of capabilities, which may then shape subsequent entrepreneurial action. Such processes can involve complex interactions among public and private actors. For example, public organizations often partner with private firms to produce existing products, create new products, and establish new markets which, in turn, generate new capabilities for both public and private actors. Yet such coevolutionary processes are not guaranteed to create value, and capabilities acquired in the pursuit of public interests may, over time, enable activities that damage those same interests. We show how a capabilities approach helps explain the nature and evolution of public organizations and we apply this approach to a series of cases on the growth and diversification of public organizations, the private provision of public goods, and related issues. Copyright © 2013 Strategic Management Society.

INTRODUCTION

An organization's capabilities—built on its resource base—are critical to its entrepreneurial behavior and performance. Yet, in the field of entrepreneurship, public and governmental capabilities have not been researched comprehensively. Governmental organizations not only control resources such as land, buildings, and budgets, but also the capabilities to

govern, administer, and transform these resources.¹ Governmental capabilities that can create value from public resources are essential to efficient and effective government. How unique and inimitable are public resources and capabilities? Are they mainly serving public or private interests? Under what conditions does public entrepreneurship create value? Can efficient stewardship of public capabilities and resources lead to outcomes that are not aligned with public interests?

Keywords: capabilities; strategic entrepreneurship; public organizations

*Correspondence to: Joseph T. Mahoney, Department of Business Administration, College of Business, University of Illinois at Urbana-Champaign, 1206 S. Sixth St., Champaign, IL 61820, U.S.A. E-mail: josephm@illinois.edu

¹ These capabilities relate to infrastructure such as highways (Small and Verhoef, 2007) and prisons (Hart, Shleifer, and Vishny, 1997), sensitive information about military activities (Vandenbroucke, 1993), organizational assets such as the cultures and routines of established agencies (Peters, 2001), and knowledge systems such as rules of law (Tamanaha, 2005).

This article explains how capabilities that develop in pursuit of specific public goals may subsequently shape opportunities in unanticipated ways. Our perspective is informed by the idea that value creation in the public domain is more difficult to identify than in many private situations. A major difference between private and public organizations is in the clarity of organizational goals. Whereas organizational objectives in the private domain typically hinge on enhancing returns on investment for shareholders and founders, the objectives of public organizations are often less clear, qualitative, changeable, and ill specified, not only because of the lack of profit indicators, but also because of interventions by multiple authorities and interest groups and sharply conflicting mandates and values—e.g., obtaining environmental conservation and economic development or achieving equality and efficiency (Dixit, 1997; Okun, 1975; Rainey and Bozeman, 2000).

Research in public administration and political science has long acknowledged capabilities in shaping goals in the public sector. Allison's (1971) seminal account of the Cuban missile crisis showed how military objectives are shaped by available resources and capabilities which, in turn, affect the costs and risks of strategic options. However, the strategic entrepreneurship literature has given little attention to the boundaries, internal organization, growth, and performance of public organizations (Bonardi, Hillman, and Keim, 2005; Hillman, Keim, and Schuler, 2004; Kivleniece and Quelin, 2012). Moreover, while research in public administration and political science has examined the growth of public agencies (Horn, 1995; Peters, 2001), the research in these fields has mainly emphasized the limitations of classical theories and pointed toward the potential importance of entrepreneurship theory, without leveraging this theory. Similarly, although transaction cost economics and agency theory have informed research on public entities (Moe, 1995; Spiller and Tommasi, 2003; Weingast, 1995), the entrepreneurial capabilities approach has rarely been employed (Kivleniece and Quelin, 2012; McWilliams, Fleet, and Cory, 2002; Oliver and Holzinger, 2008).

Our analysis examines how public capabilities can enable and constrain subsequent opportunities that both public and private actors confront. We conceive of a public organization as any sovereign entity with sovereign authority over a specific constituency. The analysis suggests that, even without any form of 'regulatory capture' by private interests (Stigler,

1971), the durability of capabilities alone may, over time, subvert the pursuit of public goals. We begin by asking what makes a resource, opportunity, activity, or outcome 'public' or 'private.' We rely on the idea from the field of entrepreneurship that capabilities develop as actors seek to deploy resources strategically. We briefly consider how these resources and capabilities attain value.² Assessing the value of the services supported by these resources requires evaluating opportunity costs in nonmonetary terms. We posit that capabilities may develop in public organizations to deploy resources in valuable ways—with value assessed against objectives that may not be pecuniary.

We then briefly review concepts from strategic entrepreneurship, neoclassical economics, agency-theoretic, transaction cost, and evolutionary perspectives on the management of public capabilities. The purpose is to motivate a new perspective on the link between capabilities and value creation and capture in the public domain, including how public goals may change over time.

We next illustrate with a simple model, inspired by Arrow (1951), how durable capabilities influence the process of resource deployment in the public sector and, thus, have a significant impact on how public goals evolve over time. The analysis indicates that perverse public outcomes, such as the consumption of bureaucratic 'slack' and the overprovision or transformation of existing public goods (which we label 'public bads') can arise from hazards in the administration of public resources. We show how these processes can occur even without regulatory capture by private interests, a prevalent explanation in the agency-theoretic and transaction cost literatures (see Dal Bo [2006] for a review of both the theory and empirical literatures on regulatory capture).

Finally we offer several detailed examples of how capabilities in the public domain shape and are shaped by entrepreneurial behavior and performance. The purpose is to explore the implications of the entrepreneurial capabilities perspective on the creation and capture of value in the public domain and to point toward opportunities for further research

² The *value* of some resources utilized by public entities—buildings, office equipment, and human capital—is tractable because of the value they command in private markets and because these resources may be fungible into private use, thus engendering competition between public and private entities for the productive services of these resources. Other resources—such as a town's name or identity—either cannot be or are not used privately and may have no market values.

in this area. In this section, we turn to issues such as organizational boundaries, growth, and quasi privatization.³ We conclude by affirming the central importance of an entrepreneurial capabilities lens to an understanding of public organization.

CAPABILITIES AND VALUE IN PUBLIC ORGANIZATIONS

The strategic entrepreneurship field offers important insights on how organizations deploy capabilities in pursuit of value creation and capture. Public entities, like private firms, have been described using the language of entrepreneurship theory (Klein *et al.*, 2010; Short, Moss, and Lumpkin, 2009). Governments, government agencies, charitable organizations, social enterprises, and other ‘nonmarket’ decision makers are alert to *recognize* (Kirzner, 1997; Shepherd, McMullen, and Jennings, 2007; Sleptsov and Anand, 2008) and *realize* (Alvarez and Barney, 2007; Luksha, 2008; Miller, 2007) opportunities for creating and capturing value. These decision makers exercise *judgment* over the mobilization and deployment of resources under uncertainty, seek the insights of users, introduce technological and organizational innovations, and develop novel strategies (Felin and Zenger, 2009; Klein, 2008; Shah and Tripsas, 2007; Van de Ven, Sapienza, and Villanueva, 2007).

Yet a central facet of public organizations that has not been examined comprehensively is the creation, stewardship, deployment, and dynamics of capabilities in purported pursuit of public goals. Unlike much of the extant entrepreneurship literature emphasizing Kirzner’s (1973) ‘pure entrepreneurship’ concept of alertness to profit opportunities, which is separated from resource ownership (Foss and Klein, 2010), the strategic entrepreneurship field highlights the close relationship between underlying capabilities and value creation and capture (see Figure 1 for a summary of these differences). Organizations are examined as unique bundles of relational, cultural, and institutional capabilities and entrepreneurship constitutes the assembly and redeployment of new resource bundles under uncertainty (Dacin, Dacin, and Matear, 2010; Foss and Klein, 2012). The dominant view on the objective of this

³ While a diversity of organizations purport to act in the public interest, the current article focuses on the differences between private and public organizations rather than among the types of public organizations.

activity is returns to shareholders, founders, and other investors. As a result, most entrepreneurship theory addresses the challenge of resource and capability deployment under uncertainty to achieve the aim of return on invested capital.

Theory that has developed in the field of strategic entrepreneurship emphasizes facets of efficiency in the deployment of resource to achieve these aims. The research literature attends to the ways in which capability development itself depends on the entrepreneurial process. Capabilities may arise as organizations develop routines for conducting this assembly and redeployment of resource bundles (Eisenhardt and Martin, 2000; Nelson and Winter, 1982). Thus, entrepreneurship is not a purely cognitive act, but is manifest in action (Foss *et al.*, 2008; Penrose, 1959). To better understand the entrepreneurial function, we must examine the capabilities that entrepreneurs establish, maintain, reshape, and dissolve to govern the creation and deployment of resources.⁴

How can we characterize public-sector resources and capabilities? Public organizations employ both private and public resources and their productivity in transforming the services of these resources into publicly valued outputs is complicated by the fact that their inputs are difficult to measure and their outputs are sometimes hard even to conceptualize. Public organizations such as government bodies and multilateral agencies (e.g., the United Nations and the World Health Organization) produce public outputs, which are not sold on the market and, thus, in contrast to private sector outputs, there are no market prices at which these public outputs can be evaluated (Mises, 1944; Peters, 2001). The productivity of public organizations is elusive because the value of public inputs and outputs is difficult to assess quickly, quantitatively, and objectively (Dixit, 1997; Wilson, 1989). Insights, tools, and theoretical relationships established in the fields of strategic entrepreneurship and management are relevant to the study of public organizations precisely because they can help relieve this intractability.

⁴ The primary contribution of the current article is in joining strategic entrepreneurship, capabilities, and public organization. Indeed, the strategic entrepreneurship literature, in general, is in progress in joining entrepreneurship and capabilities including, for example, in the *Strategic Entrepreneurship Journal* alone: Agarwal, Audretsch, and Sarkar (2007); Anderson, Covin, and Slevin (2009); Bingham, Eisenhardt, and Furr (2007); Brinkman and Hoegl (2011); Carmeli and Azeroual (2009); Foss *et al.* (2008); Simsek and Heavey (2011); and Sleptsov and Anand (2008).

	Private organizations	Public organizations	Public and private organizations
Decision making within organizations			Recognition and realization of opportunity; judgment over resource deployment
Common measures of entrepreneurial value creation	Returns to founders, shareholders, and other investors; time to IPO; time to revenue generation; return on invested capital	Improvements in security, education, health, and civic life; advances in the provision of utilities and transportation services	Efficiency and effectiveness in resource and capability deployment
Genesis of capabilities			Developed through experience and learning; may be tacit; can lead to excess capacity
Deployment of capabilities	Accumulated and deployed to support the pursuit of well-defined goals for achieving returns on investment	Initially accumulated to support the pursuit of qualitative goals, but ultimately outlive the goals and may be deployed elsewhere	Accumulated and deployed by actors within the organization seeking to create and capture value
Measures	Resources and capabilities are difficult to measure separately from their value in use	Resources and capabilities become visibly evident as bureaucratic structures emerge; these structures are more readily observable than the achievement of value creation	Productivity is difficult to assess
Focus of measurement systems and practices	Ends, outcomes, achievements	Means, tasks, activities	
Mechanisms for assessing the cost or value of a resource	Factor markets	Analogy to private value; price of construction; transferability	VRIN criteria; appropriability criteria

Figure 1. Concepts of entrepreneurship and capabilities in private and public organizations

Progress in analyzing public organizations requires clear definitions so as to allow results to be measurable (Dixit, 1997). Clarity is required to support the cultivation of knowledge, skills, and incentives to achieve public goals. Public resources and capabilities must be well defined to enable their acquisition—i.e., within strategic factor markets (Barney, 1986) for collectively owned, politically controlled resources—and their deployment through combination and recombination in use (Capron and Chatain, 2008; Maritan and Florence, 2008). Clear performance objectives for public organizations are central to assessments of bureaucratic efficiency.

Addressing these issues begins with a definition of public organization *per se*. We define public organizations as entities with sovereign authority (whether primary or derived from higher authority, such as the government) over a specified constituency. This definition does not refer directly to the ‘public interest,’ which is impossible to identify comprehensively given heterogeneous preferences and subjective valuations (Arrow, 1951). We focus only on those public organizations that control resources either formally or informally. In practice, the agencies we consider have constitutional, legislative, or other formal authority to create and/or transfer resources through levying taxes or accruing

fees through some well-defined mechanism. What distinguishes these agencies is their stewardship over resources that are not under the control of any other private or public actor. Therefore, we are examining organizations controlled by a body with legally sanctioned coercion rights and decision rights over the governance of resources and capabilities (Hirschman, 1982; Olson, 1965). We turn first to define these public resources, then explore the relationships between public resources and public organizations, and finally consider how these public resources are governed.

Objectives

The definition of ‘value’ reflects the idea that all organizations—and individuals associated with organizations—aim to capture a return from their actions, action potential, and perceived advantages (Pitelis and Teece, 2010). Common goals tend to be qualitative and are determined through negotiation, balancing, and political processes, while private goals of actors participating in the public process often encompass such concerns as career stability, career advancement, and mission-based satisfaction. Thus, individuals controlling resource deployment in public organizations exercise discretion and judgment under conditions in which their efficiency is difficult to observe and measure.

Public organizations come under scrutiny episodically and sometimes unpredictably. The research literature in the field of public administration on ‘goal ambiguity’ (e.g., Chun and Rainey, 2006; Rainey and Bozeman, 2000) shows how problems in specifying missions, directives, evaluations, and priorities frustrate good governance, productivity, and managerial efficiency. In practice, public organizations employ a vast array of metrics (Carter, Klein, and Day, 1992; Cavalluzzo and Ittner, 2004), few of which map directly to common measures used to assess entrepreneurial value creation and capture in the private sector. Government agencies tend to grow, and they often measure their success in terms of budgets and personnel as well as the re-election of politicians, the survival of public agencies, and the raising of revenues through taxes by the state. In part because of systematic differences between public and private objectives, a common focus in public organizations involves an emphasis on measuring tasks that govern resource accumulation, stewardship, and deployment, rather than the ends of value creation and capture.

The nature of public resources and capabilities

Public resources in this context cannot be defined satisfactorily simply by reference to collective ownership, as many *private* resources are owned or controlled by groups (e.g., shareholders, partners, and family members). A resource’s public goods characteristics (non-excludability and non-rivalry in use) are also ineffective as the basis of definition; private organizations also rely on resources that are at least partly public goods, such as knowledge, goodwill, and reputation. Hence, a meaningful definition of public resources must distinguish between market and nonmarket ownership and control: private resources are owned and/or controlled by identifiable individuals or groups operating voluntarily in a market setting, while public resources are owned by bodies that have the ability to use *legally sanctioned coercion* to acquire and deploy these resources.

How are the costs of public resources assessed? Public organizations may own or control private resources, which are acquired in (strategic) factor markets and may have market costs (buildings, IT systems, lobbying skills, and reputation) (Byrd, Sambamurthy, and Zmud, 2005; de Figueiredo and Kim, 2004), but other resources owned or controlled by public organizations may not be traded privately (e.g., military capabilities, policing services, and even library services). Public entities may also own or control resources that would command higher prices if they were publicly available than they do under public control. Therefore, in many cases, the cost of a resource cannot be assessed by its private analog either because the uniqueness of a public resource makes its opportunity cost impossible to assess or because of common-pool problems and social dilemmas (Agarwal, Croson, and Mahoney, 2010; McCarter, Mahoney, and Northcraft, 2011; Zeng and Chen, 2003).

Several strategic entrepreneurship concepts and frameworks regarding the productivity of resources in use offer benchmarks for application to public organizations. One such approach characterizes resources as valuable, rare, inimitable, and non-substitutable (VRIN) (Barney, 1991). The VRIN criteria yield key insights about the *existence* of sources of potential for deploying resources to their highest value use in organizations, and they are analogous in the public domain to the emergence, boundaries, and growth of assets in a public jurisdiction that compete for decision rights with other agencies seeking to control resources similarly. VRIN criteria

are relevant in explaining in part, why the public domain (e.g., the state) exists. The property rights protection of VRIN resources from being usurped by rival groups-states (North, 1981) and the development and leveraging of these resources can be a potent source of competitive advantage for nations (Porter, 1990).

The *sustainability* of an organization's capacity for deploying its bundle of resources is associated with control over valuable resources that are difficult to transfer across organizations, often because of their (1) intangibility (Itami and Roehl, 1987), (2) inimitability, (2) non-substitutability, and (4) durability. In the public sector, critical resources can have the same character: they are durable assets, which are difficult to transfer between agencies, and they are unique and, thus, difficult to substitute for achieving the agency's mission. Sustainability criteria are important for explaining the behavior of public agencies, as bureaucracies often build a scaffolding of administrative structure on top of resources that may form the original basis of their charter. This bureaucracy is important, as it may serve as an apparatus that initially supports the sustainability of a public organization toward a particular public goal. We define bureaucracy here as a constellation of resources, capabilities, and routines, resting primarily on the input of labor by salaried managers and agents, designed to administer particular resources within a public organization.

Theories of strategic entrepreneurship also point to the mechanisms by which organizations—and the individuals within them—claim value. These mechanisms of *appropriability* in the private sector include: (1) complementarity, (2) property rights, (3) governance, and (4) embeddedness. Complementarity arises when an organization possesses multiple assets that in combination enable the achievement of goals, and it is analogous in the public sector to resource combinations. Property rights relate to the ability of a controlling organization to exclude others from profiting from the deployment of a key resource. In the public sector, proprietary benefits in fulfillment of a mission achieved through property rights are generally observable. Governance relates to the organization's ability to deploy resources better than potential rivals and to extend into the public domain. Finally, embeddedness in the private context relates to the ways in which an organization builds a cluster of activities and complementary resources around a strategically important resource and, thereby, appropriates returns from this resource

by making its extraction difficult. Public agencies and organizations that contract in the public interest may capture benefits from resources through these mechanisms. We submit that these theories are useful for understanding the processes by which public organizations construct capabilities to pursue ostensibly public aims which, in turn, influence and shape the definition of goals in the public domain. We will next elaborate these processes.

Evolutionary and behavioral dimensions of capability deployment

The ways in which capabilities shape an organization's behavior—and particularly its growth—were the subject of theorizing by Penrose (1959). These ideas, which were conceived primarily with reference to large corporations, were subsequently linked to ideas in evolutionary economics (developed primarily by Nelson and Winter [1982]). This theoretical linkage emphasized that firms may be viewed as heterogeneous bundles of resources and capabilities that provide services toward a particular objective. We maintain that this conceptualization applies directly to public organizations. The theoretical linkage has important applications to the nature, growth, and boundaries of public organization, as well as the public-private nexus, as will be explained.

Decision making inside organizations is critical to the definition of capabilities. Therefore, the application of this perspective requires that we examine adaptive aspirations and expectations, routines, information processing, interdependence, organizational coalitions, organizational learning, problemistic search, sequential decision making, subgoal pursuit, satisficing, uncertainty avoidance, and the quasi resolution of intrafirm conflict through the use of organizational slack (Cyert and March, 1963; Pitelis, 2007; Simon, 1982; Thompson, 1967). In such an environment, organizational decision makers must be mindful of the scarcity of managerial attention available for making these complex assessments and the bounds on human rationality that are implied as a consequence of managerial limitations (Bingham *et al.*, 2007; Kahnemann, Slovic, and Tversky, 1982; Ocasio, 1997; Simon, 1947).

Ideas concerning the organizational capabilities of private firms apply *a fortiori* to public organizations. Resources and capabilities are programmatic, often have elements of tacit knowledge, and are largely

embedded in organizational routines (March and Simon, 1958). These routines serve several important functions, such as constituting organizational memory (Nelson and Winter, 1982), and are facilitated by common language and coding (Arrow, 1974). Routines can also serve as a truce in inter-organizational conflict to maintain internal political stability, which enhances the efficacy of organizational slack (Cyert and March, 1963; Nelson and Winter, 1982). Public organizations, lacking the feedback mechanism provided by market signals of profit and loss, are particularly dependent on evolved organizational capabilities. Also, the absence of a clear bottom-line tends to engender 'soft budget constraints' (Kornai, 1986), thereby facilitating subgoal pursuit (Williamson, 1975).

Penrose's (1959) evolutionary theory of firm growth draws on the idea that specialization, learning-by-doing, and intrafirm knowledge creation lead to an excess capacity of resources. Entrepreneurial managers in pursuit of profit aim to leverage these resources to capture value. Thus, entrepreneurial innovation induces slack, which motivates further innovation. The absence of a direct profit motive in public organizations breaks this positive loop because slack need not engender appropriable innovation. Instead, it is more likely to be used for the purpose of attenuating intraorganizational conflict (Cyert and March, 1963). The growth of public organization in this context serves uncertainty avoidance more than risk taking. Moreover, given the difficulty in relating the objectives of public entities to some notion of the public interest, public sector innovation may destroy, not create, social value. Public entrepreneurship may be unproductive and even destructive, rather than productive. While these possibilities also apply to private entrepreneurship (Baumol, 1990), the incentive to pursue unproductive or value destructive activities is likely to be higher in the case of public entrepreneurship, precisely because of the lack of the profit motive.

ESTABLISHED PERSPECTIVES ON PUBLIC RESOURCE ADMINISTRATION

Economists since Adam Smith (1776) have written about the effects of state action on business activity, but the application of strategic entrepreneurship and management theories to nonmarket organizations is only an emerging development (Buchanan and

Tullock, 1962; Riker and Ordeshook, 1973). The literature on 'nonmarket strategy' (de Figueiredo, 2009; Henisz and Zelner, 2003) treats campaign finance, lobbying, litigation, and other political and legal activity as integrated elements of firms' strategies for value creation and capture (Hillman and Hitt, 1999; Schuler, Rehbein, and Cramer, 2002). We will show how neoclassical and transaction cost economics perspectives on public organization differ from, and complement, these nonmarket approaches by emphasizing resources and capabilities.

Neoclassical economics and transaction costs perspectives to public administration

Neoclassical economics tends to explain public organization in terms of market failure and of the restoration of allocative efficiency as defined by the first fundamental theorem of welfare economics (Arrow, 1970). Early treatments of this topic focused on defense, the provision of justice, and public works to justify the State (Mueller, 2003). This approach has since developed to include 'imperfect' market structures (such as monopoly and oligopoly) and other types of (positive and negative) externalities. Coase's (1937, 1960) logic focused on the 'internalization of externalities,' explaining hierarchical organization, both private and public, as an adaptive response to high transaction costs for some market exchanges.

Coase (1964: 195) states that 'we find a category 'market failure' but no category 'government failure.' Until we realize that we are choosing between social arrangements, which are all more or less failures, we are not likely to make much headway.' Demsetz (1969: 1) notes that 'the view that now pervades much public policy economics implicitly presents the relevant choice as between an ideal norm and an existing 'imperfect' institutional arrangement. This *nirvana* approach differs considerably from a *comparative institution* approach in which the relevant choice is between alternative real institutional arrangements.' Williamson (1996: 210) adds that '[organizational] ideals are operationally irrelevant. Within the feasible subset, the relevant test is whether an alternative can be described that can be implemented with expected net gains. This is the remedialness criterion.'

Following similar logic and building on Williamson (1996), the current article maintains that the public sector is also beset with uncertainty, bounded rationality, asset specificity, and

opportunism, which can provide a transaction (organizational) cost explanation of government failure that complements public choice approaches (Datta-Chaudhuri, 1990; Henisz and Zelner, 2005; Mueller, 2003; Wolf, 1979). Williamson's (1975) focus on limits to vertical integration in the private sector concerning internal procurement (logrolling), internal expansion, and program persistence biases applies more strongly in the government sector (Mueller, 2003). Thus, transaction costs theory is useful in explicating market, public, and institutional failures, allowing a comparative assessment of imperfect alternatives rather than an unnatural focus on an ideal public outcome (Eggertsson, 1990; Ostrom, 1990). It predicts the boundaries of market, firm, and public organization in terms of relative transaction costs and, thus, explains endogenously why all production is not organized through one big firm or by the state as a central planner (North, 1990). Just as transaction cost and resource-based explanations are complementary for better understanding the performance of private organizations (Villalonga and McGahan, 2005), they are also complementary for better understanding the performance of public organizations.

Political science research has begun to incorporate the transaction cost economics concepts of bounded rationality, asset specificity, bilateral dependency, and the fundamental transformation between market and hierarchical governance (Williamson, 1985) into its analysis of political institutions and political actions (see, e.g., Alt *et al.*, 1999; Hall and Taylor, 1996). Williamson (1999) submits that government and private action can be regarded as alternative modes of governance—virtually everything done by government could, in principle, be done, or has historically been done, by private participants—and, thus, transaction cost economics can shed light on efficient governance modes for various transactions. For instance, exchanges in the public sphere include procurement transactions that are 'akin to those of make-or-buy' (Williamson, 1999: 319) and regulatory transactions that are 'often beset with asset specificity' (Williamson, 1999: 320), which make transaction cost reasoning applicable.

Williamson (1999) introduces a new key attribute in addition to asset specificity, uncertainty, and frequency for the analysis of public transactions: *probity*. Probity refers to the 'loyalty and rectitude with which certain public transactions are to be discharged' (Ruiter, 2005: 292). As government purports to embody the public's authority, sovereign

transactions require probity, and specific configurations of asset specificity, uncertainty, and probity determine the efficient choice of governance structure among market, private hierarchy or hybrid, and government (Williamson, 1999). Just as asset specificity can give rise to a 'hold-up' problem, which is mitigated by hierarchical governance, transactions involving public actors can give rise to 'probity hazards,' which are best mitigated within the structure of the typical public bureaucracy (fixed rules and procedures, low-powered incentives, job security, and an organizational culture promoting probity).⁵

However, Moe (1995) points out key differences between market and political organization that render the application of transaction costs theory to politics problematic. Moe's analysis (1995) builds on the concepts of 'political uncertainty' and 'political compromise.' Political uncertainty suggests that the government succeeds in 'usurping the property rights of others' thereby rendering economic choices as different from those in the market. Under political uncertainty:

[Decision makers] would be concerned with more than simply making efficient choices about the use and disposition of their property. They would also be concerned with taking action to protect their rights from usurpation—and with making current choices about their property that recognize and adjust for the possibility that other actors might seize their rights to the property in the future.' (Moe, 1995: 123)

This reasoning does not simply imply a different setting in which transactions take place, but is more fundamental: it is 'uncertainty about the very basis of all transactions' (Moe, 1995: 124). This political uncertainty requires considerations of the specific costs of political transactions. In this context, political compromise refers to the larger setting in which a transaction takes place. Any contract is the result of a bargaining process among participants making a number of compromises to reach a mutually satisfying solution. In politics, 'those who are able to exercise public authority can impose their preferred outcomes on everyone else' (Moe, 1995: 126).

These theories illuminate fundamental issues on the rationale for public provision of goods and services, agency and governance costs associated with alternative modes of provision, and the effect of

⁵ Williamson (1999) notes that probity hazards are high for foreign affairs, tax collections, military activities, and prisons. We later elaborate on probity hazards in our examples on military activities and prisons.

probity on governance. Nonetheless, they shed little insight on the static and dynamic performance effects of organizational form. In particular, extant approaches take the *content* of public policy as a given and examine alternate organizational and governance modes for achieving the desired policy. However, *policy goals are often endogenous to the resources and capabilities of public and private organizations involved in policy*. Like private organizations, public agencies attempt to achieve and sustain some sort of competitive advantage. How do public agencies grow and diversify over time? How do routines and capabilities emerge and evolve and how do they affect actions and outcomes? To address these questions, we consider an evolutionary perspective on organizations.

The evolution of public sector resources and capabilities

The transaction cost framework in its early stages was comparatively static and, thus, less applicable to the growth and evolution of institutions. Later developments by North (1981, 1990) adopted an historical, evolutionary perspective on economic change and innovations. Here, North (1990) explained the state in terms of the pursuit by principals of increased wealth (to tax) though increased efficiency and reduced transaction costs. North (1990) noted, however, that the pursuit of systemic transaction cost reductions may be hindered by principals' need to tax emerging wealth. This objective can lead to induced favors (transfers of property rights) to organized groups (such as monopolies), which North (1990) maintained would more easily be taxed. Therefore, the principals' interests may differ from the interests of the larger society, which could produce systematic and systemic inefficiencies. Moreover, the actions of the principals are constrained by competition from other potential principals and rival states.

A focus on capabilities and governance is complementary to theories derived from North's (1990) informational and transaction cost perspectives. Comparative institutional analysis—not only the choice between markets, hierarchies, and hybrids (Williamson, 1996), but also the choice among public policies—is informed by consideration of the capabilities created, deployed, governed, and managed under varying institutional arrangements. On the one hand, the welfare economics challenged by Coase (1960, 1964), Demsetz (1969), and the

public choice approach presented state participants as omniscient, benevolent social planners. On the other hand, the Chicago School's critique emphasized that this view of public organization did not account for the private incentives of public agents. However, the Chicago School emphasis had its own limitations (Ostrom, 1990). In particular, Eggertsson (1990) submits that Demsetz (1969) held an overly optimistic view of how property rights would develop to internalize externalities when the gains of internalization exceed the costs. Characteristic of this optimistic view, the formulation of decision making with regard to property rights is solely in terms of *private* benefits and *private* costs, neither of which deals with free riding problems that plague group decision making (Olson, 1965; Ostrom, 1990) nor attempts to model political processes (Eggertsson, 1990; North 1990), which almost surely influence how resources and capabilities evolve.

In short, as applied to political action, neoclassical economics' attempts to explain the 'prices' and quantities of nonmarket transactions, agency-theoretic approaches focus on the incentives given to public bureaucrats, and transaction costs theory considers the make-or-buy decision and the efficient governance structures for various transactions. However, none of these approaches fully address the political equivalent of *sustained competitive advantage*—why do some government bodies, bureaus, and agencies persist, expand, and diversify while others are dismantled, absorbed by other agencies, or radically restructured?

A SIMPLE MODEL OF CAPABILITIES-BASED PUBLIC ENTREPRENEURSHIP

Consider a simple model inspired by Arrow (1951) in which a public organization seeks to meet the needs of three citizens. Suppose that these three citizens commonly share interests in certain public goods such as, for example, *policing services*, and that the public organization (akin to a local government) incurs certain costs to provide these services. This public organization is staffed by a single bureaucrat who develops skills over time in the efficient administration of the organization's resources. The bureaucrat may act 'entrepreneurially' by leveraging these skills to pursue new objectives, private or public. The three citizens take turns acting as mayor to govern this public agency.

Over time, the interests of the four actors in this scenario evolve. Suppose that the bureaucrat, through learning and experience, can execute policing duties more efficiently. All else equal, the bureaucrat can either appropriate this excess capacity personally through slack or use it with probity to enhance policing activities. Given this choice, a self-interested bureaucrat weighs the costs and benefits of each option. In this simple model, imagine that the bureaucrat will choose to maximize personal benefits through private appropriation, subject to the cost of appropriation not becoming prohibitive (e.g., from an increased threat of job loss). Or, imagine that the benefit from the alternative of deploying the capacity broadly to create new value in the public interest increases (e.g., from the increased fame that accompanies a broader span of control). Moreover, imagine that these costs and benefits are balanced in a base case scenario so that the bureaucrat is indifferent between taking the excess capacity in slack and enhanced policing.

By contrast, the citizens are not indifferent. Assume citizens prefer some satisfactory level of policing. If the bureaucrat elects to police as intensively as the new capabilities allow, the citizens are policed too much. Citizen preferences instead run toward education, health care, and transportation above the satisfactory level of policing. Specifically, the three citizens in this community share preferences in pairs for alternative investments for their tax dollars. Assume Citizens A and B have an interest in public *education*; Citizens B and C have an interest in public *health care*; and Citizens C and A have an interest in public *transportation*. Arrow's (1951) social choice model demonstrates that, with three or more conflicting sets of interests in a public setting such as the one constructed here, no clearly defined and stable conceptualization of the public interest can be identified. In other words, the definition of the public good—and the public interest—is inherently an unstable and evolving construct.

For simplicity, assume the costs of developing resources in each area are initially the same, i.e., education costs the same as health care, which costs the same as transportation. And suppose that some extra costs are borne equally by each citizen. Furthermore, suppose that the citizens are constrained in each period by their budgets so that investment in only one new type of public good is affordable in each period. One important asymmetry that arises across the various possible areas of investment is that some of the bureaucrat's excess capacity may be

used for transportation. Therefore, if the mayor elects to invest in transportation, excessive policing may be avoided if the mayor can direct the bureaucrat to devote excess capacity from policing capabilities into transportation, but this comes at the cost of additional training and other incentive costs that raise the community's tax bill. Another important asymmetry arises in that an election to pursue each type of goal—i.e., education, health care, transportation, or policing—in a particular period leads to the emergence of capabilities that subsequently lower the costs and improve the effectiveness of subsequent investments in the future—but in ways that are not full tractable or measurable *ex ante*.

What kinds of outcomes can arise in this simple model? The logic in Arrow (1951) emphasizes that a benevolent social planner would recognize the value of the balanced development of capabilities in all four types of public goods over time and would similarly seek to constrain the bureaucrat from both slack and overprovision to achieve an 'optimal' level of policing. Yet even in the simple situation specified here, such an outcome is impossible to obtain programmatically. As each individual actor in the situation pursues his/her private aims, which may include benefits such as fame and satisfaction from serving as mayor, public goods may emerge and develop, but these public goods are an artifact of the alignment of private action (Ostrom, 1990). As we note later, the achievement of such alignment can build over time as public resources and capabilities develop in education, health care, and transportation. It is the intertemporal relationships that arise from the dynamic evolution of capabilities that create an institutionally stable rudder on the definition of aims and, thus, on resource deployment.

Consider the simple situation of the three citizens and bureaucrat. Whoever happens to be mayor when the excess capacity in policing arises—suppose Citizen A—must make decisions about how tax dollars are spent and particularly on how to constrain the bureaucrat from slack or excessive policing. Imagine that, at this early stage of investment, the bureaucrat's span of control is limited by a modest accumulation of excess policing capacity and, thus, the mayor elects to develop a new resource, not constraining the bureaucrat. Since the mayor, Citizen A, prefers education and transportation to health care, certainly one of these two alternatives dominates. But which one? A rational mayor may envision that, in the next period, Citizen B, who shares an interest in education, will become mayor.

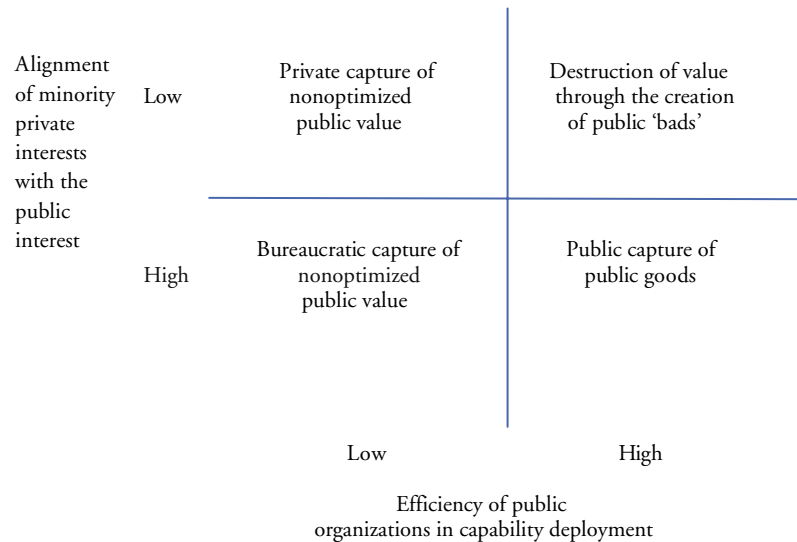


Figure 2. Potential outcomes in the deployment of public capabilities

Thus, to achieve benefits of multi-period scale in investment, the mayor may elect education on the anticipation that B will also choose education.

Under the scenario in which public goods accumulate, investments in education may occur over multiple periods, thus leading to an imbalanced emphasis on education over health care and transportation and the accumulating risk that the bureaucrat seeks to act with either slack or overprovision in policing. This situation may be rectified when Citizen C becomes mayor. If efficiency in policing has not made the bureaucrat's span of control too great and if the accumulated capabilities of the community for education are not too compelling, then Citizen C as mayor may choose to levy taxes in the interests of either health care or transportation, thus setting in motion a round-robin that will eventually lead to the creation of a full array of public goods and, furthermore, provide an outlet for the bureaucrat's excess capacity in transportation.

Yet a perverse situation is also possible. To discipline the bureaucrat, Citizen C as mayor may elect to invest in transportation. If the potential for bureaucratic slack and/or overprovision in policing is high, then excessive investments in transportation may occur as the community seeks to keep the bureaucrat occupied. A situation may evolve in which subsequent investments in health care are crowded out by the emergence of capabilities in policing and transportation.

Alternatively, imagine that the costs of high taxes to the citizenry are too great in the first period to

support investment at all and that too much policing by the bureaucrat initially ensues. As bureaucratic excess capacity develops, the community may come to value the redeployment of bureaucratic capacity from policing to transportation despite not attaining much direct benefit from transportation. This outcome reflects the idea that multi-period economies of scale arise but are not too large such that at some point the value of leveraging the accumulated capabilities to produce ends that are valued marginally lower is too small to justify.

Figure 2 illustrates some of the possible outcomes in this kind of simple model. The horizontal dimension represents the degree to which the public organization can efficiently deploy accumulated capabilities either by expanding existing activities or by launching new activities. The vertical dimension expresses the extent to which the preferences of the public decision maker (in our example, the mayor) align with the preferences of the rest of the community.⁶

Consider a scenario in which the public organization's capabilities for creating value are high and the interests of citizens in the minority (in the earlier example, initially Citizens B and C) are not too far out of alignment with those in power (Citizen A). In this case, depicted in the lower-right cell of Figure 2, the accumulation of excess capacity and

⁶ We acknowledge, however, in line with the Arrow (1951) paradox, that interests will not be fully aligned in more complex (real-world) scenarios.

the development of new capabilities results in the production of public goods (in our example, this occurs when the mayors drive investments in education and transportation and the efficiency of the bureaucrat in the provision of policing is nearly optimal, so that neither much slack nor overprovision occurs).⁷

Now consider a second scenario: one in which the bureaucrat's excess capacity cannot be easily or cost effectively deployed into some new value-creating activity (such as transportation). This contingency is represented by the lower-left cell of Figure 2. Here, the bureaucrat prefers not to create new public goods, but to exploit his/her excess capacity by slacking off or policing excessively. As long as the cost of value creation to each citizen is sufficiently low (i.e., taxes are not too high), Mayor A will choose an investment in education. The problem under this scenario—and the condition that leads to underinvestment in a public good such as education (see, e.g., Ruggiero, Duncombe, and Miner, 2004)—is that bureaucratic inefficiency in the administration of education and bureaucratic efficiency in policing may lead to less investment in education and more investment in transportation than would occur if the bureaucratic administrator did not accumulate excess capacity.

A third scenario is represented in the upper-left cell of Figure 2. Here, bureaucratic excess capacity does not accumulate intensively, but the preferences of the community are not well aligned. For instance, imagine that Citizen A prefers only education, Citizen B prefers health care, and Citizen C prefers transportation. Thus, as is described in the vertical dimension of Figure 2, minorities' interests are out of alignment with those of the mayor. In this situation, the mayor makes an investment that reflects his/her own preference. All citizens are required to pay taxes to support this idiosyncratic choice, despite the lack of alignment. Similarly, in the next period, when Citizen B is mayor, the same mechanism compels investment in health care, and so on. Each mayor acts to maximize his/her own private benefit and the bureaucrat engages in an inefficient level of policing in each period except when Citizen C as mayor elects transportation. Multi-period economies of scale in education, health care, and transportation do not accumulate, while multi-period

excess capacity in policing does. Thus, the community's capability profile develops toward a situation of inadequate provision of education and health care and increasing slack and/or excess policing by the bureaucrat, interrupted only by periodic redeployments into transportation.

The final scenario is represented in the upper-right cell of Figure 2. Here, the round-robin of investments is not supported because the taxes required are too high. The efficiency of the bureaucrat at policing leads to deeper and more intensive policing over time even as these investments occur. The excess capacity that arises *per se* leads to the creation of a public 'bad'—the bureaucratic deployment of policing capabilities becomes excessive. This outcome can arise independently of the mechanisms of 'private' or 'regulatory' capture by the mayor, in the sense that it is excess capacity alone in policing capabilities that leads to the pursuit of objectives that are misaligned with the public interest. The community is vulnerable to these 'bads' in part because of the fracturing of value creation across the citizenry in the pursuit of alternative public activities.

While we do not offer a fully specified dynamic model, this framework does suggest possible paths for movement from one cell in Figure 2 to another. For example, consider an economy in the lower-right cell, in which the public agency is using its accumulated capabilities to produce goods and services desired by the entire community. As the bureaucrat's capabilities continue to grow, new excess capacity is created, beyond the level needed to satisfy community preferences for public goods. Eventually, either the bureaucrat continues producing the same outputs but consumes additional slack (Niskanen, 1971)—moving the outcome from the bottom-right cell to the bottom-left cell—or the bureaucrat deploys the new capabilities to producing 'too much' policing or transportation or to producing new outputs that are not desired by the community (moving from the bottom-right cell to the top-right cell). Only when the community supports well-balanced investments in education, health care, and transportation over time do capabilities in each of these areas emerge to provide an institutional rudder that preserves alignment and balance of investments in public goods.

We next provide several examples of these kinds of movements and submit that they are common and represent an important challenge to public organizations. This is the case even if we assume away collusive behavior, regulatory capture, embedded power structures, and (other forms of) corruption.

⁷ In the property rights research literature, an exemplar for the lower-right cell of Figure 2 is the success story in public entrepreneurship of public-private partnerships for ground water management in some areas of California in the 1960s (Ostrom, 1990).

EXAMPLES AND IMPLICATIONS

The following examples illustrate the implications of the model, and the capabilities lens more generally, for understanding the entrepreneurial challenges that can arise through the tandem deployment of both public and private resources.

The growth of public organizations

Bureaucratic growth has been examined extensively in the political science, public choice, and public administration literatures (Downs, 1966; Meyer, Stevenson, and Webster, 1985; Peacock and Wiseman, 1961), with growth attributed to a variety of causes such as superior efficiency, coercive power, pervasive rent seeking, personnel dynamics, and other factors. Our approach emphasizes a Penrosean model of organizational growth.

Several versions of capability development and organizational expansion are consistent with our developed theory. In some cases, Penrosean learning, independent of activities outside the public agency, may be enough to generate new capabilities. In other cases, the public agency's capabilities may coevolve with the capabilities of other public or private actors (Klein *et al.*, 2010). Consider, for example, the U.S. government's rules for allocating radio frequencies (Coase, 1959; Faulhaber and Farber, 2003). The capabilities for defining property rights in spectrum, allocating these rights, and governing their transfer and exchange did not exist until private entrepreneurs had developed broadcasting and receiving capabilities. The development of an effective legal and regulatory system, famously described by Coase (1959) in anticipation of the 'Coase Theorem,' in turn, encouraged equipment manufacturers, broadcasters, and other private actors to invest in improving radio technology and providing more and better content. Private improvements were accompanied by advances in the technical, monitoring, measurement, and incentive-assessment capabilities of public authorities dedicated to the industry.

In general, how will a public organization's new capabilities be further leveraged? As discussed earlier, if the preferences of private actors are highly aligned, then the greatest risk of appropriation may be bureaucratic slack (i.e., Niskanen inefficiency, represented in the lower-left cell of Figure 2). This risk arises especially because of escalating public commitment to the service. The public choice

research literature suggests that Niskanen (1971) inefficiency is likely in representative government and has been corroborated in the provision of fire services (Ahlbrandt, 1973; Hayes, Razzolini, and Ross, 1998; Kristensen, 1983).

If the interests of private citizens are not highly aligned, then a major risk is the excessive provision of what would otherwise be a desirable public service, such as policing. One example comes from Benson (2008), who provides strong and growing evidence that drug enforcement activities in the United States are excessive, suggesting a public bad (or a bad public good). Such overprovision may be visible not only as an excessive quantity of an existing public good (Benson, 2008), but also as a new version of the existing good that appears to the public to be new and valuable. An example of the latter is found in Higgs' (1987) analysis of the growth of government in the U.S. in the twentieth century. Higgs (1987) noted that the expanded role taken on by the state during the New Deal period remained largely in place once the crisis passed, leading to a 'ratchet effect' in which government agencies expand to exploit perceived short-term opportunities, but fail to retreat once circumstances change. Higgs (1987) suggests that government officials (regulators, courts, and elected officials), as well as private agents (such as business executives, farmers, and labor unions) developed capabilities in economic and social planning during crisis periods and that, due to indivisibilities and high transaction costs, tend to possess excess capacity in periods between crises. To leverage this capacity, they looked for ways to keep these 'temporary' measures in place. Indeed, many New Deal agencies were thinly disguised versions of World War I agencies that had remained dormant throughout the 1920s—the War Industries Board became the National Recovery Administration, the War Finance Corporation became the Reconstruction Finance Corporation, the War Labor Board became the National Labor Relations Board, and so on.⁸ In many cases the charters for the New Deal agencies were mostly copied verbatim from World War I predecessors. Higgs' (1987) ratchet effect illustrates that excess

⁸ Historian Walter Leuchtenburg (1959: 41) states that 'when in 1933 a new government came to power in the midst of a major crisis, it would know no way to mobilize the country save by invoking the experience of World War I. . . . As a result, the early New Deal would draw [on the men] who had gained their first governmental experience in wartime Washington and cherished their memory of it through the 1920s.'

capacity in organizational capabilities isn't necessarily leveraged as soon as it is created, leading to smooth, continuous organizational growth, but may remain dormant until the right economic, legal, or political circumstances arise, leading to sudden, discontinuous jumps in organizational size or scope (Bellante and Porter, 1998). As the ratcheting process developed, the system became vulnerable to private capture by various constituents to government (represented in the upper-left cell of Figure 2).

Privatization and quasi privatization

Another insight from our approach is that privatization and quasi privatization often involve not simply a change in ownership and governance, in which a given set of activities formerly performed by public agencies are moved into the private sector, but also a change in the activities in question. Thus, movements among the four cells in our model often follow, or coincide with, changes in the ownership and governance status of the organizations performing those activities.

Theories of regulatory capture have dealt extensively with the hazards and opportunities in the private administration of public resources (Spulber, 1989; Stigler, 1971). Yet, as our developed theory illustrates, the transfer of resources for the public benefit is only one example of the ways in which private and public participants interact. Opportunities for innovation through public-private partnerships, privatization, and public administration must be carefully assessed. Consider, for example, the (temporary) U.S. public ownership of General Motors. What can the government accomplish in the stewardship of GM's resources that could not be accomplished when the firm was privately owned and managed? The deepest opportunities may reside in reconfigurations of capabilities that could not be pursued by a private corporation but that reflect the long-term public interest and that create new private opportunity—such as the construction of a national high-speed train system or the advance of new fuel efficiency standards on private vehicles. When the private sector develops capabilities that are relevant, necessary, and even urgently required to satisfy the public interest, then the hazards of interplay between public and private interests are activated.

As another example, consider the placement of publicly owned resources such as hospitals, prisons, and military capability into the hands of private agents for stewardship and deployment (Avant,

2005; Baum and McGahan, 2011; Cabral, Lazzarini, and Azevedo, 2010). Private actors may be able to lower the costs of deployment initially, but subsequently, resources may not be preserved or developed in the public interest. Therefore, there may be a conflict between preserving a resource's value and deploying the resource efficiently in the short run. For example, in some privately run public hospitals, highly specialized equipment has been run down in the interest of minimizing expenses while maximizing the numbers of patients served (Porter and Teisberg, 2006). In some prisons and militaries, investment in educational programs for inmates and soldiers has been significantly curtailed by private operators (although in others, these investments have been expanded) (Palumbo 1986; Singer 2003). These examples provide rich and detailed opportunities for further research to understand how the marginal benefits of publicly created capabilities differ between private and public stewards.

Stewardship of capabilities essential to the public interest by private organizations has another key facet: over time, as they develop under the governance and control of private organizations, these organizations may take on decisions that go beyond their governance mandate. For example, private military organizations that develop unique capabilities for accomplishing particular operations may be so central to the effectiveness of sovereign war operations that they may unduly influence the military agenda (Baum and McGahan, 2011). The result may be the public 'bads' depicted in the upper-right cell of Figure 2. Involvement in or escalation of military conflict is not in line with public preferences, not because the private military organization has 'captured' the Defense Department, but because after one engagement ends, the private military company is left with excess capacity in war making and the Defense Department is unable to redirect those capabilities toward alternative, value-creating ends. This evolution of the military-industrial complex is troublesome because private military organizations, such as Blackwater (renamed Xe in 2009, then again renamed as Academi in 2012) and Aegis Defense Services, profit from conflict and, thus, are unlikely to pursue peace as a principal goal even when a peaceful resolution serves the interests of the contracting sovereign authorities (Baum and McGahan, 2011; Scahill, 2007).

Insights from a capabilities approach focus attention on the implications of governance, productivity, and managerial practice for goal formation. Instead

of taking goals as fixed, Penrosean logic suggests that excess capacity in resources leads to the pursuit of opportunities that may not have been conceived when the resources were initially deployed. A capabilities approach emphasizes the endogeneity of value and of conceptualizations of goals to the ways in which resources are assembled. U.S. President Dwight Eisenhower warned of this problem in his famous January 1961 speech on the military-industrial complex. Consider, for example, that we have witnessed in the United States in the past quarter century a dramatic increase in private sector outsourcing of many of the functions historically performed by the military (Scahill, 2007). In a Penrosean process, new goals became enabled by private subcontracting of sovereign functions (Baum and McGahan, 2011). This may be a sophisticated—and tragic—instance of private capture of nonoptimized private value (represented in the upper-left cell in Figure 2) and, perhaps, even an instance of the destruction of public value, as represented in the upper-right cell. Certainly further research on this essential question is warranted.

As discussed earlier, the private-military example is particularly complex, in part because of ambiguity in balancing the interests of minority citizens in identifying public goals, especially in the face of intense defensive claims by majority citizens and the enabling capabilities of private entities that stand ready for combat (Baum and McGahan, 2011). This tension has led private military corporations to challenge their responsibilities given the ambiguities about applicable institutions of governance. For example, some private military companies have resisted attempts to subject their personnel to the Pentagon's Uniform Code of Military Conduct, insisting that such personnel are civilians, while simultaneously claiming immunity from civilian litigation in the United States under the argument that private military contractors are part of the U.S. Total Force (Scahill, 2007). The strategic entrepreneurship and management literature that builds on a more complete organizational economics approach (Baum and McGahan, 2011; Mahoney, 2005; Williamson, 1999) deals more effectively with mitigating grave moral hazard problems than do classical theories of governance based primarily on agency theory. These issues are deeply entwined in the mechanisms we identify in our model: rather than regulatory capture, the private organizations seek *clarity* about the public interest and the boundaries of their roles and responsibilities in fulfilling it.

This problem also appears in the case of prison privatization, which poses particular ethical, legal, and empirical challenges (Shichor, 1995). While some research (e.g., Segal and Moore, 2002) suggests that competitive pressures will lead to efficiency in the operation of private prisons such as Corrections Corporation of America (CCA) and the GEO Group, Inc., other research maintains that competition for prison beds occurs in a constrained market that parallels the contracting problems that have been identified in the defense industry (Camp and Gaes, 2000). Empirical results concerning the efficiency of private prisons are mixed, with some research studies finding cost savings (e.g., Segal and Moore, 2002) and others providing evidence against the claim that private prisons reduce costs (e.g., Nelson, 1999). Yet others suggest improvements in the efficacy of prisons achievable through privatization (Cabral *et al.*, 2010). Thus, in this context, basic questions about productivity, quality, and operational efficiencies in management are entangled with issues of better governance. These are not simply situations of regulatory capture or slack, though each of these well-documented conditions may be present. In the case of prison privatization, private subcontractors must also deploy resources in response to complex conflicting signals about the purposes of their activities in an ambiguous field where goals are negotiated and malleable.

Research on the private management of prisons from the fields of strategic entrepreneurship and management also illustrates how a focus on resources and capabilities can shed light on the goals that organizations pursue in the public interest. Such clarity is essential for reducing public exposure to the destruction of value through excessive service provision (i.e., 'public bads' as represented in the upper-right cell of Figure 2).⁹ One emerging area of such research deals with the quality of public outputs. For example, some research studies find that

⁹ Analogous to Eisenhower's warning of the 'military industrial complex,' in which defense contractors push for increased military spending, we now appear to be witnessing a 'prison corporate complex' in which a set of bureaucratic, political, and vested economic interests encourage increased expenditures on imprisonment. Private prisons such as Geo and CCA use lobbying, direct campaign contributions, and networking to encourage tough-on-crime legislation to ensure an increased supply of prisoners (particularly for nonviolent drug offenders). Inmate populations have increased tenfold, from less than 200,000 in 1971 to more than 2.3 million in 2008. Here is a further example of a movement from the lower right-cell to the upper right-cell in Figure 2.

the quality of prisons (as measured by recidivism rates) may initially be improved under private governance (e.g., Cabral *et al.*, 2010), corresponding to the bottom-right cell of Figure 2. However, there are sound economic reasons to anticipate that there will be pressures on private prison managers for quality shading to reduce costs (Hart *et al.*, 1997; Kivleniece and Quelin, 2012), which would destroy public value as in the upper-right cell. Long-term investments by privately governed prisons to perform on dimensions such as education, drug reformation, and health care services may be greatly curtailed (Bedard and Frech, 2009) by expressing balanced public objectives in contracts that cede responsibility to private organizations. When such complex objectives cannot be managed, then privatization may simply be too risky to tolerate. A recent meta-analysis comparing privately managed and publicly managed prisons indicates that cost savings for private prisons are minimal and that the quality of these prisons (such as greater skill training and fewer inmate grievances) was slightly better in publicly managed prisons (Lundahl *et al.*, 2009).¹⁰ Further investigation into such critical issues cannot occur without a theoretically robust perspective that accounts for variation in the goals of transactions and in the conditions of governance—which, we maintain, a capabilities approach can provide.

When capabilities that are essential to the public interest are controlled by private individuals, agents, or organizations, the essence of the public interest may not be pursued as a consummate goal. By following the rules in a perfunctory way, rather than with probity (i.e., with intensity and in the spirit of the rules), actors may leverage capabilities to direct organizations inefficiently and in ways that may or may not foster the public interest. Activism may be required for alignment of public and private goals (Kivleniece and Quelin, 2012).

¹⁰ Even more troublesome was the recent ‘kids for cash’ scandal, which unfolded in 2008 over judicial kickbacks at the court of common pleas in Wilkes-Barre, Pennsylvania. Two judges accepted more than \$2.6 million in payments from Mid-Atlantic Youth Services Corp, an operator of two private, for-profit juvenile facilities, in return for contracting with the facilities and imposing harsher sentences on approximately 2,000 juveniles brought before their courts to ensure that the detention centers were more fully utilized (Urbina, 2009). Economic analyses concerning private versus public prisons rarely fold in, across governance alternatives, different opportunities of participants playing outside the rules of the game and their different consequences. Here, informed strategic analysis is needed.

Market co-creation as a means and outcome of efficient interest alignment

The stronger possibility for unproductive and even destructive public entrepreneurship raises the specter of public sector and institutional failures and, thus, leads to the question of how to find a resolution to this problem. Here we submit that the concept of ‘market co-creation’ can help achieve this objective. Olson (2000) employed the concept of market extension to explain how states can raise more revenues, not only by minimizing transaction costs and attenuating conflict, but also by creating and enhancing markets. The emphasis on market extension-derived value creation extended North’s (1990) focus on transaction cost minimization and suggests that public organizations can create a platform for private entrepreneurship through the creation of facilitating institutions. Casson (2005) submits that private entrepreneurs and firms also can create markets. Pitelis and Teece (2010) extend this idea by positing that contributions to the creation of new markets by private entrepreneurs may be a key prerequisite for the capture of value by these entrepreneurs in markets *ex post*. Private organization helps achieve this entrepreneurial co-creation, in tandem with customers, suppliers, and other stakeholders participating in this value-creation process, including public organizations and the state. Therefore, the interplay between public and private organizations in market co-creation suggests that public organizations and the state can strategically enhance value (co-) creation. This focus extends and helps operationalize Ostrom’s (1990) emphasis on institutional and organizational complementarities (McDermott, Corredoira, and Kruse, 2009; Rangan, Samii, and Van Wassenhove, 2006).

Public entrepreneurs possess and/or develop differential capabilities in legitimacy and institutional change (e.g., by passing new laws and regulations), which can help create or co-create markets. Examples include legislation by the European Commission (Convery and Redmond, 2007; Knoll and Engels, 2012) that helped in the creation of carbon markets (Olmstead and Stavins, 2006; Stavins, 2003) and legislation aimed at promoting the use of electric cars in California (Calef and Goble, 2007; Kemp, 2005). Such market co-creation helps generate new wealth that enables both the public and the private sector to benefit and, thus, satisfy their respective objectives. Conditions under which public entrepreneurs are more likely to behave in ways that leverage

their capabilities in instituting market co-creation are complex. Furthermore, inefficiency (not efficiency) has been the norm throughout history (North, 1990). Conditions of bounded rationality, myopia, and intragroup conflict contribute to such inefficiency (Williamson, 1975). However, learning over time and the development of shared norms and visions can help foster greater efficiency. This same logic applies to pluralism, diversity, and the involvement and strengthening of a wider set of economic actors. The ways in which excess resources are used to address conflict resolution and achieve legitimacy are critical mediating factors.

Behavioral concerns (e.g., bounded rationality and opportunism) are even more relevant in the analysis of the public domain than in the private, precisely because the profit motive is blunted and the incentive structure less clear. Nevertheless, market extension, creation, and co-creation can be achieved by leveraging differential capabilities of public and private entrepreneurs. Analyzing under which conditions this outcome will be more likely can be part of a wider positive agenda for change in the social interest (Mahoney, McGahan, and Pitelis, 2009).

In sum, modern developments in the fields of strategic entrepreneurship and management emphasize the requisite capabilities of private and public actors and the coordination of market and value co-creation. Market (and ecosystem) co-creation can serve as an underpinning *raison d'être* of both private and public organization and can help explain the growth of private-public interaction. The boundaries between public and private are predicated not only on dynamic transaction costs (Langlois, 1992; Spiller and Zelner, 1997), but also on differences in the nature of public and private resources and capabilities. It is precisely through the combination of these resources and capabilities that new value may emerge, and yet, these combinations accentuate the challenge of appropriate governance and management.

CONCLUDING REMARKS

This article applies an entrepreneurial capabilities lens to public organization and the public-private nexus and maintains that these ideas are essential to a more comprehensive understanding of public organizations (March and Olsen, 1996; Scott, 1995). The very institutions—such as property, markets, and prices—that are central to private exchange emerge

in a complex interplay between public and private actors who may simultaneously pursue public and private interests. The endogeneity of value (and of the means for realizing that value) makes theories of agency, transaction costs, and organizational economics incomplete for explaining how actors deploy resources. By contrast, we suggest that critical insights emerge from an approach that accounts for the capabilities that arise within private and public organizations for deploying resources in the pursuit of value. The analysis also points to the importance of examining the transitions in behavior that occur as resources and capabilities pass from private to public control and vice versa.

We emphasize that strategic entrepreneurship research applied to public issues must go beyond pure agency views of public actors on the one hand and idealized views of property rights evolving toward efficiency via private contracting on the other hand (Demsetz, 1969). One of the first steps required is to join private contracting models of property rights with the interest group theory of legislations and government—what Eggertsson (1990) calls the *interest group theory of property rights*. Empirical research in public choice and positive political theory shows that the characteristics and behaviors of public actors can be parameterized and incorporated into broad-sample econometric analysis (using data, for example, on agency size and growth, budgets, characteristics of agency management teams and the regulatory code, as well as lobbying contacts between public agencies and private actors). Exploiting secondary data and collecting primary data on these characteristics should prove useful in examining the growth and diversification of public agencies, the persistence of agency behavior, and similar phenomena. In-depth case studies, whether historical (as in Higgs, 1987) or contemporary are valuable as well.

For theory development, a capabilities lens highlights that the concept of market and value co-creation and the leveraging of differential capabilities to co-create value can provide insight on the nature of the public domain and its growth, as well as the public-private nexus. Further, ideas such as bounded rationality, the absence of a clear objective function, and intraorganizational conflicts (as well as ways in which organizational and incentive structures emerge and can frame decisions and filter information) can help explain the failure of many public organizations and entrepreneurs to pursue and achieve sustainable value and market co-creation.

Learning, diversity, and pluralism can help foster this outcome. Devising appropriate governance structures to obtain this objective is critical for efficient public administration and can be realized through the leveraging of strategic and political entrepreneurship scholarship.

Finally, the current article has had a message for entrepreneurial managers and public policy decision makers. The growth of public-private partnerships raises fundamental issues about alternative means of social interaction and their interrelationship. Okun (1975: 13) contrasts the 'domain of dollars' and the 'domain of rights,' maintaining that '[t]he domain of rights is part of the checks and balances on the market designed to preserve values that are not denominated in dollars.' Hayek (1960) submits, however, that market mechanisms are more reliable guarantors of fundamental rights than their political counterparts. A focus on market co-creation—a position strongly championed by Ostrom (1990)—can help identify scope for value-creating co-action in the field of strategic entrepreneurship.

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