

The Dynamics of Local Service Delivery Arrangements and the Role of Nonprofits

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Abstract: This article examines the relationship between “contract failure” (the bringing “in-house” of previously contracted services) and service characteristics. The connection between contract failure and nonprofit and for-profit status is also explored. The analyses are performed using International City/County Management Association data and three service typologies constructed by previous scholars. The findings indicate that: 1) contract failure is more common than anticipated, and is actually relatively more common than privatization; 2) while service characteristics are associated with the frequency of contract failure, the nexus is tenuous; 3) nonprofit entities are less prone to contract failure than their for-profit counterparts.

Keywords: alternative service delivery, contract failure, contracting, local government, nonprofit, service typology

The literature on local contracting and privatization is expansive, yet virtually all of this work has focused on the initial choice to contract out. By observing how service production changes over time, this article demonstrates that the process is dynamic. As more local governments adopt third-party arrangements to deliver services, scholars have endeavored to understand why governments choose particular modes of service production (i.e., make or buy) and whether they prefer particular sectors if they privatize their services.^[1–5]

Much of this work assumes local governments pursue efficiency gains not by simply privatizing their services, but also by carefully choosing different service delivery modes that fit their circumstances. Along with market and institutional factors, service characteristics, and how they influence local

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governments' choice of production mechanisms, have been extensively explored in this line of research. In general, the findings suggest that services are more likely to be privatized when the nature of those services is less subject to market failure or high transaction costs. On the other hand, services that are difficult to measure, require highly specialized investments, or have important distributional goals are expect to be produced in-house by local government or through joint contracting rather than complete contracting in which the entire production and distribution of a service is contracted out. Existing studies implicitly suggest that certain types of services are, by their nature, less likely to be privatized and thereby more likely to fail if they are privatized. Most of this work has neglected change in service delivery arrangements over time. By focusing on the dynamics of service production we can identify how the characteristics of goods influence both decisions to contract out services currently produced in-house and to bring back in-house services that are currently contracted out. We apply the term "contract failure" to refer to instances in which contracted services are taken back in-house by the government providing the service.

Contract failure can be conceptually distinguished from market failure because the former could be limited to specific contract termination resulting from poor contract design and management, poor provider performance, or undesirable contract outcomes^[6] as well as for political or parochial reasons. On the other hand, the latter refers to "the plural-systemic failure of contractual transactions."^[7] In an attempt to examine the links between these two concepts, we examine whether contract failures experienced by local governments are systematically associated with factors that contribute to market failures. In particular, we are interested in whether the models predicting the relationship between service types and service production mechanisms can also explain contract failure. That is, does the likelihood of contract failure increase when mismatches occur between the service types and the modes of service delivery?

We examine three classifications of services and related service production mechanisms suggested by Ferris and Graddy,^[1] Stein,^[3] and Brown and Potoski^[8,9] to explain changes in local government service arrangements over time.

THE ROLE OF NONPROFITS, AND CHANGES IN SERVICE DELIVERY DECISIONS OVER TIME

To accomplish the tasks laid out above, we examine how service delivery arrangements have changed over time. Previous research about local government contracting decisions omits two important aspects of government policy making. First, the policy process is not static and local service provision decisions are not exceptional in this regard. Yet, most studies examine local government service delivery decisions at one time point.

Cross-sectional analyses do not capture how service characteristics and other institutional and market factors affect government service arrangements over time. For example, the current mode of production could seemingly be associated with certain service characteristics at one time point, but will such an association also be observed in the future? In other words, how stable are the local governments' service delivery decisions in the long term? Despite the importance of asking these questions, cross-sectional analyses cannot address these concerns. Furthermore, such methodological limitations constrain the theoretical and empirical implications of prior privatization studies. Are the hypothesized relationships between service types and service delivery modes established in the previous literature still supported? More importantly, what if contracts fail and governments decide to take the previously privatized services back in-house? Is contract failure related to service types in any way? We expand the time horizon in an effort to answer these questions. To do so, we take a longitudinal look at local government service delivery arrangements by examining survey data from two different time periods.

We are also interested in comparing nonprofits and for-profit firms in terms of their association with the different service types and delivery arrangements. Researchers have long recognized nonprofits as quasi-governmental actors capable of delivering collective goods.^[10] Moreover, their roles in delivering publicly financed services have increased in recent years as more local governments rely on alternative service production mechanisms.^[11-14] A common notion with regard to why nonprofits are attractive external production choices for the provision of certain government services is that unlike for-profit providers, they do not seek profits and thus are less likely to pursue opportunistic behavior.^[15-16] Nonprofits are also considered to have stronger community ties and are believed to provide higher quality services than their for-profit counterparts.^[17-18] Given the attributes associated with nonprofits, if services are collective in nature, have complex and difficult-to-evaluate goals, are only minimally conducive to efficiency gains (due to transaction costs, for example), and thus, are theoretically less subject to privatization, can contracting these services out to nonprofits rather than to for-profit firms lower the chances of contract failure?

SERVICE CHARACTERISTICS AND GOVERNMENT SERVICE PRODUCTION MECHANISMS

In this section we examine how Ferris and Graddy,^[1] Stein,^[3] and Brown and Potoski^[8,9] predict local governments' production mechanism preferences based on the characteristics of the services. While their hypotheses do not directly address the factors that contribute to contract failure, we argue that the service characteristics these authors identify as being least conducive to privatization should be positively associated with contract failure. Additionally, we are

interested in examining which service characteristics are associated with non-profit and for-profit contracting and how these factors interact regarding contract failure.

Ferris and Graddy's Four Service Categories

In their pioneering work, Ferris and Graddy identify four different groupings of services sharing similar characteristics that affect local governments' production decisions.^[1] They are: public works, public safety, health and human services, and recreation and arts. Ferris and Graddy argue that services in the public works category are, in general, characterized by tangible outputs, easy evaluation of service quality, high levels of provider availability (mostly for-profit firms), intensive labor requirements, no important distributional goals, and low possibility of moral hazards.^[1] Therefore, they argue that contracting with the private sector, especially with the for-profit firms, is a good choice for mode of delivery for this category of services.

Services in the public safety category can contain more than one type of alignment. Some services (e.g., crime patrol and fire prevention) tend to have the potential for greater moral hazard or service disruption concerns than others and, thus, are less likely to be privatized. Meanwhile, other services (e.g., vehicle towing and parking enforcement) tend to have fewer moral hazard concerns, more tangible outputs/outcomes, and greater market availability; thus, they are more likely to be privatized. Hence, clear-cut predictions about the relationship between service type and contracting decisions and contract failure are difficult to make.

The services making up the health and human service category also have characteristics that drive both privatization and in-house production simultaneously. That is, among the four categories identified by Ferris and Graddy, this category has the least tangible outputs and its performance is difficult to measure and thus should be less likely to be privatized. However, health and human services are generally labor intensive and have a great pool of non-profit providers with qualified professionals that the governments can choose from. These two factors drive the governments to select privatization for their service delivery mode. Contracting with nonprofits can be a good choice for privatization because nonprofits have strong historical ties to health and human service delivery.^[10] Nonprofits can also compete with for-profits in terms of labor costs owing to their ability to use volunteers. This can offset for-profits' cost savings gained through the employment of part-time labor with little to no employment benefits.

Ferris and Graddy's last category is concerned with arts and recreation services (including libraries and museums).^[1] Again, there are contradictory forces for privatization and in-house production. Most services in this category tend to have relatively simple and tangible outputs/outcomes, no serious

moral hazard, distributional goal, or service disruption concerns, and cost savings potential due to capacity utilization if privatized. Many arts programs are also labor intensive where moving production to the private sector can save costs due to differing labor practices (e.g., lower wages, fewer benefits, more part-time employment, etc.).

On the other hand, Ferris and Graddy note that recreation services and libraries tend to be provided more in governmental setting than the private setting simply because of low availability in those service areas.^[11] If private sector availability does exist, however, a likely choice for service production is contracting with nonprofits because many services in this category tend to be more collective than individually consumed goods, which makes nonprofits (i.e., extra- or quasi-governmental providers^[10]) preferable to for-profit firms. Moreover, the level of local government provision often falls short for art and leisure types of services that are demanded by a relatively small segment of local populations.^[10] Historically nonprofits, sponsored and financed by local volunteers and philanthropists, have stepped in to fill the void.

In our analyses, we examine whether Ferris and Graddy's predictions about service type and delivery arrangement are supported over time. Furthermore, we test whether their typology can help us understand contract failure. As alluded to above, most of their service groupings are problematic because within them are conflicting forces driving both internal production and privatization. To minimize concerns in this regard, we limit our analysis to Ferris and Graddy's first and third categories (i.e., public works, and health and human services).

The public works category is relatively coherent in terms of its likelihood for successful privatization. Since we define our term "contract failure" as a case where the government takes a contracted service back in-house, we expect to see low percentages of contract failure in this category of services. We also anticipate contracting with for-profit firms should predominate. Although the case for health and human services is not as straightforward, from our reading of Ferris and Graddy we infer that privatization should also be common for this category, owing mainly to the availability of nonprofits to perform these functions, the similar goal orientations between nonprofits and providing governments, and the potential efficiency gains associated with lower labor costs in the private sector. Hence, we posit that nonprofit contracting should be common and contract failure relatively rare in the health and human services category.

Stein's Classification of Four Types of Local Goods

Stein criticizes researchers who believe in the unquestioned superiority of the private sector and contends that efficiency gains are contingent upon achieving the proper alignment between the attributes of the different service responsibilities and the methods local governments adopt for the delivery of those services.^[3] To empirically examine the relationship between these two aspects,

Stein adopts a typology developed by Ostrom and Ostrom regarding service attributes. Ostrom and Ostrom identify four types of goods and services based on two traits: exclusion and jointness of consumption.^[19] Exclusion “occurs when producers of a good or service deny buyers its consumption or its use at a relatively low cost.”^[19] Jointness of consumption “exists when one person’s consumption of a good or service does not diminish the consumption of that particular good by another person.”^[19] “Subtractability,” where the consumption of a good or service clearly decreases consumption of that particular good by another person, is therefore the counterpart of “jointness of consumption.”

Based on these two traits, Ostrom and Ostrom identify four different types of goods and services: private, toll, common pool resources, and collective goods.^[20] Private goods are both excludible and subtractable. Examples include residential solid waste removal, vehicle towing, and hospital services. At the other extreme are collective goods, which are characterized by non-excludability and jointness of consumption. Such service areas as public health, animal shelter, or fire prevention are examples. In between these two extremes are toll goods and common pool resources.

Toll goods are excludable but non-subtractable. For instance, parking lots, libraries, museums, or water treatment services can be limited to certain customers for use, but their consumption does not necessarily reduce consumption by other potential customers. Unlike toll goods, common pool resources are goods and services that are subtractable, but exclusion is difficult to achieve. Typical examples are emergency medical services and public park facilities.

Stein identifies different alignments among these four service attributes and local service delivery arrangements.^[3] According to his argument, most private goods and toll goods are expected to be provided through non-direct service delivery modes including contracting out (to gain more efficiency), while most collective goods are better off delivered through direct service production by governments. He argues that private vendors are inadequate for this type of services. Efficiency gains could be obtained through privatizing common pool resources if governments can control the access to the good and “set a price for the sale of the resource.”^[21]

Unlike Ferris and Graddy, Stein’s alignment between service type and production mechanism is relatively straightforward at least for the private and collective services categories. Focusing on these two groups, we examine whether Stein’s hypotheses regarding service attribute and delivery method alignment hold over time. We expect that private services should enjoy high levels of contracting. While Stein does not explicitly differentiate between for-profits and nonprofits as separate production choices in his analysis, his arguments lead us to believe that for-profits should be the favored alternative delivery mechanism for this category of services. We posit that contract failure rates should be low when contracting occurs.

Regarding collective services, we believe traditional, in-house production should dominate over time. While Stein did not address the roles of nonprofit

contractors, we believe that when contracting of these services occurs, non-profits should be preferred for the same reasons mentioned above (see the discussion regarding Ferris and Graddy's arts and recreation services). For these reasons, we also hypothesize that collective services contract failure rates should be lower for nonprofits in comparison to for-profits.

Brown and Potoski's (2001) Transaction Costs Model

Brown and Potoski emphasize the "transaction costs" associated with certain types of service characteristics.^[9] Transaction costs refer to the "comparative costs of planning, adapting, and monitoring task completion under alternative governing structure(s)."^[23] "Williamson argues that organizations select governing structures to carry out different functions in ways that minimize transaction costs as well as traditional production costs such as fixed assets, labor, and capital."^[22,23] He identifies three factors that determine the extent of transaction costs: asset specificity, metering, and frequency of contracting.^[22] Brown and Potoski adopt the first two factors in developing their service type typology.^[8]

"Asset specificity" is related to the specialized investments required to perform a task. Services requiring high asset specificity, such as large equipment or computer software specifically designed to perform certain functions, tend to benefit the first rounder or existing provider in the bidding process because of the high barrier to initial entry into the market. Services with high asset specificity thus tend to provide incumbent providers with monopolistic bargaining power in subsequent rounds of procurement negotiations. Monopolistic contracting environments increase transaction costs for local governments because monopolistic power gives the providers more chance to behave opportunistically.

"Metering" refers to the degree of difficulty associated with measuring outputs and monitoring whether contractors comply with contract requirements and accomplish contract goals. Non-metering or difficult-to-measure services increase transaction costs to local governments even more than do services with high asset specificity. This is so because governments cannot efficiently and effectively assess whether, and to what extent, vendors hide their true performance, thus maximizing the potential for opportunistic behavior on the part of contractors. Brown and Potoski define four different types of service characteristics based on these two criteria: meterable market services, meterable monopoly services, non-meterable market services, and non-meterable monopoly services.^[8]

The services most likely to be privatized are meterable market services because these services do not require high levels of specialized technical knowledge, labor, or capital investments and their outcomes are easily evaluated. Brown and Potoski predict that the favorite production mechanism for meterable market services should be contracting with for-profit firms.^[8] Since contracting seems a good fit for these services, we expect low levels of contract failure. On the other extreme, there are non-meterable monopoly services that not only are

difficult to evaluate, but also require high asset specificity. Brown and Potoski hypothesize that these are services that are the least likely to be privatized.^[8] If they are privatized, we expect to see high rates of contract failure.

Brown and Potoski predict that non-meterable market services and meterable monopoly services should hold a middle ground.^[8] That is, local governments should tend to privatize these services more than non-meterable monopoly services, but less than meterable market services. Due to the relatively higher transaction costs of these services as compared to meterable market services, however, governments are expected to be more likely to select contracting with nonprofits because they may believe that choosing this delivery mode can mitigate the otherwise high levels of opportunism that might be expected if non-meterable market and meterable monopoly service delivery is contracted to for-profit organizations. We therefore expect relatively high contract failure rates for these services, but the failure rates would be lower in nonprofit contracting than in for-profit contracting.

DATA AND METHODS

We use the 1997 and 2002 International City/County Management Association (ICMA) "Profile of Local Government Service Delivery" surveys to perform our analyses. Every five years, beginning in 1982, ICMA conducts a comprehensive survey that queries municipal and county governments as to the services they provide and their delivery arrangements as appropriate (64 specific services were included in the 1997 survey and 67 in the 2002 survey). These ICMA surveys are considered among the largest and most comprehensive information gathering efforts regarding local government service delivery mechanisms. Since most empirical studies on local government service delivery decisions are based on these same ICMA data, using these data sets allows us compatibility with prior research. A potential concern for these surveys is their fairly low response rates—32.0 percent and 23.9 percent for the 1997 and 2002 surveys, respectively.

The unit of analysis is the individual services provided for that set of local governments responding to both the 1997 and the 2002 surveys. There are a total of 12,814 observations from 539 local governments (i.e., town, city, county). We pool the 1997 and 2002 data and restructure the resulting data set such that each case represents a jurisdiction service year pair (e.g., case A contains city A's production choice for service 1 for both 1997 and 2002). We only include those locales that responded to both surveys, so while the number of responses was 1,586 in 1997 and 1,283 in 2002, our resulting pool is limited to 539 jurisdictions. The transformed data set contains 34,496 cases (i.e., 539 locales multiplied by 64 services). In many cases, particular services were not provided by jurisdictions in one or both years. Since our goal is to examine delivery mechanism choice over time, these cases are dropped from the analyses. Additionally, some cases lacked responses regarding service provision or

delivery choice necessitating their removal. Our final working data set includes 12,814 cases.

Once the data are in the proper format, cases are coded to reflect their membership in the various categories of the service typologies discussed above (specific typology coding rules can be found in Appendix A.) These typologies are then used to examine the role of service characteristics on delivery mechanism choice and contract failure.

We focus our attention on the traditional service arrangement (i.e., in-house delivery by the providing government) and two alternative delivery modes—for-profit and nonprofit contracting. We code cases as “nonprofit” if nonprofit entities are used in any form to produce the service. Potential ways in which nonprofits could be used are: complete production through nonprofit contracting, joint contracting with nonprofits (i.e., the providing government shares production with nonprofit organizations), contracting with nonprofits and other alternatives (i.e., other governments or for-profits).

The same scheme is used to code for-profits. This, not surprisingly, leads to some overlap between the categories since some jurisdictions simultaneously contract with both nonprofit and for-profit firms to produce given services. While it might seem preferable to examine nonprofit and for-profit contracting in a mutually exclusive manner, such an approach is problematic. Contracting purely through nonprofits or for-profits is fairly rare, combining to account for only 8.1 percent of observed production arrangements in 1997 and 6.9 percent in 2002. The numbers are particularly small for nonprofits—1.5 percent and 1.3 percent for 1997 and 2002, respectively (see Table 2 in the “Results” section). So, from a practical perspective, such small numbers make any type of generalizable analysis unlikely. A potentially greater concern, however, is that such a coding scheme misrepresents what is going on in the real world and underestimates the importance of such alternative delivery modes. We feel our method more accurately reflects reality and allows for more comprehensive analysis.

Once delivery mechanism choice is accounted for, each case is coded as to its status in 1997 and 2002 allowing for longitudinal comparison. We begin by presenting frequencies for the aggregate data set to give the reader a feel for the overall dynamic environment. We then display results for nonprofit and for-profit contracting. Finally, we expand our examination to account for service type (as defined by the previously mentioned typologies) as well as for-profit and nonprofit service delivery.

RESULTS

Table 1 reports service production mechanisms for all jurisdictions that responded to both the 1997 and 2002 surveys. We restrict our sample to only those cases in which a service was provided in each year and the delivery mode was identified. “In-house” production denotes that responding governments

Table 1. Changes in Production Mechanism Choice over Time, 1997 to 2002 (All Cases)

Service Provision Mode over Time	percent of cases
1997: in-house	49.7
2002: in-house	
1997: in-house	13.1
2002: other	
1997: other	12.3
2002: in-house	
1997: other	24.9
2002: other	
	n = 12,814

produced the service, while “other” indicates that some other form of delivery mechanism was utilized. Other forms of production could include: joint production, contracts with other governments, for-profit firms, or nonprofit organizations, or a combination of these. From Table 1, we see that in-house service production is the dominant choice with nearly 50 percent of cases falling into this category in both years. Conversely, only about 25 percent of services were provided through an alternative format in both 1997 and 2002.

Of particular interest to our study are the two middle rows of Table 1, which indicate changes in the production mechanisms over the timeframe of the study. It is often argued that alternative service delivery is the “wave of the future” and is occurring at an accelerating rate over time.^[24] However, our data indicate that this is not necessarily the case. While 13 percent of cases move from in-house in 1997 to an alternative contracted form in 2002, an almost equal proportion (12.3 percent) was brought back in-house during the same period (difference = .008, $p = .064$). Hence, it appears that contract failure is nearly as common as choosing to privatize service production. Of course, this is a rough first cut at examining these changes. Below, we take a more nuanced look.

Additional insights can be garnered by disaggregating the “other” category in Table 1. Specifically, we compare the patterns associated with for-profit versus nonprofit contracted delivery for 1997 and 2002. The “Purely nonprofit (for-profit)” category indicates that the service is produced completely through contracts with nonprofit (for-profit) organizations. “Joint with nonprofit (for-profit) only” represents those instances in which the contracting government shares service production with only nonprofit (for-profit) entities. Finally, “Other combinations including nonprofit (for-profit)” represents those cases where nonprofit (for-profit) production is utilized in conjunction with other alternatives, but not jointly with the contracting government. We include “in-house” as a frame of reference to help understand the scale of production in each category. Therefore, Table 2 only includes those cases where service

Table 2. Production Mechanism Choice, 1997 and 2002 (Focus on Cases Utilizing In-House, Nonprofit, or For-Profit)

Provision Mode	1997 (percent of cases) ^a	2002 (percent of cases)
In-house	62.8	62.0
Purely nonprofit	1.5	1.3
Joint with nonprofit only	1.3	1.2
Other combination including nonprofit	1.2	1.5
Purely for-profit	6.6	5.6
Joint with for-profit only	10.4	11.7
Other combination including for-profit	1.7	1.8
	n = 12,814	n = 12,814

^aColumn percentages do not sum to 100% due to exclusion of some categories of service production.

delivery was provided in-house or through for-profit or nonprofit organizations in some form—all other types of service production are not reported.

A couple of interesting contrasts between nonprofit and for-profit contracting are noted in the table. Nonprofit contracting appears generally less common than for-profit contracting. Only about 4 percent of services were produced by nonprofits in each of the years. For-profits, on the other hand, accounted for approximately 19 percent of service delivery across the years. Also worthy of mention is that nonprofits were essentially equally likely to be found in any of the three modes (i.e., purely, joint, other combinations), while for-profits were most likely to be used in joint contracting (approximately 11% across the years) and least likely to be utilized in some other combination of service delivery (about 2% in each year). Purely for-profit contracting holds a middle ground with 6.6 percent and 5.6 percent of services being produced in this manner in 1997 and 2002 respectively. Why local governments find for-profit firms more desirable for joint ventures and less acceptable in alternative combinations is not readily apparent and possibly worthy of future research.

The groundwork having been laid, we now move to an examination of the patterns of change regarding nonprofit and for-profit contracting. Table 3 presents the same information presented in Table 1 above, but the focus is on nonprofit and for-profit service delivery rather than all potential methods of production. We have also added a new component discussed below. To ease presentation, we combine all the modes of contracting from Table 2 (i.e., purely, joint, other combinations) into single measures of nonprofit and for-profit service production. Again, only those cases that produced the service and defined the method of delivery in each year are included in the analysis. Table 3 indicates that, regardless of whether the service is produced via nonprofit or for-profit means, the proportion of contract failures is very similar to the proportion of moves to alternative service delivery. One percent of cases

Table 3. Changes in Production Mechanism Choice over Time, 1997 to 2002 (Focus on Cases Utilizing In-House, Nonprofit, or For-Profit)

Provision Mode over Time	Nonprofit (percent of cases) ^a	Change Ratio ^b (percent of cases)	For-profit (percent of cases)	Change Ratio (percent of cases)
1997: in-house	49.7	—	49.7	—
2002: in-house				
1997: in-house	1.0	1.7	6.4	10.3
2002: nonprofit/for-profit				
1997: nonprofit/for-profit	1.0	23.8	6.1	32.7
2002: in-house				
1997: nonprofit/for-profit	1.7	—	9.4	—
2002: nonprofit/for-profit				
	n = 12,814		n = 12,814	

^aColumn percentages do not sum to 100% due to exclusion of some categories of service production.

^bThe “change ratio” is defined as the proportion of cases that changed production choice in 2002 in the defined manner relative to the number of cases that could potentially have done so based on their 1997 codings. Interested readers are directed to Appendix B for an overview of the calculations.

moved from traditional, in-house service delivery to nonprofit production between 1997 and 2002. The same percentage of cases returned from nonprofit contracting to in-house production over the years of the study. The related numbers regarding for-profit production are 6.4 percent and 6.1 percent respectively. However, a closer examination is warranted.

The second and fourth columns report the “change ratios” for nonprofit and for-profit contracting. These ratios represent the proportion of cases that experienced privatization or contract failure accounting for the number of cases that were at risk to do so. For example, if 1,500 cases utilized in-house production in 1997, the proportion of these cases that switched to contracted service delivery in 2002 represent the change ratio. The change ratios represent a finer measure of how delivery service choice changes over time. The change ratios in Table 3 indicate striking differences in the relative frequencies of contract failure and privatization. Of those cases that could have chosen to privatize, only 1.7 percent switched to nonprofit production and 10.3 percent moved to for-profit delivery arrangements. Conversely, 23.8 percent of cases that had previously contracted with nonprofits and over 32 percent of those contracting with for-profits decided to bring delivery back in-house (nonprofit difference = .222, $p = .000$, for-profit difference = .225, $p = .000$). Examined in this manner, contract failure appears substantially more prevalent than privatization—a rather counter-intuitive finding that does not support conventional wisdom.

Of course, the above examination looks at all services in the aggregate, but as pointed out in previous sections, scholars have argued that services have differing characteristics that make them more or less amenable to privatization (and therefore, we argue, contract failure). So, we now turn to an examination of contract failure accounting for service type as defined by the various typologies reviewed above.

We begin by examining Ferris and Graddy’s “public works” and “health and human services” (HHS) categories. As noted above, the nature of public works services makes them likely candidates for contracting out to for-profit firms and contract failure rates should be low. On the other hand, we expect that HHS services are better candidates for nonprofit contracting, but again failure rates are not expected to be particularly high.

The evidence presented in Table 4 offers mixed support for our hypotheses. Public works services were produced in-house in both 1997 and 2002 in only 28.8 percent of cases, well below the 49.7 percent (difference = .209, $p = .000$) found for all services in the aggregate (see Table 1 above). And, for-profit contracting in both time periods was more prevalent than nonprofit contracting (20.6% to 0.8%), which suggests that Ferris and Graddy’s prediction of high frequency of privatization to for-profit firms in public works services is supported over time. However, contract failure is more common than anticipated and actually occurs at a higher rate than both types of privatization (i.e., nonprofit and for-profit). For example, only 17.1 percent of services that were delivered in-house in 1997 and, therefore, were potentially at-risk for privatization, actually found their way to the for-profit sector in 2002. On the other

Table 4. Changes in Production Mechanism Choice over Time, 1997 to 2002 Ferris and Graddy Typology^a

Provision Mode over Time	Nonprofit (percent of cases) ^b	Change Ratio ^c (percent of cases)	For-profit (percent of cases)	Change Ratio (percent of cases)
Public Works				
1997: in-house	28.8	—	28.8	—
2002: in-house				
1997: in-house	0.9	2.1	7.4	17.1
2002: nonprofit/for-profit				
1997: nonprofit/for-profit	0.4	15.4	8.0	21.5
2002: in-house				
1997: nonprofit/for-profit	0.8	—	20.6	—
2002: nonprofit/for-profit				
	n = 1,115		n = 1,115	
Health and Human Services				
1997: in-house	19.9	—	19.9	—
2002: in-house				

1997: in-house 2002: nonprofit/for-profit	7.1	20.2	4.2	11.8
1997: nonprofit/for-profit 2002: in-house	5.0	16.7	2.6	18.5
1997: nonprofit/for-profit 2002: nonprofit/for-profit	17.1	–	5.3	–
	n = 644		n = 644	

^aRef. 1.

^bColumn percentages do not sum to 100% due to exclusion of some categories of service production.

^cThe “change ratio” is defined as the proportion of cases that changed production choice in 2002 in the defined manner relative to the number of cases that could potentially have done so based on their 1997 codings. Interested readers are directed to Appendix B for an overview of the calculations.

hand, over 21 percent of cases that utilized for-profit service delivery in 1997 were taken back in-house by the time of the more recent survey (difference = .044, $p = .096$).

Like public works, HHS services tended towards alternative service deliver, with fewer than 20 percent of services being delivered via in-house methods over the time frame of the study. As posited, nonprofit contracting was more dominant than for-profit. Approximately 17 percent of cases were delivered by nonprofit means in both 1997 and 2002, while only 5.3 percent used a constant for-profit mode (difference = .118, $p = .000$). Ferris and Graddy's expectation that nonprofits should stand out in this category is supported in the dynamic environment of this study. While contract failure was, again, not uncommon (nonprofit, 16.7%; for-profit, 18.5%), privatization to nonprofits was the most common form of service delivery change—20.2 percent of eligible cases converted in this manner.

Next we turn to Stein's service classifications. We expect "collective" services to more commonly be produced in-house; contract failure should be relatively common; and privatization to nonprofits should result in less contract failure than privatization to for-profits. "Private" services should be characterized by alternative service delivery; for-profits should be common; and contract failure is expected to be fairly rare. Once again, the results of our analysis are varied (See Table 5). The majority (52.3%) of collective service cases featured in-house production in both years, with fewer than 9 percent of cases exclusively utilizing either nonprofit or for-profit delivery during the two survey periods (difference = .439, $p = .000$). However, contrary to expectations, privatizing with for-profit firms was notably more common than with nonprofits (6.2% to 1.4%, respectively; difference = .049, $p = .000$). In-line with expectations, contract failure was reasonably common and certainly relatively more frequent than privatization. Also as posited, nonprofit organizations failed at lower rates than for-profit firms with change ratios of 23.2 percent and 30.6 percent respectively (difference = .074, $p = .081$).

The story is a bit different regarding private services. Fewer than half (40.8%) of these services were consistently produced in-house. While this is lower than for collective goods (as expected), given the characteristics of these services (i.e., subtractable and exclusive) a higher proportion of cases than one might anticipate are delivered through in-house production. However, consistent contracting (i.e., contracting with the same type of entity, nonprofit or for-profit, in both time periods) was also common, accounting for over 27 percent of cases. Of the cases that consistently contracted, 85 percent did so utilizing for-profit production—supporting our thesis that for-profit firms should be favored when contracting involves private services. Contract failure was less prevalent than for the collective grouping, but was still not uncommon, occurring in about 1/5 of all possible cases for both nonprofit and for-profit contracting.

Finally, we move to the results for the Brown and Potoski typology. To review our hypotheses, "meterable market services" are posited to be

Table 5. Changes in Production Mechanism Choice over Time, 1997 to 2002 Stein Typology^a

Provision Mode over Time	Nonprofit (percent of cases) ^b	Change Ratio ^c (percent of cases)	For-profit (percent of cases)	Change Ratio (percent of cases)
Collective				
1997: in-house	52.3	—	52.3	—
2002: in-house				
1997: in-house	0.9	1.4	4.0	6.2
2002: nonprofit/for-profit				
1997: nonprofit/for-profit	0.8	23.2	4.6	30.6
2002: in-house				
1997: nonprofit/for-profit	1.4	—	7.1	—
2002: nonprofit/for-profit	n = 3,859		n = 3,859	
Private				
1997: in-house	40.8	—	40.8	—
2002: in-house				

(Continued)

Table 5. (Continued)

Provision Mode over Time	Nonprofit (percent of cases) ^b	Change Ratio ^c (percent of cases)	For-profit (percent of cases)	Change Ratio (percent of cases)
1997: in-house	2.7	5.0	6.6	12.1
2002: nonprofit/for-profit				
1997: nonprofit/for-profit	1.5	18.7	5.8	22.1
2002: in-house				
1997: nonprofit/for-profit	4.1	—	23.3	—
2002: nonprofit/for-profit				
	n = 1889		n = 1889	

^aRef. 3.

^bColumn percentages do not sum to 100% due to exclusion of some categories of service production.

^cThe “change ratio” is defined as the proportion of cases that changed production choice in 2002 in the defined manner relative to the number of cases that could potentially have done so based on their 1997 codings. Interested readers are directed to Appendix B for an overview of the calculations.

commonly privatized with a preference for for-profits, and not associated with high levels of contract failure. Nonprofit contracting of “meterable monopoly services” and “non-meterable market services” should lead to lower rates of contract failure than for-profit contracting of these types of services. Conversely, “non-meterable monopoly services” should generally be produced in-house and prone to contract failure when privatization occurs. The results, found in Table 6, indicate that in nearly half of all meterable market service cases, the in-house delivery method was used for both 1997 and 2002. So, as with Stein’s “private” category, meterable market services show a surprising tendency toward traditional service delivery modes, contrary to expectations. In this instance, however, consistently contracted services are not nearly as common, accounting for only 13.7% of cases. Possibly more surprising is the level of contract failure. Nearly 40% of cases in which nonprofit delivery was utilized in 1997 had been taken back in-house by 2002. For-profit contracting did not fare much better, with a change ratio of nearly 31%.

In-house production dominates meterable monopoly and non-meterable market service delivery, accounting for 45.9% and 41.4%, respectively. But, when privatization does occur, for-profit delivery seems preferred. In-line with expectations, however, contract failure is more prominent with for-profit firms. Nonprofits are associated with a change ratio of 19.4% compared to 33.9% for for-profits in meterable monopoly contracting (difference = .145, $p = .002$). For non-meterable market services, the associate change ratios are 20.6% and 33.7% (difference = .131, $p = .000$).

The results for non-meterable monopoly services are congruent with expectations. In 74.7% of the cases, production was in-house over the time-frame of the study. Consistent contracting was uncommon (0.1% for nonprofit, 0.8% for for-profit) and contract failure was prevalent, occurring in at least half of all cases in which privatization had previously occurred. However, in this instance, more so than in any other, it is important to point out that contracting was so rare, that any inferences regarding contract failure are tenuous due to the extremely small numbers of cases involved. For example, the pool for potential nonprofit contract failure (i.e., the number of cases coded as using nonprofit service delivery in 1997) was a mere 12. Hence, the non-meterable monopoly service change ratio of 50.0% associated with nonprofits in Table 6 represents a total of 6 failures. The related for-profit failure rate was produced by 34 failures from a potential pool of 52. However, even noting this caveat, the empirical evidence does support Brown and Potoski’s contention that in-house production should dominate non-meterable monopoly service delivery.^[8]

The above analyses and results assist in our understanding of the relationships between service type, delivery mode, and contract failure. However, ICMA also included in its 2002 survey a question seemingly directly relevant to the question at hand. Respondents that had suffered contract failure in the last 5 years were asked to list the reasons they chose to return to traditional,

Table 6. Changes in Production Mechanism Choice over Time, 1997 to 2002 Brown and Potoski Typology^a

Provision Mode over Time	Nonprofit (% of cases) ^b	Change Ratio ^c (% of cases)	For-profit (% of cases)	Change Ratio (% of cases)
<i>Meterable Market Services</i>				
1997: in-house	49.5	—	49.5	—
2002: in-house				
1997: in-house	0.4	0.7	8.3	13.1
2002: nonprofit/for-profit				
1997: nonprofit/for-profit	0.5	38.0	7.7	30.7
2002: in-house				
1997: nonprofit/for-profit	0.2	—	13.5	—
2002: nonprofit/for-profit				
	n = 5,350		n = 5,350	
<i>Meterable Monopoly Services</i>				
1997: in-house	45.9	—	45.9	—
2002: in-house				
1997: in-house	0.5	0.8	6.0	10.1
2002: nonprofit/for-profit				
1997: nonprofit/for-profit	0.6	19.4	5.7	33.9
2002: in-house				
1997: nonprofit/for-profit	1.1	—	8.5	—
2002: nonprofit/for-profit				
	n = 2,953		n = 2,953	

Non-Meterable Market Services			
1997: in-house	41.4	–	41.4
2002: in-house			–
1997: in-house	2.9	5.1	11.5
2002: nonprofit/for-profit			6.4
1997: nonprofit/for-profit	2.2	20.6	33.7
2002: in-house			5.9
1997: nonprofit/for-profit	5.4	–	7.8
2002: nonprofit/for-profit			–
	n = 2,799		n = 2,799
Non-Meterable Monopoly Services			
1997: in-house	74.7	–	74.7
2002: in-house			–
1997: in-house	0.1	0.2	1.8
2002: nonprofit/for-profit			1.5
1997: nonprofit/for-profit	0.4	50.0	65.4
2002: in-house			2.1
1997: nonprofit/for-profit	0.1	–	0.8
2002: nonprofit/for-profit			–
	n = 1,598		n = 1,598

^aRef. 8.

^bColumn percentages do not sum to 100% due to exclusion of some categories of service production.

^cThe “change ratio” is defined as the proportion of cases that changed production choice in 2002 in the defined manner relative to the number of cases that could potentially have done so based on their 1997 codings. Interested readers are directed to Appendix B for an overview of the calculations.

Table 7. Why Does Contract Failure Occur?

Cited Reason	# of Respondents
Service quality was not satisfactory	69.9
Problems with contract specifications	14.9
Problems monitoring the contract	20.1
Cost savings were insufficient	49.8
Local government efficiency improved	34.1
Strong political support to bring back the service delivery	20.9
Other	12.4
n	249

in-house delivery. Unfortunately, after isolating only those cases that responded to both the 1997 and 2002 surveys and examining their delivery mode change behavior, it was found that few brought only a single service (or even a single service category) back in-house. So, in Table 7 we present the results for the entire 2002 survey, not accounting for the type of change (i.e., nonprofit to in-house or for-profit to in-house) or the types of services involved. So, while the results do not directly address the role of service type or delivery mechanism in contract failure, they do offer some insight into the decision making process concerning the phenomenon.

Examining the table, we see the most commonly chosen reason for a return to traditional delivery (nearly 70%) is that the service quality was not satisfactory. This is followed by insufficient cost savings (49.8%). Interestingly, but certainly not surprisingly, politics played a fairly strong role, being cited as a factor in contract failure about 1 in 5 times.

CONCLUSIONS

One of the most intriguing findings generated by this research is the prevalence of contract failure in local service delivery arrangements. While many scholars have examined how and why jurisdictions should choose alternative delivery mechanisms or which services are most amenable to such production, less attention has been given to the failure, as defined by a return to traditional, in-house delivery, of such arrangements. Using data from two time points, we conclude that contract failure is relatively more prevalent than privatization. That is, while privatization is more common in terms of absolute frequency, this is due to the fact that more services are generally provided in the traditional manner than through alternative arrangements creating a larger pool of services available to privatize than to return to in-house production. When the differences in these potential pools are accounted for, contract failure is more common than privatization.

Overall, for-profits were preferred to nonprofits when privatization occurred. However, nonprofit contracting appears relatively less likely to suffer contract failure than for-profit service delivery. Accounting for all services, nonprofits failed at a rate of 23.8 percent from 1997 to 2002, while for-profits suffered contract failure 32.7 percent of the time.

To further understand the phenomenon of contract failure, we employed three typologies of local government services (Ferris and Graddy; Stein; Brown and Potoski) to investigate whether certain types of goods associated with market failure (essentially the basis for all of the typologies) are also associated with contract failure. The findings in this regard are mixed. These typologies were devised in efforts to understand which services are most amenable to successful privatization. Since contract failure is the reverse of privatization, we argue that these measures should also assist in predicting decisions to return to traditional service delivery. However, our findings, in many cases, indicate that the relationship between the typologies and privatization are fairly tenuous. For example, each classification scheme defines a service grouping that should straightforwardly lead to successful, for-profit privatization (public works for Ferris and Graddy; private goods for Stein; meterable market services for Brown and Potoski), the relationships do not prove to be so clear. Contrary to expectations, we find high levels of in-house provision for both Stein and Brown and Potoski categories. On the other hand, all three classifications reveal a preference for for-profit as compared to nonprofit contracting for these services. Since successful privatization is anticipated, low levels of contract failure are also posited. But, in all instances, contract failure was not only common, but relatively more frequent than privatization, sometimes substantially so.

Stein and Brown and Potoski also each construct a category that should be associated with a traditional, in-house mode of delivery. There is stronger support for this relationship and, as expected, contract failure is much more common than privatization. The category garnering the greatest support for Ferris and Graddy's argument was "health and human services." Due to the nature of services in this group, Ferris and Graddy expect nonprofit contracting to dominate. The same characteristics lead us to posit low levels of contract failure. Our results support these assertions. While consistent in-house production is more common than consistent nonprofit contracting, the differences are quite small—smaller than for any other service type measure. Also, this is the only instance in which there is a lower level of contract failure than of privatization.

The results also provide evidence that nonprofits may reduce the risks of contract failure. We consistently found that services contracted to nonprofits were less likely to be taken back in house. There could be various factors explaining why nonprofits experience less contract failure than for-profit providers where the nature of contracted services does not inherently embed vendor opportunism. One possible explanation is that nonprofits may have stronger community ties and local support. On the other hand, contracts with for-profits could be purely driven by governments' cost-efficiency calculations and

thus easily replaceable by more competitive providers or by the contracting government if contracting proved to be cost-inefficient. Nonprofits also tend to serve populations with specific needs and/or demands while many for-profit firms deal with universal residents or customers. Changing service providers (including bringing back in-house) could be more difficult in the former than the latter instance.

We have demonstrated that there are links between service type, delivery mechanism, and contract failure and, hence, a relationship between market and contract failure. The application of economic theory to match service characteristics and delivery mechanisms provides a parsimonious theoretical framework, but our findings suggest it does not have great explanatory power for explaining changes in local service delivery arrangements. If production choices were matched to the goods to maximize efficiency, contract failure should not be so common. Instead, economic theory is probably just a piece of the puzzle. Future work should examine the political as well as economic pay-offs of service production configurations.

The potential for such an approach is indicated by a question on the ICMA survey that asked respondents to select reasons for bringing service production back in-house. The responses indicate that most commonly the providing government simply found the quality of the contracted services to be lacking or the cost savings insufficient. Unfortunately, the structure of the data related to this question does not allow us to test whether market or other factors were at work. Tellingly, however, 20.9 percent list political pressure as one of the influences affecting this decision. Obviously, additional work is needed to ascertain the mix of influences that shape the dynamics of service production. In addition to the market factors examined here, likely suspects include government organizational structure and contract monitoring capacity, partisanship or political climate, and policy entrepreneurs and delivery constituencies.

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APPENDIX A

SERVICE TYPOLOGY CODING SCHEMES

Table A1. Ferris and Graddy

Public Works ^a	Health and Human Services ^b
Residential Waste	Animal Shelter
Street Repair	Daycare
Tree Trimming/Planting	Child Welfare
Cemetery	Programs for the Elderly
Bus	Hospitals
Paratransit	Public Health
	Drug/Alcohol Treatment
	Mental Health

Note: Adapted from Ref. 1.

^a“Street Light Operation” was omitted because the category did not exist in the 1997 and 2002 versions of the ICMA survey.

^b“Public Housing” was omitted because the category did not exist in the 1997 and 2002 versions of the ICMA survey.

Table A2. Stein

Collective ^a	Private ^b
Street Repair	Residential Solid Waste
Street Parking	Commercial Solid Waste
Traffic Sign	Solid Waste Disposal
Tree Trimming	Parking Meter
Code Inspection	Sludge Disposal
Airports	Utility Readings
Crime Prevention	Utility Billings
Police/Fire Communications	Vehicle Tow
Fire Prevention	Day Care
Traffic Control	Child Care
Sanitary Inspection	Elderly Programs
Rodent Inspection	Hospitals
Animal Control	Drug Rehabilitation
Animal Shelters	Mental Health
Public Health	Operation of Recreation

Note: Adapted from Ref. 3.

^a“Streetlights” was omitted because the category did not exist in the 1997 and 2002 versions of the ICMA survey.

^b“Public Housing” was omitted because the category did not exist in the 1997 and 2002 versions of the ICMA survey.

Table A3. Brown and Potoski

Meterable Market Services	Meterable Monopoly Services
Residential Solid Waste	Operation of Bus System
Commercial Solid Waste	Operation of Paratransit System
Solid Waste Disposal	Operation of Airports
Street Repair	Water Distribution
Street/Parking Lot Cleaning	Water Treatment
Snow Plowing/Sanding	Sewage Collection and Treatment
Traffic Signs	Disposal of Sludge
Tree Trimming	Electricity
Cemetery Maintenance and Operation	Gas
Parking Lot Operation	Hospital Management
Utility Meter Reading	Operation of Libraries
Utility Meter Billing	Operation of Museums
Hazardous Materials Disposal	Heavy Equipment Maintenance
Vehicle Towing	Emergency Vehicle Maintenance
Convention Center Operation	Tax Collection
Building/Grounds Maintenance	Title/Plat Maintenance
Vehicle Maintenance	Parking Meter Maintenance
Payroll	Police And Fire Communications
Secretarial Services	
Personnel Services	
Daycare Facilities	
Park Landscaping	
Data Processing	
Non-Meterable Market Services	Non-Meterable Monopoly Services
Child Welfare	Crime Prevention
Programs for the Elderly	Fire Prevention
Drug Treatment	Traffic Control
Homeless Shelters	Sanitary Inspection
Recreation Facilities	Inspection and Code Enforcement
Building Security	Prisons and Jails
Insect and Rodent Control	
Animal Control	
Animal Shelters	
Public Health Programs	
Mental Health Programs	
Legal Services	
Public Relations	
Tax Assessment	
Emergency Medical Services	
Ambulance Services	

Note: Adapted from Ref. 8.

APPENDIX B

Table B1. Change Ratio Calculations

	1997: ih ^a 2002: np	1997: np 2002: ih	1997: ih 2002: fp	1997: fp 2002: ih
Overall (Table 3)				
Pool ^b	8046	521	8046	2401
# of Changes ^c	133	124	826	786
Change Ratio	1.7	23.8	10.3	32.7
Ferris and Graddy (Table 4)				
Public Works				
Pool	480	26	480	414
# of Changes	10	4	82	89
Change Ratio	2.1	15.4	17.1	21.5
Health and Human Services				
Pool	228	192	228	92
# of Changes	46	32	27	17
Change Ratio	20.2	16.7	11.8	18.5
Stein (Table 5)				
Collective				
Pool	2482	125	2482	578
# of Changes	34	29	155	177
Change Ratio	1.4	23.2	6.2	30.6
Private				
Pool	1028	155	1028	493
# of Changes	51	29	124	109
Change Ratio	5.0	18.7	12.1	22.1
Brown and Potoski (Table 6)				
Meterable Market Services				
Pool	3378	71	3378	1346
# of Changes	24	27	443	413
Change Ratio	0.7	38.0	13.1	30.7
Meterable Monopoly Services				
Pool	1755	93	1755	499
# of Changes	14	18	177	169
Change Ratio	0.8	19.4	10.1	33.9
Non-Meterable Market Services				
Pool	1559	301	1559	492

(Continued)

TABLE B1 (Continued)

	1997: ih ^a 2002: np	1997: np 2002: ih	1997: ih 2002: fp	1997: fp 2002: ih
# of Changes	80	62	179	166
Change Ratio	5.1	20.6	11.5	33.7
Non-Meterable Monopoly Services				
Pool	1321	12	1321	52
# of Changes	2	6	24	34
Change Ratio	0.2	50.0	1.8	65.4

^a“ih” = in-house, “np” = nonprofit, “fp” = for-profit.

^b“Pool” is the number of cases that delivered services in the manner designated in 1997.

^c“# of changes” is the number of cases that changed delivery mode between 1997 and 2002.

