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Insourcing and Outsourcing

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Insourcing and Outsourcing

The Dynamics of Privatization Among U.S. Municipalities 2002–2007

Mildred E. Warner and Amir Hefetz

Problem, research strategy, and **findings:** While contracting for the private delivery of public services is common, reversals from private to public provision are also common. Indeed, our U.S. data indicate insourcing (reverse contracting) is roughly equal to the level of new outsourcing for 2002-2007. We analyze these data to better understand how city managers decide to privatize services, or to reverse their privatization. The International City/County Management Association collected survey data on the form of service delivery for 67 local government services; they also report many community characteristics and city manager opinion data we can use to explain that choice. Our statistical models suggest that transactions costs, market management, monitoring, and political interests are all associated with the decision to contract, or to reverse contract. Municipalities appear to experiment by outsourcing those services with high transactions costs, while insourcing reflects a lack of cost savings and the challenges of monitoring and market management of privatized services. Alternatively, mixed public and private delivery (concurrent sourcing) promotes competition and provides the capacity for public provision should contracts fail.

Takeaway for practice: The dynamics of outsourcing and insourcing urban services plausibly reflect pragmatic experimentation by government managers in both directions. For private delivery of public services, monitoring is critical, especially as cities experiment with outsourcing services with high transactions costs. Managing market competition also matters, as does Privatization, as in the contracting out of urban services, has been heralded as a reform to promote efficiency and responsiveness in local government service delivery (Osborne & Gaebler, 1992). In the United States, contracting out is a long-standing practice; in fact, many urban services (especially social services) began in the private sector and shifted to public provision during the 20th century. Some argue that renaming such contracting privatization was part of a broader agenda to shrink government and shift the social contract (Feigenbaum & Henig, 1994). For local officials, however, the approach to privatization has been a pragmatic one focused on experimenting with new forms of service delivery in search of cost efficiencies and greater service quality (Bel, Hebdon, & Warner, 2007; Hebdon & Jalette, 2007; Warner & Hebdon, 2001).

This pragmatic approach leads city managers to explore new outsourcing but also to insource or reverse privatize when a contracting effort does not yield the desired results. This has prompted new studies that look at the dynamics of contracting, not as a one-way street toward privatization, but as a two-way street as service production shifts between private and public actors (Brown, Potoski, & Van Slyke, 2008; Hefetz & Warner, 2004, 2007; Lamothe, Lamothe, & Feiock, 2008; Warner & Hebdon, 2001).

Our article offers an analysis of the most recent time period for which data are available to explore the dynamics of contracting across U.S.

retaining the capacity to provide services inhouse.

Keywords: privatization, local government, contracting, reverse privatization, outsourcing, insourcing

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Journal of the American Planning Association, Vol. 78, No. 3, Summer 2012 DOI 10.1080/01944363.2012.715552 © American Planning Association, Chicago, IL. municipalities. We use national survey data collected by the International City/County Management Association (ICMA) from municipalities across the United States in 2002 and 2007, which differentiates stable public delivery and continued contracting from experimentation with new outsourcing and new insourcing. In these data, public delivery remains the most common form of municipal service delivery in the United States (41% of all service delivery). Contracting is also quite common with continued contracting accounting for 35.5% of all service delivery. What interests us here is the experimentation that occurs at the margins as cities test new outsourcing and new insourcing (contracting back in previously contracted services). This experimentation accounts for 23.5% of all service delivery.

While proponents of privatization argue it would typically offer a superior form of service delivery to urban governments (Hood, 1991; Savas, 1987), experience has raised concerns about lack of cost savings (Bel, Fageda, & Warner, 2010; Boyne, 1998; Hirsch, 1995; Hodge, 2000), management and market challenges (Brown & Potoski, 2003; Girth, Hefetz, Johnston, & Warner, in press; Johnston & Girth, 2012; Marvel & Marvel, 2007; Warner, 2012), and equity and citizen engagement (Andrews & Entwistle, 2010; Dannin, 2010; Warner & Hefetz, 2002). In addition, city managers are more experienced users of contracting with time (Amirkhanyan, 2007; Dijkgraaf & Gradus, 2007; Hefetz, Warner, & Vigoda-Gadot, 2012a, 2012b; Warner & Hefetz, 2008).

This article focuses on a little-studied but interesting phenomenon of reverse privatization, an important but understudied planning tool in service delivery and market management. The level of reverse contracting (insourcing) now equals the level of new contracting out (outsourcing). Our analysis explores why.

In the first section, we present the theoretical reasons for understanding why outsourcing would be accompanied by insourcing. Next, we present survey data collected with ICMA on the form of service delivery and managers' attitudes regarding key transaction cost, market, and management variables that may explain contracting out. The third section presents the regression model results showing that new outsourcing reflects experimentation with contracting among services with high transaction costs, while insourcing reflects the importance of monitoring and the challenges of market management and inadequate cost savings. We conclude with discussion regarding the importance of monitoring, market management, and maintaining city capacity to bring work back in house should contracts fail.

Literature Review: Why Contract?

What might explain the dynamics of contracting? Possible explanations arise from several arenas: economics, management, and urban geography. Williamson's (1999) theory of transaction costs provides a compelling basis for understanding when a private firm might outsource rather than produce a service in house. This theory has been applied to public-sector contracting by Sclar (2000) and others (Brown et al., 2008; Hefetz & Warner 2004, 2007, 2012; Levin & Tadelis, 2010; Nelson, 1997; Whittington, 2012/this issue). In short, services that are more asset specific (requiring specific physical infrastructure or technical expertise) and more difficult to manage are less likely to be contracted out.

Frequency of contracting and the level of competition in the market are also important as they can prevent lock in with a single supplier, which would raise risk and costs. Competition in local government service markets is generally low, and this creates special market management challenges (Dijkgraaf & Gradus, 2007; Girth et al., in press; Johnston & Girth, 2012; Levin & Tadelis, 2010) of which insourcing is one response (Hefetz & Warner, 2004, 2007). City managers also mix public and private delivery for the same service, as a means to benchmark costs, keep some control over service delivery and ensure failsafe delivery in the event of contract failure (Hefetz et al., 2012a; Warner & Hefetz, 2008).

Monitoring is also critical, especially in contract markets with little competition (Girth et al, in press). In general, the level of contract monitoring in the public sector is low (Brown & Potoski, 2003), the ability to sanction contractors is limited (Marvel & Marvel, 2007), and the effectiveness of performance management uncertain (Heinrich & Choi, 2007). However, we see evidence of a managerial learning process over time as cities become more sophisticated in their contracting (Amirkhanyan, 2007; Rashman & Randor, 2005; Rashman, Withers, & Hartley, 2009; Warner & Hefetz, 2008).

An additional concern for public sector managers is the level of citizen interest in the process of service delivery (Hefetz & Warner, 2012). Beyond basic concerns with open government that can be compromised by outsourcing (Dannin, 2010), city managers must ensure avenues for citizen engagement in the service delivery, planning, and design process (Denhardt & Denhardt, 2003; Forester, 1999; Frug, 1999; Nalbandian, 1999). Outsourcing, because it uses market mechanisms, may enhance consumer voice (Savas, 1987), but the quasi-markets created by government contracting may not enhance opportunities for citizen engagement unless city managers give explicit attention to creating such avenues for public engagement (Andrews & Entwistle, 2010; Lowery, 1998; Warner & Hefetz, 2002).

Recent trends in public administration and planning urge the public sector to interact with markets and communities to encourage democratic deliberation (Alexander, 2001; Nalbandian, 1999). New public service in public administration (Denhardt & Denhardt, 2003) and communicative planning in urban planning (Forester, 1999; Sager, 2009) recognize the need for more attention to citizen deliberation and voice. Government managers learn about citizen preferences through a dynamic decisionmaking process that integrates market mechanisms with citizen deliberation (Allmendinger, Tewdwr-Jones, & Morphet, 2003; Sager, 2001; Warner, 2008). This dynamic learning process is reflected in the rise in insourcing (Hefetz & Warner, 2007) and the rise in concurrent sourcing (mixed public and private delivery; Hefetz et al., 2012a; Warner & Hefetz, 2008) as both of these contracting tools balance market and government in a social choice approach.

In addition to managing markets for public services and citizen interests, city managers must also manage the politics and finance around contracting. Union opposition to outsourcing is strong but professional city managers have found ways to manage such opposition and still pursue outsourcing (Hebdon & Jalette, 2007; Hefetz & Warner, 2012; Warner & Hebdon, 2001). Political interests matter more than political ideology at the local government level, and fiscal stress is also a driver of privatization, according to a meta analysis of studies of local government contracting worldwide (Bel & Fageda, 2007).

Urban geography also matters. Metro core cities typically have lower rates of privatization due to higher rates of unionization, greater heterogeneity, and more complex service requirements, which lead to higher costs and narrow the market of potential service providers (Joassart-Marcelli & Musso, 2005; Warner & Hefetz, 2002). This makes metro core cities less attractive candidates for privatization. Suburbs, by contrast, create a market of moderatesized communities with similar service demands in a metropolitan region. This makes them more attractive privatization candidates, and indeed their rates of privatization are consistently higher than either metro core or rural communities (Hefetz et al., 2012b; Hirsch, 1995; Joassart-Marcelli & Musso, 2005).

Reverse contracting requires government capacity to re-internalize service delivery should the contract fail to adequately control costs, preserve quality, or address broader community goals. The water sector has received the most attention regarding reversals with high profile cases like Atlanta (GA) and New Orleans (LA) in the United States; Hamilton, Ontario, in Canada; Paris, France; Buenos Aires, Argentina; and Manilla, The Philippines (Pigeon, McDonald, Hoedeman, & Kishimoto, 2012). But smaller cities also have sought to reverse their contracts as evidenced by Bill 83, which the Illinois legislature passed in 2011, allowing some municipalities to exercise eminent domain to re-municipalize their water systems after complaints of rising rates and quality problems (Illinois General Assembly, 2011). This law raises the visibility of the question of how common reversals are and do they extend beyond the water sector?

The first empirical work to study reverse contracting across the full range of urban services focused on cities in New York State (Warner & Hebdon, 2001). It found reversals were one strategy used alongside privatization, intermunicipal cooperation, and governmental entrepreneurship in a complex array of alternatives local governments use to balance concerns with efficiency, service quality, local impacts, and politics. The first national study of reverse contracting was conducted by Hefetz and Warner (2004) using ICMA data and reported insourcing (at 11% across all service delivery) from 1992 to 1997 was two-thirds the level of new outsourcing (18% across all service delivery). Insourcing was primarily a substitute for monitoring, as few governments monitored their contracts.

Privatization peaked among U.S. local governments in 1997 and a subsequent study, which looked at the period 1997 to 2002, found that insourcing (reversals) had risen to 18% of all service delivery and exceeded the level of new contracting out (12% of all service delivery; Hefetz & Warner, 2007). Insourcing in this period was found to reflect a dynamic process of social choice (Sager, 2001) that attempted to balance concerns with markets, planning, and citizen satisfaction. This article provides the most recent chapter in a continuing story. Using the same methodology as above for the 2002–2007 period, we find that, averaged across all services, insourcing (11.9%) and new outsourcing (11.6%) are evenly matched. Notable in all these studies is that the dynamics of service delivery are located along the margin, 23–30% of service delivery.

Similar reversals have been noted in the United Kingdom, which stepped back from compulsory competitive tendering in 1998 and allowed local governments to reinternalize previously privatized services (Entwistle, 2005). Australia and New Zealand were also early privatizers who have shifted focus toward rebuilding internal government capacity (Warner, 2008). Even in the private sector, Deloitte Consulting (2005) reports the enthusiasm for outsourcing has cooled slightly with recognition of the risks to internal knowledge and control, service delivery, service quality, and failure to find a competitive market of outside suppliers. A recent book looking at public service and infrastructure projects around the world profiles a reassertion of the role of the public sector in public service provision in health, education, and infrastructure to ensure equity, access, and failsafe service delivery (Ramesh, Araral, & Wu, 2010).

The United States is the only country with longitudinal data that permit an analysis of contracting dynamics over time. This study will explore new outsourcing and new insourcing across the full range of locally provided public services, giving attention to service characteristics, local market characteristics, and political and monitoring concerns that city managers must address when determining whether to contract out or contract back in service delivery.

Data and Methods

To measure contracting dynamics we combine the ICMA surveys from 2002 and 2007. No national survey directly measures reversals in privatization. However, the consistency of the ICMA survey design and sample frame allows pairing surveys over time to see if the form of service delivery has changed. The ICMA surveys cover 67 public services and ask how the service is delivered: by government directly, or through contracts to for-profit organizations, other governments, or nonprofits. The surveys also ask managers 70 questions regarding factors that are motivators or obstacles to alternative service delivery.

The ICMA sample frame includes all counties with more than 25,000 population (roughly 1,600) and cities over 10,000 population (roughly 3,300) and a one-in-four random sample of cities with population between 2,500 and 10,000 and counties under 25,000 population. A quarter of all governments contacted respond (24% for 2002 and 26% in 2007), but only about 40% of respondents are the same in any two paired surveys. To track changes over time, we paired the surveys and found 476 governments that responded to both the 2002 and 2007 surveys. Of this number we found 430 usable pairs that contain full information for the purpose of statistical analysis. We analyze the paired 2002–2007 sample as representative of the larger surveys, as the key demographic means are similar.¹

We supplement these data with a survey we conducted with ICMA in 2007 of 164 city managers' assessment of several characteristics for each of the 67 services: level of competition in the market, asset specificity of the service, contract management difficulty, and citizen interest in the process of service delivery.² We also use Census of Government Finance data from 2002 and Census of Population and Housing data from 2000 (U.S. Bureau of the Census, 2000, 2002).

The ICMA surveys only ask how the service is currently provided. To determine the level of new outsourcing and new insourcing, we use the method used in prior studies (Hefetz & Warner, 2004, 2007) for consistency of comparison. First, we code the data into three exclusive categories: the service is provided 1) entirely by government employees, 2) by mixed public delivery and private contracts (concurrent sourcing), or 3) by contracts exclusively. Next, we combine these exclusive alternatives over time to create a matrix that allows us to track changes in service delivery choice. This matrix method enables us to compare stability in form of service delivery and to assess shifts, whether toward outsourcing or reversals back toward public delivery.

We use a conservative measure of new outsourcing and new insourcing based on the definition used in prior work by Hefetz and Warner (2004, 2007; see Figure 1). We count as new insourcing only those cases where contracting ceases and the service is brought totally back in house (mixed delivery back to public, or contracted delivery back to public). We count new outsourcing as those cases where public delivery shifts to contracting for the first time (public to mixed, public to contract). Continued contracting involves all the cells where contracting occurred (either as a mix or as a complete contract) regardless of whether the extent of contracting increased or decreased (e.g., mixed to total contract, total contract to mixed).

Disaggregating across individual services, the highest rates of continued contracting are found in physical infrastructure services like transit, waste management, and vehicle towing; and in social services like job training, elderly services, drug treatment, and homeless shelters. Physical infrastructure services are more likely to be contracted to the for-profit sector, while social services are more likely to be contracted to the nonprofit sector. Local governments in the United States have a long tradition of contracting in these service areas. (See Appendix.)

The highest rates of stable public delivery are found in crime prevention, police and fire, water and sewer services, snow plowing, and back-office support services (personnel, billing, data processing). Police and fire are considered essential government functions and have high rates of unionization, which limits government flexibility in exploring contracting. Back-office services are an area where more contracting should be possible, and indeed

		2007 Survey				
		Direct Public Delivery	Mixed Public/ Private Delivery	Complete Contracting Out		
		Toward Contracting Out \rightarrow				
	Direct Public Delivery	Stable Public	New Outsourcing	New Outsourcing		
2002 Survey		Public → Public	Public \rightarrow Mix	Public \rightarrow Contract		
	Mixed Public/ Private Delivery	New Insourcing	Continued Contracting	Continued Contracting		
		Mix $ ightarrow$ Public	$Mix \rightarrow Mix$	Mix → Contract		
	Complete Contracting Out	New Insourcing	Continued Contracting	Continued Contracting		
		$\begin{array}{l} Contract \rightarrow \\ Public \end{array}$	$Contract \to Mix$	$\begin{array}{c} Contract \rightarrow \\ Contract \end{array}$		
		← Toward Public Delivery				

Figure 1. Matrix of service delivery dynamics: Definition of new outsourcing and new insourcing.

many services in this group show substantial levels of new contracting out (>10%), but this is matched with similar levels of reverse contracting suggesting a lot of experimentation.

The services that will carry the most weight in the current analysis are those exhibiting high rates of new outsourcing and new insourcing. These are services where there is more experimentation going on across municipalities. Theory would suggest the services most likely to be contracted out would have low asset specificity, low contract management difficulty, and face competitive markets (Levin & Tadelis, 2010; Williamson, 1999). While service characteristics explain part of the reason for dynamics in contracting, they only tell part of the story.

A constellation of factors including nature of local markets, management expertise, and political preferences are also important in determining the level of contracting to the private sector (Bel & Fageda, 2007; Hefetz & Warner, 2012). This may explain why we see high levels of insourcing and outsourcing for the same services. Some of these (e.g., street repair, traffic signs, fleet management, building maintenance, park management) meet Williamson's (1999) conditions of low asset specificity, easy contract management, and higher competition. Others (recreation, legal services, elderly services, and public health), do not, but they are areas where nonprofit contracting is common, and this provides another avenue for community control beyond the contract.

We worked with ICMA to add a question to the 2002 survey exploring what reasons motivated managers to contract back in previously privatized services. The question measured six factors, developed from case studies (Ballard & Warner, 2000), that city managers might consider important in their decisions to insource previously outsourced services. In both the 2002 and the 2007 surveys, the most commonly reported reasons for insourcing were inadequate service quality, followed by inadequate cost savings. Other factors included: improvements to local government efficiency, political support to bring the work back in house, problems with monitoring, and problems with contract specification. A similar survey of local governments in Canada found the same ranking of reasons for reversing privatization (Hebdon & Jalette, 2007).

We model the decision to newly outsource or insource considering the following variables: service characteristics; market characteristics; fiscal concerns; management (monitoring, opposition); and controls for metro status, population, and income.

Dependent Variables: New Contracts or New Insourcing

Our interest is in the level of new outsourcing and new insourcing across the full mix of services that a local government provides. This variable is the count of services newly outsourced or newly insourced in 2007, given the total number of services that government provides.

Table 1 provides descriptive statistics for all model variables and shows that on average 3.5 services are newly insourced, while 3.1 services are newly outsourced in 2007 as a proportion of 27 services provided on average. We see considerable variability in both the level of new outsourcing and new insourcing and in the overall number of services provided. See the Appendix for variation in the level of provision by service (code enforcement, public safety, parks and recreation, vehicle

Table 1. Descriptive statistics for model variables.

Variable	Min.	Max.	M	SD
Dependent variable components				
# New outsourced services, 2002 ^a	0.0	19.0	3.2	3.4
# New insourced services, 2007 ^a	0.0	22.0	3.7	3.7
Provision, both years, # services ^a	1.0	58.0	28.0	11.6
Service characteristics				
Asset specificity, 2007 ^b	3.13	4.69	3.47	0.20
Contract mgmt. difficulty, 2007 ^b	2.53	3.80	3.07	0.17
Citizen interest, 2007 ^b	2.46	3.57	2.91	0.14
Market characteristics				
Competition, 2007 ^b	0.00	1.57	0.89	0.25
Percent mixed delivery, 2007 ^a	0.00	0.89	0.20	0.16
Fiscal concerns				
Total govt. exp. per capita, 2002 \$°	105	7,353	1,100	824
Fiscal pressure, 2007, yes=1 ^a	0.00	1.00	0.30	0.46
Inadequate cost savings, 2007 ^a	0.00	1.00	0.12	0.32
Management				
Council manager = 1 ^a	0.00	1.00	0.66	0.47
Problems with service quality, 2007 ^a	0.00	1.00	0.18	0.39
Problems monitoring contract, 2007 ^a	0.00	1.00	0.06	0.23
Monitoring index, 2002 ^a	0.00	1.00	0.37	0.31
Monitoring index, 2007 ^a	0.00	1.00	0.34	0.29
Opposition index, 2002 ^a	0.00	1.00	0.19	0.28
Opposition index, 2007 ^a	0.00	1.00	0.19	0.29
Controls				
Metro status, metro core = 1 ^a	0.0	1.0	0.3	0.5
Metro status, rural = 1ª	0.0	1.0	0.2	0.4
Ln per capita income, 1999 ^d	9.0	11.1	9.7	0.3
Ln population, 2000 ^d	8.2	14.5	10.7	1.1

Notes:

a. 2002 and 2007 International City and County Management Association (ICMA) Alternative Service Delivery Survey, Author analysis. (*N* = 430 responding to both the 2002 and 2007 surveys.)

b. 2007 ICMA Supplemental Survey (n = 164, here expanded to the larger sample as explained in text), author analysis.

c. Census of Government Finance, 2002.

d. Census of Population and Housing, 2000.

maintenance, and data processing are the most commonly provided services across all governments).

Service Characteristics

Transaction cost economics points to two key characteristics of a service, whether the service requires specific assets or technical expertise (asset specificity) and the difficulty of contract specification and monitoring (contract management difficulty; Levin & Tadelis, 2010; Williamson, 1999). In the public sector an additional characteristic is important: the level of citizen interest in service delivery (Denhardt & Denhardt, 2003; Hefetz & Warner, 2012; Nalbandian, 1999). These measures were taken from the supplemental survey we conducted with ICMA in 2007. Each characteristic was ranked on a scale of 1 (low) to 5 (high) for each of the 67 services ICMA measures. The ICMA survey showed significant differences by metro status, so we differentiated values by metro status (core cities, outlying suburbs, and independent rural places) for our sample. See Hefetz and Warner (2012) for values on these factors for each of the 67 services by metro status.

Assuming the sample from the 2007 opinion survey has no response bias for the questions of interest here, we further calculate expected values for these answers for the full sample of 430 places. For example, mean values by metro status were imputed as expected scores for all provided services for each place in the paired survey sample. The final variables used in the regression models are the sum of the expected scores across all services provided divided by the number of services provided.

$$mean_agg_expscore_{ej} = \sum_{j=0}^{s} P_j * expscore_{ej} / \sum_{j=0}^{s} P_j$$

The value is the aggregated expected score across all provided services divided by the number of provided services where $P_j = 1$ if service j is provided and j = 1,2,...,sservice; expscore_{ej} = expected score e for service j, e = asset specificity, contract management difficulty, citizen interest, and competition. The set of services provided varies across place, so the variability of the mean scores provides independent values for each service characteristic for each place.

For our sample, we find that the average asset specificity of the service mix is relatively high (3.47), and higher than the average for contract management difficulty (3.07). The average of managers' rankings for citizen interest is lower (2.91) but is highest among metro core communities, followed by suburban and then rural.³ One of the challenges to outsourcing in urban areas is the complexity of service delivery and the heterogeneity of the urban population, which is reflected in higher levels of citizen interest in the process of service delivery (Frug, 1999). Suburbs are more homogeneous, which makes outsourcing easier (Hefetz et al., 2012b; Joassart-Marcelli & Musso, 2005; Warner & Hefetz, 2002).

We hypothesize that governments, which have a more asset-specific service mix, will have lower rates of new outsourcing and higher levels of new insourcing. We hypothesize that governments, which have a service mix with higher contract management difficulty and higher citizen interest, will have lower levels of new outsourcing and higher levels of new insourcing.

Market Characteristics

Local governments face different local market conditions. The ICMA supplemental survey cited above also measured the number of alternative providers for each of the 67 services (0 = government only, 1 = 1 alternate provider, 2 = 2 alternate providers, 3 = 3 alternate providers, 4 = 4+ alternate providers). Only 10 of the 67 services had mean competition levels over 2.5 providers. Legal services, day care, and vehicle towing were the only services to have more than three providers on average. Using the same method as described above, we calculated the mean level of competition each local government faced for the mix of services it actually provides. The average government in our sample faces an average competition level (across its service mix) of less than one alternative provider. (See Table 1.)

Competition is key to effective contracting (Savas, 1987), and city managers try to encourage competition for their contracts (Johnston & Girth, 2012). We hypothesize that governments, which face more competitive markets, will have higher rates of new outsourcing and lower rates of new insourcing.

We also measured the level of mixed public-private delivery where direct provision and contracting are used concurrently for the same service. Governments use concurrent sourcing to create competition, provide benchmarking, and ensure failsafe delivery (Warner & Hefetz, 2008). Mixed delivery, or concurrent sourcing, is a strategic approach to contracting used in both the public and private sectors (Hefetz et al., 2012a; Parmigiani, 2007). We hypothesize this market management behavior of local governments may provide a pathway to more outsourcing and reduce the need for insourcing.

Fiscal Concerns

A primary motivation for contracting is to reduce costs. To account for fiscal concerns we include per capita local government expenditure for each local government from the Census of Government Finance. In addition, we include variables from the ICMA survey indicating whether the local government faces fiscal stress and whether inadequate cost savings was listed as a reason for reversing contracts. We hypothesize that governments with higher average expenditures will explore both more new outsourcing and new insourcing (in an effort to gain efficiencies). We expect governments reporting fiscal stress will be more likely to explore new outsourcing and new insourcing. Finally, we hypothesize that governments which report problems with inadequate cost savings as a reason for reversing contracts will both have higher levels of new insourcing and lower levels of new outsourcing.

Management

Management is a critical factor in outsourcing, in contract design, monitoring, managing opposition, and ensuring citizen satisfaction (Brown & Potoski, 2003; Girth et al., in press; Hefetz & Warner, 2012; Johnston & Girth, 2012; Marvel & Marvel, 2007). A dummy variable indicates if the municipality has a council manager form of government, as such governments may have more access to professional managerial expertise (Coate & Knight, 2010; Feiock & Kim, 2000). We hypothesize that such governments will engage in more outsourcing and more insourcing.

There are three measures of monitoring. If a government noted unsatisfactory service quality or problems with monitoring contracts as reasons for reverse contracting, we would expect more new insourcing and less new outsourcing. To ensure service quality and contract compliance, monitoring should be associated with new outsourcing. While only 6% of governments acknowledge problems with monitoring their contracts as a reason for insourcing, less than half of respondents in either survey year monitor their contracts. We constructed a monitoring index composed of the following variables (desire to reduce costs, monitoring service quality, monitoring costs, allowing competitive bidding, and experimentation with alternatives).⁴ The monitoring index is included for both years 2002 and 2007 as we expect a lagged effect of monitoring; more monitoring in 2002 could lead to more insourcing in 2007 due to the identification of service delivery problems, while more current monitoring in 2007 should lead to less need for insourcing in 2007.

Managers also must manage opposition to privatization from elected officials, department heads, and line employees. Restrictive labor agreements can also limit outsourcing (Donahue, 1989). We construct an opposition index from four questions on the ICMA survey (opposition from employees, department heads, elected officials, and restrictive labor agreements) for each year, 2002 and 2007. We hypothesize that such opposition could reduce the level of new outsourcing and increase the level of insourcing (reversals).

Controls

Trends in privatization differ by metro status. Suburbs have historically had the highest rates of contracting while metro core and rural communities have had lower rates (Heftez et al., 2012b; Hirsch, 1995; Joassart-Marcelli & Musso, 2005). Insourcing requires a level of capacity to bring the work back in house, which we expect to be higher for metro core governments. We also include controls for population and income. Larger governments with greater fiscal and managerial capacity may be more likely to experiment with both insourcing and outsourcing service delivery. However, more heterogeneous and complex service demands in the largest cities may make outsourcing more problematic and lead to more insourcing.

Model Results

Separate probit models were estimated for new outsourcing and insourcing, relative to the number of services offered.⁵ We found that service characteristics (related to transactions costs) provide only part of the explanation for why places choose to outsource or insource services. If a government has a higher level of asset-specific services, it is more likely to insource and less likely to outsource. (See Table 2.) This reflects the higher transactions costs and greater difficulty of successfully outsourcing asset-specific services.

However, governments whose service mix is on average harder to measure or who have more citizen interest show a higher level of outsourcing and a lower level of insourcing. This is the opposite of what we expected but may reflect Stein's (1990) notion that governments will seek to contract out services that are difficult to measure and have high citizen interest in order to reduce the political burden they face in dealing with such problematic services. Indeed contract management difficulty has the highest marginal effect of any variable in the outsourcing equation.⁶ City managers often prefer contracting with community-based nonprofit organizations as a way to ensure that the complexities of service delivery and citizen interests are managed at the community and neighborhood level (Johnston & Romzek, 2008). Many of the services with high levels of new outsourcing are in public works, social services, and

Table 2. Probit model results, new outsourcing and insourcing, 2002–2007 (number of services in that category as share of all services).

	New outs	ourcing	New inse	ourcing
Variable	Est.	Mar. Eff. (%)	Est.	Mar. Eff. (%)
Service characteristics				
Asset specificity, 2007	-1.8410 **	0.00	1.1980 **	0.46
Contract mgmt. difficulty, 2007	0.5970 **	7.06	-0.7950 **	-0.01
Citizen interest, 2007	2.1640 **	0.03	-0.8270 **	-0.01
Market characteristics				
Competition, 2007	0.1860		-0.0360	
Percent mixed delivery, 2007	1.8750 **	2.32	-1.0690 **	-4.20
Fiscal concerns				
Total govt. exp. per capita, 2002	0.0001 *	0.34	0.0001 **	3.07
Fiscal pressure, 2007, yes $= 1$	-0.1040 **	-0.14	-0.0040	
Inadequate cost savings 2007	-0.1440 *	-0.19	0.1510 **	2.72
Management				
Council manager $= 1$	0.0010		-0.0080	
Problems w/service quality 2007	-0.0190		0.0600	
Problems monitoring contract 2007	0.0060		-0.0390	
Efficiency/monitoring index, 2002	-0.1110		0.2230 **	2.51
Efficiency/monitoring index, 2007	0.0640		-0.1270 *	-1.14
Opposition index, 2002	-0.0800		0.1590 **	1.57
Opposition index, 2007	0.1120 **	0.11	0.0670	
Controls				
Metro status, metro core $= 1$	-0.2050 **	-0.25	0.1380 *	2.47
Metro status, rural $= 1$	0.7090 **	2.79	-0.7250 **	-7.11
Ln population, 2000	-0.0940 **	-0.02	0.0520 **	3.36
Ln Per Capita Income, 1999	0.0010		0.0520	
Constant	-2.5410		-1.3360	
Chi square log likelihood	1194.6 **		1199.6 **	

Note: N = 430.

p < .05 * p < .01

support functions (maintenance, data processing). New outsourcing is experimenting with services that have higher transaction costs, suggesting an experimentation process exploring new areas for contracting, which makes monitoring all the more important.

Two economic aspects are important: market management and finances. Market management tells an interesting story. We see that level of competition is not significant in either model. Governments face a level of competition in the market that they cannot do much about. However, mixed delivery, or concurrent sourcing, where government stays in the market by providing the service alongside private contracts, is complementary to new outsourcing and a substitute for insourcing as expected. This concurrent sourcing is an active form of market management (Hefetz et al., 2012a), which can provide benchmarking for new contracting and ensure government capacity to reinternalize the contract if necessary; this competitive pressure can make reversals unnecessary. Contrary to expectations, fiscal stress leads to less new outsourcing, but there is no significant effect of fiscal stress on insourcing. As expected, per capita expenditures are higher both for places that engage in new outsourcing (this could be a motivator to outsource), and for those that insource (as more services are now in house). Concern with inadequate cost savings from outsourcing is associated with a lower level of new outsourcing and a higher level of reversals, as expected. In fact, inadequate cost savings are a primary driver of insourcing.

Monitoring and opposition are two management and political features measured in our models. Although we saw that problems with service quality was the top reason governments cited for reversing contracts, it was not significant in either model, nor did recognition of problems with monitoring have any effect on contracting direction. It appears that what matters is not what governments say are problems, but what they actually do about them. Monitoring levels show no impact on levels of new outsourcing but show an important lagged effect on insourcing, as expected. The lack of monitoring of outsourced contracts leads to the need to insource in later periods (similar results were found in earlier studies; Hefetz & Warner, 2004, 2007). In the insourcing model we see governments that had higher levels of monitoring in 2002 have higher rates of insourcing in 2007, as expected. Prior monitoring exposes problems, which can be addressed by reversing contracts over time. As expected, current monitoring levels are associated with lower rates of insourcing, suggesting that monitoring can prevent the need for reversals.

A similar lagged effect is found with opposition. More opposition to privatization in 2002 is associated with a higher level of insourcing in 2007, but current opposition has no effect. Prior opposition has no relationship to new outsourcing and current opposition has a weak but positive relationship to new contracting. This is the opposite of what such opposition would intend, but managers have learned over time how to manage opposition and still pursue contracting (Hefetz & Warner, 2012). These results suggest there are accountability and political voice aspects to reversals but these are lagged effects, more important in explaining reversals than in explaining new outsourcing.

Metro status shows significant differences. Metro core cities have higher levels of insourcing and lower levels of outsourcing. The same is true of more populated places. This may reflect the greater challenges with contracting in more heterogeneous urban environments and greater management capacity of larger cities. Lack of suppliers in complex urban markets or more formalized labor opposition in more populous urban governments could also explain this metro difference, but our controls for competition and opposition already account for those factors.

Rural municipalities, by contrast, show higher levels of new contracting and lower levels of reversals. Rural areas were slower to experiment with contracting in the 1990s (a slower adoption curve), but their privatization rates rose in the 2007 survey. Due to their smaller size, they have less capacity to reverse contracts once the service has been outsourced. Indeed, rural has the largest (negative) marginal effect of any of the explanatory variables in the insourcing equation. Suburbs are the reference category, fewer reversals than metro core but more than rural places, and more new contracting than metro core but less than rural. Suburbs were the early innovators in contracting and their rates of for-profit privatization reached 20% of service delivery in 1997 and have not risen since (Hefetz et al., 2012b).

Discussion

These results support how understanding contracting as a dynamic process is important. New outsourcing and new insourcing are tools used equally by city managers in our sample in the 2002 to 2007 period. Transaction costs, competition, fiscal concerns, management, monitoring, opposition, and metro status are all important factors differentiating use of these tools. The dynamics of outsourcing and insourcing urban services may reflect a pragmatic, experimentation process on the part of U.S. local government managers. Yet, transaction costs explain only part of the process and work in more complicated ways than simple theoretical predictions. That managers are more likely to newly outsource services with higher contract management difficulty and citizen interests suggests a willingness to push the edges of contracting to services where transaction costs are higher. Monitoring is critical in such circumstances, and the lack of higher monitoring among places with higher outsourcing is cause for concern. We do find a monitoring effect on insourcing. Early monitoring can identify problems with outsourcing that lead to reversals, while current monitoring can reduce the need for insourcing.

Lack of cost savings is one factor that drives the move to re-internalize service delivery, but it is not the only factor. Opposition also can lead to more insourcing, but we see it has little impact on new outsourcing. Pragmatic city managers know how to manage opposition. What is required for effective contracting is capacity: that is, managerial capacity to monitor contracts, manage opposition, and structure competition in the market place. Mixed public and private delivery (concurrent sourcing) is a strategy used to complement outsourcing and to reduce the need for insourcing by ensuring more competition in the market for urban services. Complexity of urban service provision makes larger urban governments less likely to outsource and more like to insource. As urban governments experiment with new outsourcing, they also use insourcing and concurrent sourcing to ensure a road back should the contract fail.

Responding city managers recognize the importance of market management, but more attention needs to be given to monitoring, especially as city managers experiment with new outsourcing for services with high contract management difficulty and where citizen interest is high. Without adequate attention to monitoring contracts, failures leading to more reversals are likely.

Conclusion: Implications for Planners

As local governments experiment with contracting, they recognize that contracting is a dynamic process. Our analysis has shown that levels of new outsourcing are matched by reversals (insourcing) among local governments across the United States. There is considerable variation by service, and even within the same service, some governments will newly outsource while others insource previously privatized services. Not all contracting is successful. Markets shift, citizen preferences change, and service requirements change.

Cities should retain some capacity to re-internalize previously contracted work so that they can ensure failsafe delivery and responsiveness to citizen interests. Outsourcing and insourcing are tools in the city manager's repertoire. Concurrent sourcing (mixed public and private delivery) is another important market management tool used in conjunction with insourcing and outsourcing. But using these tools requires capacity of city managers, staff, and resources, a capacity that can be lost if cities sell off assets or privatize core functions. This is not an ideological stance; it is a pragmatic approach that better allows cities to manage markets to secure the most gains for their residents.

Insourcing is a long-standing but understudied component of contracting. Earlier studies of the 1992–1997 period found insourcing was a substitute for monitoring (Hefetz & Warner 2004). In the 1997–2002 period, when insourcing was one and a half times the level of new outsourcing, we found insourcing was used to reduce transactions costs and to ensure a social choice balance between markets, planning, and citizen satisfaction (Heftez & Warner, 2007). In the current time period, we see the continued importance of transactions costs and monitoring as well as the critical importance of concurrent sourcing to ensure competition and government capacity to bring work back in house.

Contracting urban service delivery is a dynamic reform process. Experience with contracting has made urban managers more aware of the high transactions costs associated with infrastructure contracts (Whittington, 2012/this issue), the problems managing limited competition in local service markets (Girth et al., in press; Johnston & Girth, 2012), and concerns with accountability in long-term infrastructure contracting (Dannin, 2010; Siemiatycki, 2010). Planners have voiced special concerns over failure to consider long-term planning horizons and changing societal needs when structuring long-term contracts in arenas such as transit, parking, and airports (Ashton, Doussard, & Weber, 2012/this issue; Baker & Freestone, 2010; Sclar, 2009). Relational contracting is one way to achieve a more flexible approach (Sclar, 2000). Public-private partnerships are being promoted as an alternative to privatization because they maintain a relational interaction (Savas, 2000). However, such relational contracts can lock in partners, undermine competition, and raise accountability risks (Ashton, et al., 2012/this issue; Miraftab, 2004; Siemiatycki, 2010). A dynamic approach, using insourcing as a complement to outsourcing, offers another solution that maintains the discipline of markets and the arms' length contracts necessary to ensure monitoring and accountability. City managers recognize the importance of these sourcing tools to maintain a dynamic contracting process over time.

Notes

1. The population distribution of the paired 2002–2007 subsample is similar to the full 2002 and 2007 samples, except that smaller size rural places under 10,000 are less represented in the paired survey ($\chi^2 =$ 11.08, *PV* = 0.05 for places over 10,000 population). No difference was found in analysis of variance (ANOVA) of the means of average per capita income of the two surveys and the paired subsample (*F* = 2.305, *p* = .129).

2. The response rate for the supplemental survey was 7.4% (2,207 surveys sent, 164 responses). The majority of respondents to the supplemental survey were from suburban municipalities (53%), and the rest were from metro core (25%) and rural independent municipalities (22%). This metro status breakdown was similar to the full 2002 survey (suburbs, 50%; rural, 28%; metro core, 22%), and the full 2007 survey (suburbs, 53%; rural, 30%; metro core, 17%). It is important to note that, while response rates from both ICMA surveys are low enough to caution against using the results as representative of their populations, these are the best data available thus far and a reasonable basis for an exploratory study.

3. In the full supplemental survey, assessment of citizen interest follows an urban (3.12), suburban (2.94), rural (2.85) gradient and these differences are significant by Duncan Subgroup ranking test.

4. The monitoring index and the opposition index were created by summing positive responses to component questions and dividing by the total number of questions in the index. $\Sigma fi/N$, where f = 1 if checked yes to question and 0 if not, and I = 1, 2, ... N for questions.

5. A probit transformation belongs to a family of linear probability models that produce predictions within the [0,1] range, whereas an ordinary least squares (OLS) procedure would predict results outside this range (Aldrich & Nelson, 1984). The two most common link functions for this type of transformation are logit and probit. The probit transformation takes the form of the standard normal distribution and calculates probability from the integral of the standard normal density function from infinite to the estimated score Xi β . For comparison, we also tested the model using a logit link and got the same significance level for all variables in the model.

6. We calculate the marginal effects in order to make the effects of the different independent variables comparable to each other. The marginal effect of the jth independent variable is the difference between the probabilities of the standard deviation around the mean. In the probit case, Marginal Effect j is

$$ME_{j} = \frac{dP}{dX_{j}} = \text{CND}\left(a + b_{j}(\overline{x_{j}} + sd_{x})\right) - \text{CND}\left(a + b_{j}(\overline{x_{j}} - sd_{x})\right)$$

where CND is the cumulative normal distribution for a value of z.

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Appendix

Table A1. Service Delivery Dynamics, 2002–2007.

Service	<i>n</i> Providing	New outsourcing (%)	New insourcing (%)	Stable public (%)	Continued contracting (%)
Residential waste collection	216	5.6	6.9	41.2	46.3
Commercial waste collection	127	7.9	8.7	25.2	58.3
Waste disposal	148	8.8	8.1	25.0	58.1
Street repair	339	17.4	16.2	19.8	46.6
Street/lot cleaning	268	11.6	12.3	58.2	17.9
Snow plowing/sanding	237	10.5	13.5	61.2	14.8
Traffic sign maintenance	284	15.8	19.0	26.4	38.7
Parking meter maintenance	75	13.3	9.3	73.3	4.0
Tree trimming/planting	298	16.4	14.4	17.4	51.7
Cemeteries maintenance	47	25.5	31.9	0.0	42.6
Inspection/code enforcement	348	10.1	11.8	69.0	9.2
Lots/garages operation	118	16.9	12.7	45.8	24.6
Bus system maintenance	86	9.3	10.5	27.9	52.3
Paratransit system maintenance	67	13.4	6.0	28.4	52.2
Airport operation	104	9.6	16.3	32.7	41.3
Water distribution	257	9.7	9.3	71.2	9.7
Water treatment	214	8.9	79	66.8	16.4
Sewage collection/treatment	262	8.0	9.5	57.3	25.2
Sludge disposal	191	18.8	10.5	28.3	42.4
Hazardous materials disposal	116	10.3	9.5	10.3	69.8
Electric utility management	51	9.8	17.6	43.1	29.4
Gas utility management	21	4.8	4 8	38.1	52.4
Utility meter reading	206	13.1	87	67.0	11.2
Utility hilling	200	16.4	12.7	59.1	11.2
Crime prevention/patrol	363	6.6	8.5	79.1	5.8
Police/fire communications	324	11.4	12.7	60.8	15.1
Fire prevention/suppression	293	6.8	8.9	72.0	12.3
Emergency medical service	254	7.9	12.2	47.6	32.3
Ambulance service	193	9.3	11.9	45.6	33.2
Traffic control/enforcement	297	8.4	57	79.1	67
Vehicle towing and storage	68	5.9	74	15	85.3
Sanitary inspection	1/2	10.6	1/1 8	54.2	20 4
Insect/rodent control	97	12.6	14.0	29.9	/3 3
Animal control	267	9.7	7.9	55.8	26.6
Animal shelter operation	156	9.0	7.5	30.1	44.9
Davcare facilities operation	27	14.8	11.1	25.9	48.2
Child welfare programs	52	9.6	17.3	2).)	51.9
Elderly programs	19/	16.5	17.5	9.3	58.8
Hospital operation/management	8	10.5	0.0	9.9	87.5
Public health programs	92	1/.1	19.6	20.7	67.5 45.7
Drug/alcohol treatment programs	58	3 /	3 /	17	91 /
Montal health programs)8 /8	6.3	<i>J.</i> 4 <i>4</i> 2	1./	91.4 85 /
Drisops/isils	128	1/1	4.2	4.2	21.0
Homeless shelters operation	120	0.0	1/.2	0.0	05.5
Lob training programs	61	0.0	4.)	0.0	93.3 70.5
Wolfere clicibility determined	56	14.0	4.7	7.0 /0 0	/U.) 26 0
Proposition facilities assister)ن 240	10.1	0.7 175	40.2	20.0
Recreation facilities maintenance	24Z	1).8	1/.5)).8 /7 /	12.7
Convention contraction distant	530 76	14.3	10.0	4/.4	21./ 21.6
Convention centers/auditoriums	/0	10.5	10.5	4/.4	21.0
Cultural/arts programs	125	11.2	19.2	9.6	60.0

Table A1 (continued).

Service	n Providing	New outsourcing (%)	New insourcing (%)	Stable public (%)	Continued contracting (%)	
Libraries operation	196	12.8	8.7	51.5	27.0	
Museums operation	74	16.2	10.8	16.2	56.8	
Buildings/grounds maintenance	379	14.8	20.3	34.8	30.1	
Building security	258	12.4	8.1	57.0	22.5	
Heavy equipment maintenance	341	14.4	22.9	34.0	28.7	
Emergency vehicles maintenance	321	13.4	20.6	31.5	34.6	
All other vehicles maintenance	352	14.8	21.0	36.1	28.1	
Payroll	370	3.2	2.4	89.5	4.9	
Tax bill processing	197	13.7	12.2	53.3	20.8	
Tax assessing	151	10.6	9.3	49.7	30.5	
Data processing	329	13.1	15.2	59.6	12.2	
Delinquent tax collection	195	13.8	15.4	37.9	32.8	
Title records/plat map maintenance	126	14.3	8.7	54.8	22.2	
Legal services	285	15.4	18.6	13.0	53.0	
Secretarial services	327	6.7	7.0	83.5	2.8	
Personnel services	289	9.3	12.1	77.2	1.4	
Public relations/information	336	13.4	13.7	66.1	6.8	

Note: Percentage of responding municipalities providing service by each form of delivery; "*n* Providing" is the number of governments providing the service in both survey years.

Sources: 2002 and 2007 International City and County Management Association Alternative Service Delivery Survey, author analysis.