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Outsourcing and Insourcing of Organizational Activities: The Role of Outsourcing Process Mechanisms

Fariborz Damanpour
Rutgers University
Rutgers Business School
1 Washington Park
Newark, NJ 07102
damanpour@business.rutgers.edu

Catherine Magelssen
London Business School
Strategy and Entrepreneurship Area
Sussex Place, Regent’s Park R342
London, NW1 4SA
cmagelssen@london.edu

Richard M. Walker*
Laboratory for Public Management and Policy
Department of Public Policy
College of Liberal Arts and Social Sciences
City University of Hong Kong
Tat Chee Avenue
Kowloon Tong
Hong Kong
rmwalker@cityu.edu.hk

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*The authors are listed alphabetically.

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Outsourcing and Insourcing of Organizational Activities: The Role of Outsourcing Process Mechanisms

Abstract

The decision to outsource organizational activities is studied widely, but research on the aftermath of outsourcing decisions and the insourcing of outsourced activities is scarce. We study outsourcing decision as a process not an event, and investigate the influences of organizational mechanisms on its sustainability. We argue that organizational learning from the outsourcing decision process could over time result in competencies that would enhance the sustainability of outsourcing decisions. We examine outsourcing and insourcing processes longitudinally among 64 public services in 1,650 local governments across 25 years. The results from regression analysis generally support our theory that the outsourcing process mechanisms, especially the mechanisms associated with implementing the outsourcing decision, predict the occurrence of insourcing. We discuss the implications of our organizational behavioural study of outsourcing decisions for future research on outsourcing and insourcing of public services.
Government outsourcing of organizational activities is a longstanding practice. Outsourcing gained momentum with waves of management reform and promises of better decision-making and more efficient and responsive public services (Boyne 1998; Hood 1991; Savas 1987). Scholars have probed decisions to outsource organizational functions, operations, and services (Globerman and Vining 1996; Brudney et al. 2004) while others have questioned its wisdom and effectiveness (Alonso, Clifton and Díaz-Fuentes 2013; Jørgensen and Bozeman 2002; Sclar 2000). Academic studies have been grounded primarily on the logic of organization economics and political science such as transaction cost economics (TCE), agency theory, and public choice theory (PCT) (Hodge 2000; Boyne et al. 2003; Brown, and Potoski, 2003b). Empirical studies have focused mainly on outsourcing as a transaction, measured it as a dichotomous choice (make versus buy), and have examined financial attributes, outsourcing risks, contract design (type, complexity, and duration) as the determinants of outsourcing and its consequences (Boyne 1998; Brown and Potoski 2003b; Fernandez 2007). While managing the outsourcing process has been acknowledged as a challenge (Brown, Potoski and Van Slyke 2009; Warner and Hefetz 2012), research on outsourcing process from the organizational behavioural perspective has rarely been conducted. We address this research need by focusing on the process of outsourcing at the organization level and investigate the influences of organizational mechanisms for making and implementing outsourcing decisions on the sustainability of those decisions in local governments.

Outsourcing decisions are strategic decisions, managerial actions that reflect the internal and external behavior of organization (Boyne and Walker 2004). However, these decisions may not be sustainable because they could result in unintended consequences or outcomes (Boyne 1998; Entwistle 2005; Sclar 2000). As such organizations can change their strategic actions and
return the outsourced activities “in-house”. The reversing decision has been referred to as “backsourcing” (Veltri, Saunders and Kavan 2008), “reverse contracting” (Miranda and Lerner 1995), and “insourcing” (Warner and Hefetz 2012). Evidence suggests that reversing outsourcing decisions occurs frequently (Hefetz and Warner 2004; Young and Macinati 2012). For example, Warner and Hefetz’s (2012) study of outsourcing and insourcing in U.S. local governments in the 2002-2007 period finds that the rate of insourcing is approximately equal to the rate of new outsourcing.

Similar to outsourcing, we consider insourcing as a strategic decision intended to enhance the conduct and outcomes of public organizations. When outsourcing of a service produces the intended outcomes, it will be sustained. When it does not, the organization may either switch the contractor or provider or reverse the outsourcing strategy. The switching of contractors does not represent a strategic change, rather it is the continuation of the previously enacted outsourcing strategy. Insourcing, on the other hand, indicates that the outsourcing strategy has been changed (Brown, Potoski and Van Slyke 2008). Academic studies of insourcing relative to outsourcing are scarce (Hefetz and Warner 2004; Young and Macinati 2012). Since insourcing of outsourced activities can occur in any function or unit of the organization, we posit that the sustainability of outsourcing strategy and occurrence of insourcing depends on the public agency’s competency in managing the outsourcing decision process.

We rely on the decision-making and strategy process models from the organization management and public management literature (Brown 2010; Bryson 2011; Dean and Sharfman 1996). We ground our arguments on the concepts and insights from organizational behavior, adaptation and capability research (Bryson, Ackermann and Eden 2007; Cyert and March 1992; Piening 2013). The organizational behavioural theories provide an alternative to the economics
of organization. They open up the organization black box, involve human activities, and account for organizational mechanisms (e.g., decision making, resource allocation, performance monitoring) that enable producing and delivering services efficiently and effectively (Cyert and March 1963, 1992). As adaptive systems, organizations learn from their outsourcing experiences and alter their outsourcing processes to cope with changes in the environment and to preserve consistency and harmony among their internal activities (Cyert and March 1992; Piening 2013). We propose that over time continued refinement of organizational mechanisms associated with making and implementing outsourcing decisions could evolve into an operational capability that enable organizations to make more effective decisions.

This study seeks to contribute to outsourcing and insourcing research in public organizations in several ways. First, it focuses on the under-researched area of the outsourcing process, and examines the influence of organizational mechanisms associated with making and implementing outsourcing decisions on the insourcing of outsourced services. Second, we study outsourcing decisions from a behavioural perspective, adding new insights to explanations of outsourcing decisions from economics and political theories. Third, longitudinal research on insourcing of organizational activities is scarce. The existing studies are primarily comparative case studies (Young and Macinati 2012) or examine a dichotomous outsource-insource decision (Brown, Potovski and Van Slyke 2008; Hefetz and Warner 2004; Warner and Hefetz 2012). We address this need by conducting a large sample empirical study of insourcing outsourced services using a six-panel dataset extending 25 years in seven areas: public works/transportation, public utilities, public safety, health and human services, parks and recreation, cultural and arts services, and support functions. Fourth, our study contributes to practice by informing public managers of mechanisms for the effective management of outsourcing process to help save organizational
resources.

THEORY

Outsourcing and insourcing

Outsourcing is defined as a strategic decision to transfer organizational activities (delivery of services; administrative systems; information systems) or sub-activities (delivery of parts of services; payroll; data centre) to outside suppliers (Brown and Potoski 2003b; Brown, Potoski and Van Slyke 2009). Governments outsource to achieve economic efficiency, concentrate on their core competency, fulfil political ideology, or ease managing units and processes (Hodge 2000; Young and Macinati 2012).

A strategic decision is a long-term decision and organizations tend to sustain the decision rather than reverse it momentarily. However, as with other managerial decisions, strategy decisions are “contingent decisions” and their outcome is uncertain (Rogers 2003). Forecasting ahead may involve error, and managers’ capacity to recognize and factor future potential hazards in their decisions is limited (Brown 2010; Cyert and March 1992). An outsourcing decision that does not meet the anticipated outcomes could motivate a follow-up decision to enter a new contractual agreement, switch the supplier, or discontinue outsourcing (Hefetz and Warner 2004; Young and Macinati 2012). We consider the first two choices as continuations of the outsourcing strategy and study the third choice as a strategic change.

Insourcing is a managerial decision to abandon outsourcing and bring the production of the products or services back in-house.¹ Replacement can be substitution of a strategy with another strategy new to the organization or by one known to it Greve (1995). The decision to

¹Organizations insource due to organization-specific features, environmental demands and opportunities, market conditions including the quality and availability of contractors, cost considerations, product and service quality, contract management issues, loss of control and political support (Veltri, Saunders and Kavan 2008; Young and Macinati 2012).
insource demonstrates that the outsourcing decision has been unsuccessful, or lost its effectiveness or support. Dean and Sharfman (1996) define strategy decision effectiveness by the extent of achievement of objectives set at the time of the decision. Hickson, Miller and Wilson (2003) define success of a decision by its performance achievement over time. We build on these definitions and consider that the effectiveness of outsourcing decisions are manifested by their continuance or discontinuance. Continuance of outsourcing conveys the strategy is perceived to be effective; discontinuance conveys that the strategy is ineffective and would need to be changed. Making and implementing outsourcing decisions require organizational resources, including organizational leaders’ scarce time. As insourcing may not necessarily produce beneficial outcomes, it would be reasonable to expect that as long as the outsourcing decision is perceived relatively advantageous insourcing will not be enacted.\(^2\) Thus, we posit that the sustainability of an outsourcing decision is (inversely) coupled with the insourcing of that decision, and learning from the management of outsourcing process could help organizations make more effective and sustainable outsourcing decisions.\(^3\)

**Outsourcing Process**

The decision-making process is usually studied as a sequence of sub-processes such as “formulation” and “implementation” in strategy, “initiation” and “implementation” in innovation adoption, and “contracting” and “monitoring” in outsourcing. The pairs are separated by the adoption-decision and represent, respectively, the pre- and post-adoption decision phases of the outsourcing decision process (hereafter, decision and implementation phase). The organizational

\(^2\) An organization may insource for a variety of reasons. This could be due to issues within the contract, unavailability of contractor or failure by the contractor – see the notable recent case of Carillion in the UK. When examining the sustainability of outsourcing, such changes suggest that the outsourcing strategy is no longer effective. We thank one of the anonymous reviewers for highlighting this point.

\(^3\) It would also be reasonable to expect that organizations, as adaptive systems, act to alter the insourcing strategy when deemed ineffective. Capturing the dynamics of outsourcing and insourcing over time requires an analysis of multiple, sequential episodes of strategy change, which is not the goal of our study.
actions for making and implementing decisions associated with the two phases are respectively referred to as “decision mechanisms” and “implementation mechanisms.”

The goal of decision mechanisms is to enable making viable, reasonable, and effective outsourcing decisions. The decision phase includes recognizing need, searching for solutions, evaluating alternatives, and making the choice (Bryson 2011; Rogers 2003). Since politicians and top managers are responsible for making strategic decisions, we assume they are involved in this process due to their positional power. However, public organizations differ in the extent to which they involve non-managers in the decision-making process. We thus focus on the decentralization of decision-making and account for organizational heterogeneity in the extent of participation of internal actors (employees) and external actors (users, experts, early adopters) in the decision-making process (Andrews et al. 2009; Elbanna, Andrews and Pollanen 2016).

The goal of implementation mechanisms is to ensure that the selected strategy is executed properly, stays on course, and fulfils expectations. Criteria for successful implementation are twofold: (1) organization wide roll-out and widespread use; and (2) continued user satisfaction and satisfactory performance (Bryson 2011; Real and Poole 2005). First, organizations often implement strategy incrementally or gradually, piloting it in one or few parts, adjusting and improving it to receive acceptance, and then rolling it out across the organization (Boyne et al. 2005; Daft 2001; Rogers 2003). Second, organizations monitor costs, continued use, user satisfaction, and performance effects. The first part of implementation phase is mostly controlled by the organization, the second part is also influenced by external factors (Real and Poole 2005). We account for organizational heterogeneity in the gradual roll-out and continued performance monitoring of the implementation phase.

Learning is an ongoing process for gaining insights and knowledge and acting on them
(Kotter 1996). Since outsourcing of functions and services is also a continuing organizational activity, over time, organizations can learn from both decision and implementation mechanisms. Hence, we consider the outsourcing process as an organizational learning process where organizations gain experience, analyse effective and ineffective past decisions, and refine the decision rules to make better choices. Cumulated experiences from outsourcing functions and services over time could become common organizational knowledge and facilitate future learning for managing the outsourcing process (Rashman and Radnor 2010). Learning through experience helps fine-tune the decision and implementation mechanisms, establish heuristics that link them together, and result in a reliable outsourcing process that can be used to make successful decisions. Therefore, assuming that the outcomes of past decisions accumulate to better future decisions, we account for the influence of decision and implementation mechanisms on the continued effectiveness of outsourcing decisions.

**Decision Mechanisms**

Cyert and March’s (1963) organizational behavioural theory advanced that decision-making is constrained by uncertainty in preferences and consequences of current actions, and by limitations in the decision makers’ rationality and cognition. The appropriateness and consequences of new actions are uncertain and decision makers’ ideas and intellectual capacity to process information are limited, making reliance on other sources of information crucial for the quality of organizational choices (Cyert and March 1992). Research on strategy and innovation decision process endorse the participatory and consultative style of decision-making over the direct and hierarchical style (Andrews et al. 2009; Daft 2001). The advocacy for more participatory decision-making has come about in public organizations with the advent of the new public governance and collaborative innovation (Ansell and Torfing 2014) that place emphasis on
“more attention to citizen deliberation and voice” and “a decision-making process that integrates market mechanisms with citizen deliberation” (Warner and Hefetz 2012, 315). Together, these concepts and theories call for the participation of non-managers in the decision-making process on the assumption that their technical and administrative knowledge and experiences supplement those of top managers and help them to make informed and reasonable decisions.

Participation of internal actors in the decision process assists in making wholesome decisions due to diversity of opinion, knowledge-base, and skill-set (Andrews et al. 2009; Elbanna, Andrews and Pollenan 2016). Decentralization of decision-making also widens communication channels, improves organizational members’ awareness and commitment, facilitates cross-pollination of ideas, and increases the quantity and quality of knowledge retrieved from the external environment (Andews et al. 2009; Black and Gregersen 1997). The range and depth of functional and technical knowledge of those involved in the decision process affects to the quality of the search, selection, and evaluation of alternative solutions. In sum, we account for the extent of participation of employees because it increases cognitive or preference diversity and influences the comprehensiveness of the outcome.

Participation of external actors in the decision-making process can also influence the quality and appropriability of the decisions (Boyer, Van Slyke and Rogers 2016). Their involvement reflects the organization’s tendency to value external knowledge and learn from the ideas and experiences of early adopters, service suppliers, industry experts, users and clients. For the same reasons offered for organizational members, the external actors provide additional know-how for making outsourcing decisions for which the focal organization’s internal knowledge and experience is inadequate. External actors are sources of new knowledge and expertise that go beyond the experiences of the focal organization and its members (Crosby and
Bryson 2005). For instance, the involvement of service recipients and citizen advisory groups help reduce uncertainty in outsourcing services that the users might view unnecessary or unacceptable. Likewise, the participation of suppliers and industry experts in the process can help avoid selecting programs that have not succeeded in similar jurisdictions, and thereby enrich the relevance and quality of the decision.

While participatory decision-making provides access to additional knowledge and information, non-managers may sway the organization towards self-interested positions. For example, internal actors may advocate to keep in-house activities to save jobs, and external actors may lobby the organization to contract out activities to their entities. Yet, we propose that in balance participation of both internal and external actors shall provide the decision makers with more information and insight than they would otherwise have, reduce decision uncertainty, and increase their ability to make better choices (Cyert and March 1992). We thus propose that experience and heuristics from participatory decision-making will assist organizations to make more sustainable outsourcing decisions thereby decreasing their reversal.

_Hypothesis 1:_ Participation of non-managers in making outsourcing decisions will increase the sustainability of outsourcing.

**Implementation Mechanisms**

Although implementation is vital for the success of strategic decisions (Brown and Potoski 2003a), most strategic decision models do not include implementation (Andrews et al. 2011). Yet, the failure of decisions is more closely associated with implementing than making the decision (Nutt 1989). Compared with the decision phase, the implementation phase is more detailed, challenging, and organization-specific. It includes more actors, faces more conflict and tension, resistance to change is unavoidable, and careful planning and ample resources cannot
guarantee success (Bryson and Anderson 2000; Daft 2001). Hence, organizations require to put in place mechanisms to roll-out and monitor implementation to obtain success.

Gradual roll-out or incremental implementation enables the organization to learn from experience and adapt. Organizations applying this mechanism by implementation on a trial basis (piloting), adjust organizational processes and systems, allure cooperation of managers and employees, learn about managing the relationship with suppliers, and acquire knowledge for sustaining use (Boyne et al. 2005; Buuren and Loorbach 2009). By gradual roll-out, organizations learn from their own experience and the experiences of others (consultants, early adopters, users) to attain implementation effectiveness. Using the internal and external sources of learning inform managers to overcome obstacles to implementation, lay down the technical and social groundwork, build and manage relationship with suppliers, and address the sources of resistance to change (Dibbern et al. 2004; Greve 1995).

Performance monitoring describes organizational actions to measure the outcome of outsourcing decisions regularly so that managers can choose to continue or discontinue outsourcing (Moynihan 2008). Monitoring is an essential but understudied phase of outsourcing decisions, and strategy decision process in general. Without monitoring, learning from the decision-making will be incomplete and knowledge for the development of reliable and satisfactory outsourcing process could not be obtained. To be effective, monitoring mechanisms should be regular rather than episodic, employ multiple criteria (goal attainment; cost; user satisfaction), and install techniques and metrics (survey; observation; financial analysis) for measuring efficiency and effectiveness (Moynihan 2008; Weiss 1972). In the context of this study, for instance, regular monitoring includes (1) the collection and analysis of financial data to enable measuring the efficiency of operations and control costs, and (2) the surveying of citizens
and monitoring of their complaints via field observations to assess the quality of service provision.

Incremental implementation and performance monitoring help ensure that outsourcing decisions are implemented across the organization smoothly and produce the expected outcomes. Dibbern et al.’s (2004) review of IS outsourcing found that implementation effectiveness and outsourcing success are interdependent. We propose that insights gained from the gradual roll-out and regular monitoring help establish competencies for the implementation of outsourcing that will allow organizations to make more sustainable outsourcing decisions thereby decreasing their reversal.

_Hypothesis 2:_ Gradual roll-out (H2a) and regular monitoring (H2b) in implementing outsourcing decisions will increase the sustainability of outsourcing.

**METHODS**

**Data**

We tested our hypotheses using data from the International City/County Management Association (ICMA) surveys of Alternative Service Delivery (ASD). Starting in 1982, the ICMA has surveyed U.S. local governments every five years regarding the modes of provision (e.g., in-house, outsourced) of 64 public services. The questionnaires are sent to a stratified random sample (based on population) of city managers or chief administrative officers of municipal and county governments. The number of organizations that responded to each survey ranged from 1,283 to 1,777, reflecting a response rate of 24-32% (http://www.icma.org). These data were supplemented with data from the U.S. Census City and County Data Book (U.S. Census) and Brown and Potoski’s (2003b) expert survey of 36 city managers/mayors.

This study’s unit of analysis is the organization (local government). The ASD survey asks
the respondents to answer questions about making and implementing outsourcing decisions at their organization. We focused our analysis on services produced in-house (by the employees of the organization) or privatized (produced by private suppliers). The ASD questionnaires define privatization (“private service delivery”) as when a service is provided through “private for-profit,” “private non-profit,” “franchise/concessions,” or “subsidies.”\(^4\) We merged the data from each available ASD survey, resulting in a longitudinal, unbalanced dataset of six panels (1982, 1988, 1992, 1997, 2002, and 2007). To our knowledge, this study is the first to analyze all published ASD panels.

Since insourcing is defined as bringing outsourced services back-in house, we excluded all organizations that did not respond to at least two sequential surveys on either in-house or outsourced (privatized) provision of services to allow for capturing the change in the provision of a service from in-house to outsourced. This resulted in a sample of 1,650 organizations and 4,729 organization-year observations (hereafter observations). Then, to estimate changes in the mode of provision of services from outsourced back to in-house, we limited the sample to organizations that provided at least one service via privatization in the prior period to reflect the observations that may potentially insource. This resulted a sample of 1,468 organizations and 2,524 observations, which we use for the analyses.

**Measures**

**Dependent variable**

*Insourcing* is the proportion of services insourced by the focal organization. Specifically, insourcing is measured as the sum of services in the focal organization that changed from outsourced in the prior period to in-house in the current period, divided by the total number of

\(^4\) Services provided by private for profit, private non-profit, franchise concessions, and subsidies represent 78.9%, 11.6%, 6.6%, and 2.9% of outsourcing observations, respectively.
services the organization outsourced in the prior period. We rely on a proportion to control for differences across organizations in the number of services outsourced.

Independent variables

To operationalize decision and implementation mechanisms we used four questions from the ASD surveys, two related to the participation of internal and external actors for making, and two related to organizational actions for implementing, outsourcing decisions. We first selected the items that theoretically were relevant to our definition of decision mechanisms and implementation mechanisms and did not overlap with the other items in the survey questions.\footnote{For participation, we excluded involvement by top management since virtually all organizations have top management involved in decision making and our key variable of interest is participation of lower-level employees. We also excluded items from the survey that were not theoretically relevant to our constructs such as recommending changes in state and local laws, using citizen advisory committees and consultants to assess private alternatives, and developing programs to minimize the effect of displaced workers.}

We conducted exploratory factor analysis to help identify the relevant items. This procedure resulted in eight items for decision, and nine items for implementation, mechanisms. The items loaded into three factors: one factor including participation of both internal and external actors in deciding to outsource (hereafter participation), and two factors representing gradual roll-out and regular monitoring in implementing the decision. (The factors and their items are shown in Online Appendix 1.) Then we conducted a confirmatory factor analysis to ensure that the three categories of items were empirically distinct. All items loaded onto their proposed factors and were significant \((p<0.001)\) and the three-factor model fit the data well \(\chi^2/df = 8.74, \text{RMSEA} = 0.023, \text{CFI} = 0.989, \text{TLI} = 0.986\). We used these three factors as the independent variables in the regression analysis, which were measured by the proportion of positive responses to the survey questions for a factor divided by the total number of question items of that factor.

As stated earlier, we assumed that the members of the top management team
(manager/chief administrative officer, assistant manager, department heads, and elected officials) are involved in the decision-making process due to their positional power. Participation, therefore, represents the involvement of non-managers both inside and outside of the organization, and was measured by the proportion of positive answers to whether five different internal groups and three different external groups were involved in the process (see Online Appendix 2). Implementation mechanisms are represented by two variables. Gradual roll-out was measured by the proportion of positive responses to three activities, and regular monitoring was measured by the proportion of positive responses to six activities (see Online Appendix 2).

Control variables
We controlled for environmental, organizational, and service levels variables that could affect the decision to privatize public services and capacity of governments to manage contracts (i.e. the decision and implementation mechanisms) that had precedence in the literature (e.g. Hefetz and Warner 2004). Since economic conditions can influence organizational decisions, we controlled for income per capita of the jurisdiction to gauge organizations’ financial resources because high levels of economic munificence are likely associated with greater contract management capacity (Brown and Potoski 2003a). Income per capita was measured as the average income of constituents from the U.S. Census, adjusted for inflation using the consumer price index (CPI) with 1982 as the base year. Differences may exist in the bureaucracies (scale advantages, resources, and access to service suppliers) between large and small organizations that influence their propensity to contract, and their capacity to manage decision processes (Boyne et al. 2005; Brown and Potoski 2003b). We controlled for the size of the local government community using the natural log of the population in its jurisdiction collected from the U.S. Census. It is anticipated that large jurisdictions will have a greater capacity to manage
contracts thereby reducing insourcing.

Institutional arrangements are likely to influence choice in service delivery by setting rules and norms of behaviour across organizations. Council-manager and strong-major governments are predicated on the assumption that a government should be managed like a private firm (Brown and Potoski 2003a). Further, council-manager governments are members of the ICMA, which promotes contracting as a norm (Brown and Potoski 2003b). Brown and Potoski (2003a, b) show that council-manager governments are more likely to contract than strong-major governments and that their capacity for contract management is greater. Alternatively, local governments governed by town meetings or commissions may choose to contract services due to member ties to local networks. Hence, we controlled for whether the local government structure was headed by a nonelected administrator/manager (County-manager), collective group (Collective), or by an elected official (Elected) with a categorical variable. The variable was coded County-manager if its form of government is council-manager or council-administrator, Collective if its form of government is a commission, town meeting, or representative town meeting, and Elected if its form of government is a mayor-council or council-elected executive.

Local governments under pressure to enhance efficiency typically privatize (Bel and Fegeda 2007). Thus, we controlled for fiscal pressure, and measured it by the proportion of positive answers to whether the organization indicated that it: (1) had state or federal mandates tied to intergovernmental financing, and/or (2) was under external fiscal pressure for outsourcing. Local governments under fiscal pressure to outsource are anticipated to have limitations in the management of contracts because the fiscal pressure that led to contracting is likely to be associated with weaker capacity to maintain ongoing contract management (Brown
and Potoski 2003a). Since, organizations may face contractual constraints that inhibit them from abandoning their outsourcing strategy, we controlled for restrictive labour contracts using a binary indicator for whether the organization indicated in the ASD surveys that restrictive labour contracts or agreements were an obstacle in outsourcing the services.

To take into account the effects of transaction costs, we controlled for asset specificity (AS) and service measurability (SM) of the services provided by the organization using Brown and Potoski’s (2003b) expert survey.\(^6\) AS and SM, which are respectively associated with “specialized investment” required to provide a service and “difficulty of measuring and monitoring” a service, are two types of service level attributes that affect costs and reflect the complexity of the contracted service (Brown and Potoski 2003b). As the costs of services outsourced in the prior period should affect the proportion of services insourced in the current period, we calculated AS and SM for insourcing as the mean ratings of asset specificity and service measurability for the organization’s outsourced services in the prior period.

We also controlled for program group and panel year. The ASD surveys classify the 64 services into seven groups: public works/transportation, public utilities, public safety, health and human services, parks and recreation, cultural and arts services, and support functions. To account for variation in the type of services, we controlled for program group calculated as the number of services provided in each group, divided by the total number of services provided by the organization. The differences in the propensity to insource in any given year were controlled via year fixed-effects.

**Analysis**

\(^6\) Brown and Potoski conducted an expert survey of 36 local government managers and asked them to rate AS and SM for each service on a 5-point scale, with higher values indicating that the service requires greater specialized investments or is more difficult to measure and monitor. They reported the mean ratings of AS and SM for the 64 public services (Brown and Potoski 2003b, 451-452).
Endogeneity, which occurs when explanatory variables are correlated with the error term, is a concern in organization studies. Frequently, endogeneity arises from problems with “reverse causality” or “omitted variables” that affect both the dependent and independent variables. The key concern for endogeneity in our analysis may arise from omitted variables. Organizations that are more engaged in the outsourcing process might have some unobserved features that also affect their propensity to insource outsourced services. We therefore employed fixed effects linear regression for data analysis in order to control for unobserved organizational factors that might influence the insourcing decision (Greene 2007).

RESULTS

Table 1 presents descriptive statistics and correlations of key variables for insourcing. On average, organizations insourced 34 percent of the programs that were outsourced, indicating that a relatively large portion of outsourcing decisions are reversed over time. The most common services insourced were heavy equipment, emergency, vehicle maintenance, buildings/grounds maintenance, legal services, operation and maintenance of recreation facilities, street repair, and data processing. Among the independent variables, organizations on average had a participation index of 25%, indicating that they involved approximately one-quarter of the internal and external actors in the process. Compared to participation, the gradual roll-out was lower (15%), and regular monitoring was higher (41%). As expected correlations between these three process variables were significant (r=.30, .36, and .31), reflecting the related nature of the sub-processes of the outsourcing process.

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7 Reverse causality is not a concern as the theoretical variables in our model precede the dependent variable; that is, organizations first choose to outsource services and engage in the outsourcing process before deciding to reverse the outsourcing decision by backsourcing the activity.

8 We also examined the descriptive statistics and correlations for each individual year. The proportion of backsourcing for each panel ranged from 26.9 percent to 40.8 percent, and the other results were generally consistent with those presented in Table 1.
Table 2 presents the regression results for insourcing. We conducted hierarchical regression analysis, and entered the control variables first (Model 1), and then entered one at a time the theoretical variables of participation (Model 2), gradual roll-out (Model 3), and regular monitoring (Model 4) before entering all three independent variables (Model 5). The value of R-squared increased from Model 1 to Model 5, indicating that Model 5 best fits the data. We also tested for multicollinearity by computing the variance inflation factors (VIFs) and found that they were between 1.0 and 1.5, below the recommended ceiling of 10 (Chatterjee and Price 1991).

Hypothesis 1, which proposed that the extent of participation of non-managers in making the decision to outsource will reduce insourcing, was supported in Model 2 (p<.05). However, when the implementation mechanisms were entered, the coefficient for participation became nonsignificant (Model 5, p>.05). Hypothesis 2, which suggested that the implementation mechanisms of gradual roll-out (H2a) and regular monitoring (H2b) negatively affect insourcing, received full support as the coefficients for both factors were negative and significant (Models 3 and 4, p<.05). The coefficient for gradual roll-out indicates that organizations that adopt all gradual roll-out items insource 7.2 percent fewer services than if they did not adopt any gradual roll-out items. On average, adopting one item in the index is associated with a 2.4 percent reduction in insourcing of services. Similarly, the coefficient for regular monitoring indicates that adopting all regular monitoring mechanisms is associated with 5.8 percent fewer services
insourced than if the organization adopted no regular monitoring mechanisms. These results indicate that, on average, each regular monitoring mechanism adopted is associated with approximately a one percent decline in insourcing by the organization. Considering the control variables, the categorical controls for form of government were positive and significant (Model 5, p<.05) indicating that relative to council-manager, local governments that change to elected or collective forms of government are positively associated with insourcing services.

We conducted additional analyses to confirm the robustness of the results of the theoretical variables, and check effects of controls without fixed effects. Since the dependent variable is fractional, ranging from 0 to 1, we used a fractional logit model (Papke and Wooldridge 1996). The results for the three theoretical variables of were significant (p<.001), and consistent with those reported in Table 2. We also tested the sensitivity of our results to dropping control variables, removing them from the model one at a time, and in combinations. The results generally remained consistent with those reported in Table 2. (Robustness results are available on request from authors).

Overall, the results generally support our study’s main thesis—that organizational mechanisms for effective management of outsourcing process could affect the intensity of insourcing. More specifically, our findings suggest that (1) while the decentralization of decision-making might influence outsourcing decisions, it might not have a lasting effect on insourcing; and (2) the implementation mechanisms are the salient process factors that affect the insourcing of outsourced services.

**DISCUSSION**

Drawing on behavioural and adaptation theories we studied outsourcing strategy, focused on outsourcing as a process, and examined the role of decision and implementation mechanisms.
While organizations strive to make optimal decisions, outsourcing decisions may not succeed, prompting organizations to bring the production of activities back in-house. We proposed that the sustainability of outsourcing strategy matters because insourcing involves organizational change, which requires resources. The results from the influences of three process mechanisms on the occurrence of insourcing indicated that implementation mechanisms affect the sustainability of outsourcing and thereby the likelihood of insourcing. We discuss the implications of our findings for research on the management of the outsourcing process as a specific capability and a potential source of organizations’ effectiveness of outsourcing decisions.

**Outsourcing and Insourcing**

While review studies of outsourcing process, and case studies of insourcing have been conducted (Dibbern et al. 2004; Cullen, Seddon and Willcocks 2005, Young and Macinati 2012), large sample research beyond dichotomous outsource-insource decisions have not been conducted. We constructed a panel dataset over a 25-year period to pursue this line of inquiry and bring attention to several important research areas: the aftermath of the outsourcing decision; the why and how of insourcing occurrence; and the role of the outsourcing process as an organizational capability. Brown and Potoski (2003a) identify contract-management capacities. This study adds by pointing out the role of the outsourcing process capability—local governments’ capability to develop processes for adopting and implementing effective outsourcing decisions that could produce continued satisfactory outcomes.

Our findings on adoption mechanisms suggest the need for a more in-depth conceptualization of the role stakeholder involvement and collaboration on the sustainability of outsourcing decision. We draw on evidence that points towards the ways in which participatory
decision-making justifies the role of stakeholder involvement (Andrews et al. 2009; Boyer, Van Slyke and Rogers 2016; Uster, Beeri and Vashdi 2018). Our findings regarding the influence of implementation mechanisms on the sustainability of outsourcing points out the importance of probing and understanding the post-adoptive processes for execution of outsourcing strategy and evaluation of its effectiveness (also see Hefetz and Warner [2004] for similar findings for a two-data point time period). When the adoption and implementation mechanisms are considered together, however, longitudinal results indicate that gradual implementation and regular monitoring mechanisms influence insourcing, but involvement of internal and external actors does not (Model 5, Table 2). This finding confirms the necessity of studying outsourcing as a process rather than a dichotomous decision that drove our study. It demonstrates as the process of outsourcing unfolds over time the influence of the adoption mechanisms on the effectiveness of the process gives way to the implementation mechanisms. That is, effectiveness of an outsourcing decision hinges on its successful implementation, not on eloquence of its adoption. This is a major gap in research on governance choice, which primarily focus on the adoption decision rather than scrutinizing the entire process. Further studies to better explain the relative influence of adoption and implementation mechanisms, including the role of collaboration, are called for.

The last two ASD surveys (2002 and 2007) included an additional question asking respondents to indicate whether their organization insourced any of the services in the last five years, and if it did, what factors from a list of six influenced the decision.9 The three primary reasons were to do with the outcomes of contracting: nearly two-thirds (64.8 percent) of respondents rated unsatisfactory service quality as the primary reason for insourcing outsourced

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9 Of the total of 2,882 respondents in the two surveys, 2,681 (93%) answered this question, and 586 (21.9%) indicated that they had insourced previously outsourced services.
services; one-half (50.9 percent) identified insufficient cost savings; and a third (34.1 percent) stated reasons for improvements in organization efficiency. Internal decisions or contract management problems accounted for smaller proportion of reasons for insourcing.\textsuperscript{10} These anecdotal evidences suggest that lack of success or problems with outsourcing dominate the reasons for bringing the service back in house, reinforcing the importance of understanding outsourcing capabilities and processes.

Overall, our findings point out the cumulative effect of outsourcing adoption and implementation mechanisms on the sustainability of outsourcing decisions. They suggest that outsourcing process influences insourcing more strongly when client organizations develop and utilize mechanisms for implementation. However, research on implementation mechanisms is often overlooked in favour of understanding conditions that necessitate and facilitate adoption decisions. Despite challenges in studying implementation, we recommend more research on the implementation of outsourcing as the success of strategic decisions depends on all the steps organizations take to make and execute them.

**Outsourcing Process Capability**

Capabilities or competencies represent the ability of organizations to combine different resources to engage in productive activities and meet objectives (Bryson, Ackerman and Eden 2007; Piening 2013). Organizational capability has been defined broadly and includes key terms such as knowledge, skills, routines, experience, and complementary assets (Bryson, Ackerman and Eden 2007). An overarching theme of this perspective is the importance of routines or processes embedded in the organization that enable continuous satisfactory performance of one or more

\textsuperscript{10}Less than two in ten decisions to insource (18.6 percent) were the direct result of political support for a change in strategy, followed by problems with contract monitoring (18.1 percent) and problems with contract specification (11.9 percent).
activity (Helfat and Winter 2011). These processes are refined through organizational experience and learning, and influence managerial decision-making. Organizational processes and routines can eventually become unique, difficult to measure and valuable, a source of organizational effectiveness, and growth (Bryson, Ackermann and Eden 2007; Klein et al. 2013).

Strategy research delineates that governance decisions are driven by organizational resources and capabilities, and, in the case of contracting, by the relative competencies of the client organization and potential contractors (Boyne and Walker 2004; Brown and Potoski 2003b; Bryson, Berry and Yang 2010). Organizations produce products and services in-house when they fit organizational competencies and outsource them when suppliers have greater abilities or low internal congruencies make in-house production inefficient. The outsourcing process know-how develops gradually through activation and deactivation of outsourcing and insourcing decisions. Eventually, it assists organizations to make effective outsourcing decisions, reducing the need to insource. In this vein, the enactment and refinement of outsourcing process mechanisms could become a specific capability that enables organizations to make the governance decisions reliability and satisfactorily (Helfat and Winter 2011). Our study provides early evidence for this view in public service organizations by finding that adoption and implementation mechanisms of the outsourcing public services collectively affect the appropriability of outsourcing decisions and decrease the proportion of outsourced decisions that are subsequently insourced.

The concept of capability has been applied mainly to business organizations operating in complex and competitive environments. However, patterns of capabilities can vary with organizational environment dynamism. That is, in more stable environments organizational processes need not necessarily be rare, inimitable, and non-substitutable, and can exhibit
commonalities across effective organizations (Eisenhardt and Martin 2000). This argument opens up the application of capabilities to public organizations, which operate in such environmental conditions. In the public context, specific operating procedures (Cyert and March 1992) or operational capabilities suffice to attain sustained “minimally satisfactory performance” (Helfat and Winter 2011). Operating procedures overlap with the process of learning and change articulated in the adaptation literature (Greve 1995). They enable organizations perform their activities on an on-going basis using more or less the same techniques on the same scale. It is in this sense that we relied on organizational adaptation and behaviour to study outsourcing and insourcing, and envisage the outsourcing process as an operational capability that can be developed to assist organizations carry out their services reliably and satisfactorily. Future research in outsourcing and insourcing of other activities in public service organizations can further explore this view.

Implications for Research on Private and Public Services

Research on the outsourcing of public services is influenced by the underlying economic assumption of TCE and PCT. Whereas the influence of cost efficiency is undeniable, since a straight trade-off between cost and quality of services under either public or private provision cannot be made, the efficacy of cost-quality ratio as an important factor in the governance mode choice is rather uncertain. For instance, the prevailing assumptions that privatization of public services will lead to higher efficiency and lower cost, and public organizations and their

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11 Helfat and Winter (2011) distinguish between dynamic and operational (or ordinary) capabilities. Dynamic capabilities “aim to promote seemingly large amounts of change in a short period of time,” suggesting that they enable a firm to change the way it carries out its activities for superior performance (Helfat and Winter 2011, 1243-1244). Operational capabilities enable an organization to perform its activities on “an on-going basis using more or less the same techniques on the same scale to support existing products and services for the same customer application” (Helfat and Winter 2011, 1244). The line between the dynamic and operational capability is blurry (Helfat and Winter 2011); however, the dynamic capability as conceptualized for business organizations in high velocity markets does not apply to public organizations; only operational capability does.
employees are not motivated to innovate to reduce cost or increase quality, are likely over
generalized (Hodge 2000; Homsy 2018; Sclar 2000; Warner and Hefetz 2012). The consistent
rate of insourcing within the 25-year span of our dataset suggests that future research on the
governance mode choice of public services would need to balance the economic efficiencies of
private ownership with the social benefits of public services by probing various contingencies on
the cost-quality ratio. For instance, when organizations’ resources are abundant, contracts could
be more lucrative and private providers would deliver quality services, resulting in citizen
satisfaction. When the resources are limited and contracts are tight, the quality of service
provision could drop, resulting in citizen dissatisfaction.

There has been ongoing calls for the application of strategy theories and methods to study
public organizations (Bryson, Ackermann and Eden 2007; Bryson, Berry and Yang 2010; Klein
et al. 2013). This study is a step forward in addressing this research need. On one hand, our
arguments on the importance of organizational processes in strategic decisions attest to Klein et
al.’s (2013) arguments in support of strategy theories and methods in understanding public
organizations. On the other hand, our theory and findings provide further evidence that the
strategic decision process in local governments is different to that in the private context. For
instance, in a study of IS sourcing decisions Jain and Thietart (2013) found that capabilities
associated with organizational processes decrease the likelihood of outsourcing. Future
research should further probe the application of concepts and methodologies from the private to
the public context, and vice versa.

The examination of the effects of outsourcing process mechanisms on insourcing is

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12 Major differences in datasets, analytical methods, and study contexts forbid a true comparison of Jain and Thietart’s (2013) findings with those of this study. Jain and Thietart’s study is cross-sectional and focuses on the role of production and governance costs on outsourcing decisions; our study is longitudinal and focuses on the role of outsourcing process on insourcing decisions.
scarce. Hence, our findings should be validated by future research on outsourcing and insourcing of other functions and services in both business and public organizations. Learning from research in public and private contexts is reciprocal, suggesting that our application and extension of behavioural/adaptation approach to outsourcing and insourcing in public organizations could help advance the understanding of the dynamics of outsourcing and insourcing in business organizations. Since organizations in every industry and sector, private or public, may continually outsource and insource their activities, research on effective management of the process of outsourcing and insourcing can contribute to both theory and practice.

This study also has several implications for public administrators/managers. First, considering the number of outsourcing and subsequent insourcing of outsourced services, public managers should be cognizant that outsourcing is not merely a decision to make but process to manage. Effective management of outsourcing process increases its sustainability and reduces insourcing of outsourced services. Second, the results suggest that in the early stages of outsourcing process, input from internal and external sources of information and knowledge assist sustainability of the outsourcing decision. Hence, public managers are advised to seek input from middle managers, as well as non-managers, and find ways of involving them in the process. Third, senior managers are often more keen about the pre-adoption phase of decision making than the post-adoption phase. Simply put, making a decision is more fun than implementing it. Our findings highlight the crucial impact of roll-out and monitoring mechanisms, suggesting that public managers would need to be as involved in the implementation phase as they are in the adoption phase.

Limitations

There are several limitations to our study that should be considered in interpreting its findings.
First, we study insourcing as the discontinuation of outsourcing (not updating contracts or switching providers) and posit that an effective outsourcing process will result in fewer insourcing occurrences. Our data do not allow us to empirically test performance outcomes of outsourcing in order to determine whether they mediate the occurrence of insourcing. Future studies which utilize both qualitative and quantitative data on the management processes used for outsourcing and their performance consequences can provide additional insights. Second, the dataset used in this analysis does not allow us to explore questions of political ideology that may impact on outsourcing and insourcing decisions within the focal organization, or at other levels of government. Similarly, we do not have data on local government organizations’ shareholdings in local service providers, thus cannot control whether outsourcing or insourcing decisions are influenced by their local network membership. Since the membership of local networks is increasing, the examination of this timely issue on governance choices are highly recommended. ¹³ Third, we studied outsourcing and insourcing of privatization, the most prominent mode of outsourcing in governmental organizations. However, it is possible that local governments outsource services to neighbouring cities and counties instead of private providers. In the same vein, in addition to producing services fully in-house or outsourcing them completely, organizations may choose a cooperative mode of service provision, where organizations and providers offer services jointly. Future studies of the role of outsourcing process on different types of outsourcing, and conditions under which each may occur, could provide a fuller understanding of insourcing of public services. Fourth, we studied outsourcing and insourcing from the perspective of client organizations, which represents one side of the contractual relationship. The success of outsourcing strategy depends on the quality of

¹³ We thank an anonymous reviewer for raising this point.
relationships between the parties, and cannot be explained fully without data from both sides. Future studies can consider dyadic methods for including both parties to limit bias and provide insights on how client organizations learn from the interactions with providers and how that would affect the development of outsourcing process mechanisms.

Despite these limitations, however, we have taken a step toward examining a challenging but promising research endeavour by highlighting the role of outsourcing process, applying behavioural theories to studies of outsourcing and insourcing, and investigating the role of adoption and implementation mechanisms. We hope that organization management scholars continue and advance this line of enquiry.

**CONCLUSION**

From TCE and PCT perspectives, the primary driving force for outsourcing has been efficiency, especially in government organizations that are perceived to be bureaucratic and inefficient. Also, previous research has examined outsourcing decisions mainly as events, not as a process. Theoretical arguments and empirical evidence on the outsourcing process as an organizational capability is scarce. We offered that over time the learning from outsourcing could result in a process that increases the sustainability of outsourcing decisions and reduce its reversal. Data analyses from a longitudinal dataset of outsourcing and insourcing of public services showed that insourcing is relatively common, and is influenced primarily by the implementation mechanisms of the outsourcing process. Future research can expand and extend the characterization of the outsourcing process as a specific capability to carry out effective transformation of resources to outcomes. We also recommend more research on the implementation mechanisms of governance mode choices. While there might be more interest in learning about the pre-adoption decision conditions that could affect outsourcing decisions, neither the effectiveness of managerial actions
nor the extent of organizational learning from previous actions can help future outsourcing
decisions until the post-adoption processes of implementing and evaluating outcomes of the
decisions are explained. The task is challenging as the implementation of a decision is more
difficult to study than its adoption, but the effort will be essential in advancing theory and
assisting practice.
References


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Piening, E. P. 2013. “Dynamic capabilities in public organizations: A literature review and


Young, S. and M. S. Macinati. 2012. “Health outsourcing/backsourcing: Case studies in the
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<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
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<td></td>
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<td></td>
<td></td>
</tr>
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<td></td>
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<td></td>
<td></td>
</tr>
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<td>0.09</td>
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<tr>
<td>6 Fiscal Pressure</td>
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<td>0.05</td>
<td>0.13</td>
<td>-0.04</td>
<td>-0.01</td>
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</tr>
<tr>
<td>7 Restrictive Labour Contracts</td>
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<td>0.13</td>
<td>0.05</td>
<td>0.06</td>
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<td>0.34</td>
<td>0.03</td>
<td>-0.08</td>
<td>0.14</td>
<td>-0.01</td>
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<td>0.03</td>
<td>0.54</td>
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<td>0.32</td>
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<td>-0.03</td>
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<td>0.16</td>
<td>0.01</td>
<td>0.03</td>
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</tr>
<tr>
<td>11 Gradual Roll-out</td>
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<td>0.25</td>
<td>-0.12</td>
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<td>12 Regular Monitoring</td>
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<td>0.10</td>
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<td>-0.09</td>
<td>-0.07</td>
<td>0.17</td>
<td>0.09</td>
<td>-0.03</td>
<td>-0.03</td>
<td>0.36</td>
<td>0.31</td>
</tr>
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</table>

Number of Observations 2,524. All correlations greater than 0.04 or less than -0.04 are significant at the 0.05 level.
Table 2. Fixed Effects Results for Insourcing

<table>
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<th>Variable</th>
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<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
</tr>
</thead>
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<td>Std error</td>
<td>Coefficient</td>
<td>Std error</td>
<td>Coefficient</td>
</tr>
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<td>-0.120 (0.086)</td>
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<td>-0.120 (0.085)</td>
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<td>Elected(^{a})</td>
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<td>0.294* (0.133)</td>
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<td>0.293* (0.127)</td>
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<td>Collective(^{a})</td>
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<td>0.427** (0.148)</td>
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<td>0.432** (0.141)</td>
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<td>Fiscal Pressure</td>
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<td></td>
<td>-0.021 (0.031)</td>
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<td>-0.030 (0.030)</td>
</tr>
<tr>
<td>Restrictive Labour Contracts</td>
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<td></td>
<td>0.013 (0.028)</td>
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<td>0.014 (0.028)</td>
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<tr>
<td>AS</td>
<td>-0.078+ (0.044)</td>
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<td>-0.076+ (0.044)</td>
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<td>SM</td>
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<td>0.006 (0.053)</td>
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<td>Program Group</td>
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<td></td>
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</tr>
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<td>Year Fixed Effects</td>
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<td>Organization Fixed Effects</td>
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<tr>
<td>Participation</td>
<td>-0.095* (0.042)</td>
<td></td>
<td>-0.097** (0.031)</td>
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<td>-0.075** (0.025)</td>
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<tr>
<td>Gradual Roll-out</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regular Monitoring</td>
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<td></td>
</tr>
<tr>
<td>Number of Observations</td>
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<tr>
<td>F</td>
<td>7.518</td>
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<td>7.213</td>
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<td>Prob&gt;F</td>
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<td>0.000</td>
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<td>0.000</td>
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<tr>
<td>F (relative to Model 1)</td>
<td>5.19</td>
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<td>9.93</td>
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<tr>
<td>Prob&gt;F (relative to Model 1)</td>
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<tr>
<td>R-squared</td>
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<td>0.094</td>
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<td>0.097</td>
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</table>

Notes. Standard errors are calculated using robust clustering on organization. Two-tailed tests for variable coefficients.
\(\dagger\) \(p<.10\), \(^*\) \(p<.05\), \(^{**}\) \(p<.01\), \(^{***}\) \(p<.001\).

\(^{a}\) Categorical variable for the organization's form of government contains separate categories for county-manager, elected, and collective forms of government. County-manager is the base category in all regressions.
### Online Appendix 1

**Factor Analysis of the Outsourcing Process Mechanisms**

<table>
<thead>
<tr>
<th>Items</th>
<th>Participation</th>
<th>Gradual Roll-out</th>
<th>Regular Monitoring</th>
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</thead>
<tbody>
<tr>
<td><strong>Participation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Who inside your local government was involved in evaluating the</td>
<td>0.69</td>
<td>0.23</td>
<td>0.11</td>
</tr>
<tr>
<td>feasibility of private service delivery?</td>
<td>0.72</td>
<td>0.10</td>
<td>0.18</td>
</tr>
<tr>
<td>Management/budget analysts</td>
<td>0.75</td>
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<td>0.14</td>
</tr>
<tr>
<td>Finance/accounting officer</td>
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<td>0.17</td>
</tr>
<tr>
<td>Attorney</td>
<td>0.68</td>
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</tr>
<tr>
<td>Procurement/purchasing officer</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Who outside your local government organization was involved in</td>
<td>0.52</td>
<td>0.09</td>
<td>0.14</td>
</tr>
<tr>
<td>evaluating the feasibility of private service delivery?</td>
<td>0.64</td>
<td>0.07</td>
<td>0.12</td>
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<tr>
<td>Potential service deliverers</td>
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<td>0.12</td>
<td>0.25</td>
</tr>
<tr>
<td>Professionals/consultants with expertise in service areas</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Applied private alternatives to new services</td>
<td>0.19</td>
<td>0.84</td>
<td>0.21</td>
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<tr>
<td>Applied private alternatives to growing services</td>
<td>0.18</td>
<td>0.86</td>
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<tr>
<td><strong>Gradual Roll-out</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has your local government undertaken any activities to ensure success</td>
<td>0.29</td>
<td>0.67</td>
<td>0.28</td>
</tr>
<tr>
<td>in implementing private service delivery?</td>
<td>0.19</td>
<td>0.84</td>
<td>0.21</td>
</tr>
<tr>
<td>If “yes,” which of the following activities has your government</td>
<td>0.18</td>
<td>0.25</td>
<td>0.91</td>
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<tr>
<td>undertaken to ensure success in implementing private service delivery?</td>
<td>0.18</td>
<td>0.25</td>
<td>0.91</td>
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<tr>
<td>Implementation of private alternatives on a trial basis</td>
<td>0.22</td>
<td>0.26</td>
<td>0.90</td>
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<tr>
<td>Applied private alternatives to growing services</td>
<td>0.25</td>
<td>0.24</td>
<td>0.88</td>
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<tr>
<td><strong>Regular Monitoring</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Does your local government use any techniques to systematically</td>
<td>0.18</td>
<td>0.06</td>
<td>0.90</td>
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<tr>
<td>evaluate its private service delivery?</td>
<td>0.22</td>
<td>0.26</td>
<td>0.90</td>
</tr>
<tr>
<td>If “yes,” which of the following aspects of service delivery are</td>
<td>0.25</td>
<td>0.24</td>
<td>0.88</td>
</tr>
<tr>
<td>evaluated?</td>
<td>0.26</td>
<td>0.17</td>
<td>0.83</td>
</tr>
<tr>
<td>Citizen satisfaction</td>
<td>0.26</td>
<td>0.17</td>
<td>0.83</td>
</tr>
<tr>
<td>Cost</td>
<td>0.26</td>
<td>0.17</td>
<td>0.83</td>
</tr>
<tr>
<td>Compliance with delivery standards specified in contract</td>
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<td></td>
<td></td>
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<tr>
<td>What techniques are used to evaluate the above aspects of service</td>
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<td>0.17</td>
<td>0.83</td>
</tr>
<tr>
<td>delivery?</td>
<td>0.26</td>
<td>0.17</td>
<td>0.83</td>
</tr>
<tr>
<td>Monitoring citizen complaints</td>
<td>0.19</td>
<td>0.16</td>
<td>0.90</td>
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<tr>
<td>Conducting field observations</td>
<td>0.20</td>
<td>0.26</td>
<td>0.86</td>
</tr>
<tr>
<td>Analyzing data/records (i.e. demographic/finance data)</td>
<td>0.26</td>
<td>0.17</td>
<td>0.83</td>
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<tr>
<td>Eigenvalue</td>
<td>1.77</td>
<td>1.80</td>
<td>5.23</td>
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<tr>
<td>Percentage of Variance Explained</td>
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<td>0.14</td>
<td>0.30</td>
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<tr>
<td>Cumulative Percentage of Variance Explained</td>
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<tr>
<td>Cronbach's Alpha</td>
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</table>


**Online Appendix 2**

**Indices, Components, and Means**

<table>
<thead>
<tr>
<th>Participation</th>
<th>Mean</th>
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</thead>
<tbody>
<tr>
<td>Who inside your local government was involved in evaluating the feasibility of private service delivery?</td>
<td></td>
</tr>
<tr>
<td>Management and/or budget analysts</td>
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</tr>
<tr>
<td>Finance/accounting officer</td>
<td>0.39</td>
</tr>
<tr>
<td>Attorney</td>
<td>0.24</td>
</tr>
<tr>
<td>Procurement/purchasing officer</td>
<td>0.14</td>
</tr>
<tr>
<td>Line employees</td>
<td>0.12</td>
</tr>
<tr>
<td>Who outside your local government organization was involved in evaluating the feasibility of private service delivery?</td>
<td></td>
</tr>
<tr>
<td>Potential service deliverers</td>
<td>0.39</td>
</tr>
<tr>
<td>Professionals/consultants with expertise in particular service areas</td>
<td>0.34</td>
</tr>
<tr>
<td>Service recipients/consumers</td>
<td>0.09</td>
</tr>
<tr>
<td><strong>Participation Index</strong></td>
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</table>

<table>
<thead>
<tr>
<th>Gradual Roll-out</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has your local government undertaken any activities to ensure success in implementing private service delivery? If “yes,” which of the following activities has your government undertaken to ensure success in implementing private service delivery?</td>
<td></td>
</tr>
<tr>
<td>Proposed implementation of private alternatives on a trial basis</td>
<td>0.20</td>
</tr>
<tr>
<td>Applied private alternatives to new services</td>
<td>0.12</td>
</tr>
<tr>
<td>Applied private alternatives to growing services</td>
<td>0.14</td>
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<tr>
<td><strong>Gradual Roll-out Index</strong></td>
<td><strong>0.14</strong></td>
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</table>

<table>
<thead>
<tr>
<th>Regular Monitoring</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does your local government use any techniques to systematically evaluate its private service delivery? If “yes,” which of the following aspects of service delivery are evaluated?</td>
<td></td>
</tr>
<tr>
<td>Citizen satisfaction</td>
<td>0.34</td>
</tr>
<tr>
<td>Cost</td>
<td>0.46</td>
</tr>
<tr>
<td>Compliance with delivery standards specified in contract</td>
<td>0.42</td>
</tr>
<tr>
<td>What techniques are used to evaluate the above aspects of service delivery?</td>
<td></td>
</tr>
<tr>
<td>Monitoring citizen complaints</td>
<td>0.37</td>
</tr>
<tr>
<td>Conducting field observations</td>
<td>0.37</td>
</tr>
<tr>
<td>Analyzing data/records (i.e. demographic/finance data)</td>
<td>0.38</td>
</tr>
<tr>
<td><strong>Regular Monitoring Index</strong></td>
<td><strong>0.39</strong></td>
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