# THE UNEVEN DISTRIBUTION OF MARKET SOLUTIONS FOR PUBLIC GOODS

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**ABSTRACT:** *Using national data on local government service delivery from 1992 and 1997, this article assesses the distribution of privatization and inter-municipal cooperation across localities in the metropolitan region and finds them most common among suburbs. Coasian economics argues market solutions may offer an alternative to regional government in the fragmented metropolitan area. However, our discriminant analysis shows the use of market solutions is highest in suburban communities that also exhibit high income and low poverty. Thus, market solutions appear to reflect the inequality among municipalities in the metropolitan region. Some system of regional market governance is still needed to internalize the costs arising from regional inequality in public service delivery.*

Urban public service provision has been criticized for inequity and inefficiency, resulting in part from the fragmented nature of municipal governance in the metropolitan region (Frug, 1998). Provision of public services by some form of regional government has been promoted on equity, efficiency and economic competitiveness grounds (Altshuler, Morrill, Wolman, & Mitchell, 1999; Downs, 1994; Orfield, 1997; Rusk, 1993). Regionalists argue that economic competitiveness is undermined by metropolitan fiscal inequality (Pack, 1998; Peirce, Johnson, & Hall, 1993), but Swanstrom (2001) found limited empirical support for this position. The equity and efficiency arguments of regionalists are typically trumped by political support for localism (Briffault, 2000; Frisken & Norris, 2001; Norris, 2001). Public choice theorists offer an alternative approach arguing we can promote efficiency in public service delivery through market forms of coordination (Boyne, 1998a; Tiebout, 1956). Using national data on local government service delivery patterns

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from the International City/County Management Association (ICMA) for 1992 and 1997, this article assesses the distribution of market solutions across the metropolitan region.

Public goods arise because of problems with externalities and free riders. However, municipal service delivery creates its own public goods problems at a regional scale because metropolitan fragmentation creates externalities in service coordination and financing. Can market solutions address these problems? Coasian economics suggests market solutions can be used to internalize externalities (Webster, 1998). The ICMA data show privatization and inter-municipal cooperation are the two most common market alternatives used by local governments (Warner & Hefetz, 2001). However, if markets for public goods are primarily based on self-interest and exit, they will exacerbate inequality across the larger metropolitan region (Briffault, 2000). Lowery (2000) argues market solutions cannot address the regional public goods problems of coordination and equality without some governance mechanism to internalize the externalities of uneven fiscal capacity and need. We provide an empirical assessment of this argument using data that show the relative reliance on direct public provision, privatization (for profit contracting), and inter-municipal cooperation among governments by metropolitan status.

Municipalities use a mix of public and private service delivery approaches (Miranda & Lerner, 1995), and each of these forms of public service delivery (public or market) should be assessed according to its externalities and transaction costs (Alexander, 2001). Savas (2000) highlighted the costs associated with direct public provision (bureaucratic inefficiency, lack of responsiveness, and principal agent problems), and Sclar (2000) highlighted problems with privatization (contract specification and contract monitoring). The costs of voluntary inter-municipal cooperation include coordination, the loss of local voice, and substitution of functionally specific special districts for broader multi-functional regional integration (Bollens, 1997; Briffault, 2000; Foster, 1997). By exploring the spatial distribution of market solutions, we find the use of such market alternatives reflects income differences in the fragmented metropolitan region. For market alternatives to be a solution for the public goods problems of regional service delivery, there must be some mechanism to internalize the costs associated with metropolitan inequality.

## THEORETICAL CONCERNS

### The Cost of Public Choice: Regional Inequality

Support for local political autonomy is strong in America because it is assumed to promote local efficiency, democracy, and community (Briffault, 2000). Market solutions allow local governments to achieve regional economies of scale while avoiding consolidated metropolitan government. While planners support regional equity, not all are comfortable with the notion of regional governance solutions (Bollens, 1997; Frug, 1999; Healey, 1997). The challenge is to address the externalities created by market solutions so that regional efficiency and equity can be achieved.

Market solutions may address efficiency concerns but they are less effective in addressing regional inequality. All municipalities will not be equally attractive to private suppliers. This is especially true for inner city and rural communities where markets of alternative private suppliers are thin and costs of service delivery are high (Hirsch, 1995; Kodrzycki, 1994; Reeder, 1989). Public choice models have been criticized for their narrow notion of citizen engagement (focused on exit rather than voice) and for the inequitable results of such fragmentation among municipalities within the metropolitan region (Lowery, 2000). Key assumptions of the Tiebout model—unlimited citizen mobility,

positive inter-jurisdictional competition, and no externalities from political fragmentation—hold best in the case of suburbs (Briffault, 2000). Uneven fiscal capacity may be reinforced by market solutions. In the inner city, limited mobility, especially for the poor, prevents citizens from voting with their feet. This leads to inner cities of segregated poverty (Massey & Denton, 1993). Inter-jurisdictional competition primarily reflects competition for the upper income taxpayer, and exclusionary zoning allows successful municipalities to keep out lower income residents (Altshuler et al., 1999; Frug, 1998; Poindexter, 1996). Such regulation creates a market between governments that Troutt (2000) refers to as an anti-market based on isolation and racism.

Regional government has been unpopular because it undermines autonomy and local voice. However, education, police protection, and public infrastructure all have regional dimensions. Not only can affluent suburbs secure a higher tax base, they can limit their obligations for service delivery to the population within their borders. Public choice theory results in a privatized view of the city where political boundaries and property rights are used to justify exclusion (Briffault, 2000; Frug, 2000). Lack of coordination and equity at a regional scale are externalities created by this fragmented local government system. A higher level of governance may be needed to bring these externalities inside the market process so that coordination and equity concerns can be internalized as part of the transaction process (Lowery, 2000).

## Transaction Costs: Competition, Efficiency, and Voice

According to privatization advocates, providing governmental services through the market encourages competition, economies of scale, and greater consumer voice (Savas, 2000). Use of privatization is common among local governments (Greene, 1996; Hirsch, 1995; Miranda, 1994). However, research suggests the benefits may be overstated (Boyne, 1998b; Ferris, 1986; Stein, 1990). Concerns with erosion in service quality, lack of competition, and the high cost of contracting and monitoring are common (Kodrzycki, 1994; Prager, 1994). When private service providers are national or international firms, as in waste management and water systems, local communities may become price takers from monopoly service providers and see profits and employment flow out of the local economy (Pinch & Paterson, 2000; Starr, 1987). Longitudinal analysis of Compulsory Competitive Tendering among local governments in Britain shows that cost savings range from negative to positive values with an average of just 10% in the short run (Domberger & Jensen, 1997). In the long run, competition can create pressure for even higher spending (Glennerster & LeGrand, 1995).

Inter-municipal cooperation is the primary alternative to privatization among US local governments because it lowers costs and helps achieve scale economies (Morgan & Hirlinger, 1991). Cooperation provides a politically attractive alternative to political consolidation, which despite the enthusiastic support of promoters such as Rusk (1993) and Orfield (1997) has limited political appeal. However, longitudinal research has shown that fragmentation does not necessarily lead to higher costs (Ostrom, 2000), and in some cases, cooperative regional service delivery may lead to higher costs due to bureaucratic specialization and insulation from direct citizen oversight (Altshuler et al., 1999). In addition, cooperative agreements may not address sprawl or equity concerns (Downs, 1994; Lowery, 1998).

There are important transactions in direct municipal provision of public services that may be lost in the privatization process (Marmolo, 1998). Private markets treat the citizen as a consumer and those without effective demand may lose their voice. Broader social

benefits of public goods production may be sacrificed to the bottom line of private profit. Citizen oversight and accountability also may be reduced (Leazes, 1997; Starr, 1987).

Although the citizen voice components of service delivery remain public with intermunicipal cooperation, voluntary cooperation is driven by self-interest, and governments with higher costs or hard-to-serve populations may not be invited to participate (Lowery, 1998). Even in the case of regional planning authorities (such as water and transportation authorities), the historical record shows equity may be undermined by infrastructure development that promotes sprawl (Bollens, 1997; Wachs & Dill, 1999). Cooperation in specific functions is common (15% of all service delivery in the ICMA sample), but regional governance that integrates delivery over a more comprehensive range of services is not (Rusk, 1993). The functionally specific nature of special districts may prevent broader deliberation about integrated service delivery and the comprehensive nature of metropolitan services (Bollens, 1997; Briffault, 2000). By addressing the service areas where regional cooperation is most needed (e.g., transportation), cooperation may rationalize fragmentation (Foster, 1996) and possibly reduce interest in more comprehensive regional government. Foster (2000) has shown that existence of specific regional service delivery structures may not lead to broader integrated regional policy.

Neither theoretical nor empirical evidence allows us to assume greater efficiency under fragmentation or consolidation, public or private service delivery. More attention needs to be given to the nature of transaction costs and externalities in the market for public services (Alexander, 2001; Webster, 1998). First, there is a cost to creating competition. Often governments must engage in competitive public-private bidding to ensure competition in the contracting process (Martin, 1999). Second, there is the cost of information to ensure adequate contract specification and monitoring. Failure to adequately specify these can result in the disappearance of valuable social benefits once delivery is contracted (Sclar, 2000). Third, there is the cost of citizen voice. Consumer notions of citizenship do not adequately ensure voice for all citizens, especially for the poor and other voiceless groups (Starr, 1987). They also invite problems with preference substitution where individual preferences and collective preferences are not the same (as in segregation and public schools) (Lowery, 1998). Finally, the uneven fiscal capacity in the metropolitan landscape is an externality that is not addressed by public delivery in our current fragmented government system, nor is it likely to be addressed by market solutions (Lowery, 2000).

## Theoretical Expectations

Pragmatic local governments use a mix of public and private service delivery alternatives (Henig, 1990; Miranda & Lerner, 1995). This article seeks to understand how patterns of market-based service delivery differ by metropolitan status. Suburbs best reflect the theoretical components of the competitive market. Their moderate size and relatively more homogeneous demands and generally higher fiscal capacity create a competitive market attractive to private suppliers. Competition reduces the costs of information, the risk of contract misspecification, and the need for monitoring. More homogeneous demand also narrows the possibility of preference substitution between individual and collective preference. Thus, the benefits of market solutions should be greatest for suburbs as they experience the lowest transaction costs.

Rates of restructuring may be lower in core cities because they have the scale to efficiently provide services in-house even though a potential market of fragmented local governments surrounds them. They also may have higher political and labor opposition due to higher rates of unionization. Restructuring may be lower in rural areas because

they have fewer potentially cooperating governments and private suppliers. Sparse population and limited scale may raise the costs and reduce the market power of rural municipalities, which result in a lack of viable alternatives to direct public provision in these communities.

## EMPIRICAL EVIDENCE

Using data from the ICMA surveys of alternative service delivery arrangements of local governments from 1992 and 1997 (ICMA, 1992, 1997) and data on poverty and income from the Census of Population 1990 (U.S. Census, 1990), we explore whether local governmental use of market forms of service delivery differs by metropolitan status. The ICMA surveys are national in scope, covering all counties with more than 25,000 population (approximately 1,600 of 3,100 total) and cities with populations over 10,000 (approximately 3,300). Roughly a third of all governments contacted responded (31% for 1992 and 32% for 1997), yielding a sample of over 1,400 governments in each survey year.

The surveys measured the form of service delivery for 64 different public services in seven broad areas: public works and transportation, public utilities, public safety, health and human services, parks and recreation, culture and art, and support functions. Forms of contracting out measured by the ICMA survey include: contracts with other governments (inter-municipal cooperation), contracts with for-profit firms, non-profit providers or neighborhood groups, and use of subsidies, franchises or volunteers. We aggregated these responses across all services for each government and thus obtained the average mix of service delivery forms each government employs. Provision via public employees is the most common form of service delivery, accounting on average for 58% of all service provision in 1997. Privatization to for-profit and non-profit firms and inter-municipal cooperation are the most common alternatives, together accounting for 90% of all restructuring cases. Across all services, privatization to for-profit firms accounts for 19% of provision and is more common than cooperation, which accounts for 15% of service provision (Warner & Hefetz, 2001).

ICMA classifies responding cities and counties into three categories: central-core city of a Metropolitan Statistical Area (MSA) or county in which the core city is located, suburban-city or county located in an MSA excluding core cities and counties, and independent/rural, city/county not located in an MSA. Orfield (1997) noted the diversity among suburbs, especially between older inner ring suburbs with declining fiscal capacity (more linked to the core) and higher income, outlying suburbs. To better capture these differences, we adjusted the ICMA classification using Office of Management and Budget criteria that differentiate core and outlying metropolitan communities (U.S. Census, 1999). Core cities are those with employment residence ratios of at least 0.75 and at least 40% of residents working in the central city of the MSA. This definition can include inner ring suburbs as core. OMB classifies suburbs as outlying if they have less than 40% of residents working in the central city and employment/residence ratios of less than 0.75. Outlying suburbs (called suburbs in our analysis) comprise more than half the sample; core metropolitan and independent (non-metropolitan rural) municipalities make up the remainder.

### Differences by Metro Status

We expect outlying suburbs to be most favored in the market for public goods and services because service demands are likely to be more similar and residential mobility is

**TABLE 1**

**Differences in Restructuring and Well-Being by Metro Status**

| | 1992 | | | 1997 | | |
|---|---|---|---|---|---|---|
| | Metro | Suburb | Rural | Metro | Suburb | Rural |
| Form of service provision[a]: | | | | | | |
| Public | $62^{2}$ | $56^{1}$ | $63^{2**}$ | $58^{1}$ | $56^{1}$ | $60^{1}$ |
| Cooperation | $15^{1}$ | $20^{2}$ | $16^{1**}$ | $12^{1}$ | $16^{2}$ | $15^{2*}$ |
| For-profit | $14^{1}$ | $16^{2}$ | $12^{1**}$ | $18^{2}$ | $20^{2}$ | $16^{1**}$ |
| Provision level[b] | $45^{2}$ | $41^{1}$ | $41^{1**}$ | $40^{2}$ | $33^{1}$ | $33^{1**}$ |
| Per capita income[c] | $13{,}886^{2}$ | $17{,}543^{3}$ | $11{,}228^{1**}$ | $13{,}760^{2}$ | $17{,}314^{3}$ | $11{,}247^{1**}$ |
| % Poverty[c] | $14.3^{2}$ | $7.8^{1}$ | $17.3^{3**}$ | $14.5^{2}$ | $7.7^{3}$ | $17.4^{1**}$ |
| *N* | 309 | 753 | 358 | 306 | 731 | 394 |

*Note.* Superscript numbers to the right of values represent Duncan Post Hoc Rankings that rank subgroup means from lowest (1) to highest (3) and show whether these differences are statistically significant at .05. [a]Delivery by form as percentage of provision, ICMA data. [b]Number of services provided, ICMA data. [c]US Census of Population and Housing, 1990.

*Source.* International City/Country Management, 1992, 1997; U.S. Bureau of the Census, 1990.

$^{*}p < .05.^{**}p < .01$.

higher. Sub-group means and Duncan Post Hoc rankings (which test whether one subgroup mean is significantly larger than another) in Table 1 show that both privatization to for-profit firms and inter-municipal cooperation are highest among suburban governments in 1992. Direct public provision is highest among metropolitan core and independent rural governments. Overall service provision levels are highest in the metro core, reflecting the greater number of services that must be publicly provided in core urban communities. Despite a larger market share and higher density of governments with which to cooperate, market solutions are less common in core metro communities. Rural communities also show lower rates of cooperation and privatization. This may reflect a limited market of governments with which to cooperate and lack of a competitive market of private suppliers. All of these differences are statistically significant.

By 1997, the level of privatization rose for all municipalities: metro core cities increased their level of for-profit privatization to rank with that of outlying suburbs. Rural governments continue to exhibit significantly lower levels of privatization. The level of cooperation falls slightly by 1997 as municipalities replace cooperation with privatization. Metro core governments continue to exhibit significantly lower levels of cooperation. This may reflect limited gains from economies of scale for core governments whose service areas are already large. The overall level of service provision also falls, but core metro municipalities still offer a significantly higher number of services, seven more on average, than their suburban or rural counterparts. In many instances it is the larger metro core government that smaller suburban governments contract with for services. In such cases the suburban governments indicated they provided the service via contract with another government, but the metro core governments might indicate provision by their public employees. However, the differences also may reflect lack of suburban interest in internalizing the true social costs of service provision by cooperating with high need, high cost urban municipalities (Frug, 1998; Trout, 2000). Previous research on cooperation has found when metro and suburban interests are different, regional cooperation is less likely (Lowery, 1998).

Wealth varies dramatically across the rural-urban spectrum. Theoretically, suburbs can attract more wealthy residents by combining services and tax rates to meet the interests of

higher income tax payers. Studies of tax effort typically use per capita income as a proxy for capacity because comparable data for assessed property values is unavailable (Bradbury, Ladd, Perrault, Reschousky, & Yinger, 1984; Ladd & Yinger, 1989, 1994). Poverty and population are typically used as proxies for need (Reeder, 1989). We do not use population as it is already captured in the definition of metropolitan status (the category on which our discriminant analysis is based). Data on per capita income and percentage living in poverty clearly show a suburban advantage. Metro core cities rank second, and rural independent municipalities rank lowest in income and highest in poverty. If cost savings from privatization were large, we would expect higher rates of restructuring among independent and metro core governments. Instead these data suggest there may be something in the nature of supplier markets and transaction costs that makes privatization a less compelling option for lower income, higher poverty places. Just as inequality in direct governmental provision of public services reflects uneven fiscal capacity across jurisdictions, market solutions may reflect similar externalities by reinforcing a competitive landscape that favors richer, outlying suburbs.

## Factors Affecting Transaction Costs

Comparable cross-sectional data on the actual costs associated with municipal service contracting are not available. Many costs such as political or labor opposition, contract specification and monitoring, or generating demand to a request for proposals are typically not assigned a monetary value. Conceptually the notion of transaction costs can still be captured. The ICMA surveys do this by asking government managers which factors they feel are important in their decisions to explore and implement alternative service delivery. We group these questions into three indices of transaction costs: 1) motivators for restructuring, 2) obstacles to restructuring, and 3) monitoring. Each index was created by summing positive responses to component questions and dividing by the total number of questions in the index.

The first index includes seven motivators for restructuring as shown in Table 2. These transaction costs primarily reflect fiscal pressures: internal attempts to decrease costs, external fiscal pressures such as restrictions on raising taxes, change in political climate emphasizing decreased role for government, proposal from alternative service providers, concerns about government liability, state or federal mandates tied to intergovernmental financing, and an active citizen group favoring privatization. The primary motivating factor is internal attempts to cut costs of service delivery, cited by 60% of responding governments. While the percentage of governments reporting fiscal stress dropped between 1992 and 1997, it remains the second most important motivator. Political motivators (to decrease the role of government) were cited by less than a sixth of responding governments. Thus, it appears the move to restructure can be characterized as a pragmatic response to increase efficiency, not as an anti-government political agenda at the municipal level. These attitudinal measures of fiscal stress complement our income and poverty measures.

A second set of transaction costs reflects obstacles to the restructuring process. This index is composed of managers' answers to 10 questions: opposition from local government line employees, opposition from elected officials, opposition from departments heads, restrictive labor contracts/agreements, opposition from citizens, insufficient supply of competent private deliverers, lack of empirical evidence on the effectiveness of private alternatives, legal constraints, lack of precedent/institutional rigidities, and lack of staff with sufficient expertise in contract management.

**TABLE 2**

**Index Components and Means**

| | Mean 1992 | Mean 1997 |
|---|---|---|
| Motivator Index: | .23 | .20 |
| Internal attempts to decrease costs | .63 | .60 |
| External fiscal pressures, restrictions on raising taxes | .38 | .31 |
| Change in political climate emphasizing decreased role for govt. | .14 | .17 |
| Proposal from alternative service providers | .16 | .14 |
| Concerns about government liability | .11 | .08 |
| State or federal mandates tied to intergovernmental financing | .12 | .07 |
| Active citizen group favoring privatization | .05 | .05 |
| Obstacle Index: | .14 | .14 |
| Opposition from local government line employees | .26 | .29 |
| Opposition from elected officials | .19 | .20 |
| Opposition from department heads | .14 | .15 |
| Restrictive labor contracts/agreements | .14 | .15 |
| Opposition from citizens | .15 | .14 |
| Insufficient supply of competent private deliverers | .12 | .12 |
| Lack of empirical evidence on the effectiveness of private alternatives | .13 | .11 |
| Lack of precedent/institutional rigidities | .11 | .08 |
| Legal constraints | .08 | .08 |
| Lack of staff with sufficient expertise in contract management | .07 | .06 |
| Monitoring Index: | .35 | .35 |
| Cost | .42 | .40 |
| Compliance with delivery standards | .34 | .38 |
| Citizen satisfaction | .29 | .28 |
| *N* | 1,420 | 1,431 |

*Source*. International City/County Management Association, 1992, 1997.

The primary obstacles to restructuring are internal. The highest levels of opposition are from line employees and elected officials but are only reported by 20 to 30% of all responding governments. Few governments allow competitive bidding or report programs to minimize effects on employees, and this may help explain continued internal opposition. Although some studies found labor opposition reduces privatization (Chandler & Feuille, 1991; Ferris, 1986; Hirsch & Osborne, 2000), other studies have found little or no effect (O'Brien, 1994; Warner & Hebdon, 2001). Evidence on labor costs is similarly mixed, with some studies finding erosion in wages after privatization (Hebdon, 1995) and others finding no significant differences in wage rates (O'Brien 1994; Pendleton, 1997). Citizen opposition is reported by only 15% of responding governments. Lack of a market of competitive alternative providers was cited by only 12% of governments.

The final set of transaction costs is reflected in a monitoring index composed of three questions concerning: 1) cost, 2) compliance with delivery standards, and 3) citizen satisfaction. Almost all governments report at least one case of restructuring, but less than half report any monitoring. Monitoring cost is most common at 40% of respondents. Citizen satisfaction was monitored by less than a third of governments.

Table 3 shows metro core cities have the highest transaction costs. Motivators are higher for metro core cities (e.g., fiscal stress) but so are obstacles (e.g., employee opposition). For suburbs, motivators are not quite as high as for metro core cities (due in part to less fiscal stress) but obstacles are lower (due in part to a less professional or unionized

**TABLE 3**

**Differences in Restructuring Factors by Metro Status**

| | 1992 | | | 1997 | | |
|---|---|---|---|---|---|---|
| | Metro | Suburb | Rural | Metro | Suburb | Rural |
| Factor Indices[a]: | | | | | | |
| Motivators | .28[3] | .22[2] | .19[1] | .28[2] | .19[1] | .16[1] |
| Obstacles | .19[3] | .13[2] | .10[1] | .20[2] | .12[1] | .12[1] |
| Monitoring | .41[2] | .38[2] | .24[1] | .46[3] | .37[2] | .24[1] |
| *N* | 309 | 753 | 358 | 306 | 731 | 394 |

*Note*. Superscript numbers to the right of values represent Duncan Post Hoc Rankings that rank subgroup means from lowest (1) to highest (3) and show whether these differences are statistically significant at .05. [a]Factor Index is the percentage of positive responses in each category. The total number of questions in each index is Motivators (7 questions), Obstacles (10 questions), and Monitoring (3 questions).
*Sources*. International City/County Management Association, 1992, 1997.

service delivery structure). As the level of privatization rises, metro core cities are more likely to monitor service contracts than their suburban or rural counterparts, a reflection of more professional metro core government. Independent rural municipalities rank lowest on all three indices—motivators, obstacles, and monitoring.

## Discriminant Analysis

Discriminant analysis is used to determine if metro core, suburban and independent rural places can be differentiated by their restructuring choices. Discriminant analysis differentiates between predetermined groups by identifying which variables maximally discriminate between groups and in what combination. These dimensions are referred to as functions and are analogous to regression equations. The discriminant analysis divides the predictors into two functions shown in Table 4. Function 1, which explains 87% of the variance in the 1992 model, is composed of the economic status of the place, the level of direct in-house public provision, and the level of privatization. High levels of privatization are associated with higher income. High levels of in-house public provision are associated with high poverty. Function 2, composed of overall service provision level, transaction costs and level of inter-municipal cooperation, explains the remaining 13% of the variance. Rural municipalities are more like suburbs on Function 2 with lower motivators and lower opposition to restructuring.

In the 1997 model, the functions load in a similar manner but the explanatory power of Function 1 drops slightly. This is partly a result of the rise in privatization by metro core and independent municipalities in 1997. High correlation between motivators (such as fiscal stress), opposition, and monitoring (in Function 2) suggests core metro governments may wish to use more market alternatives but be prevented by lack of competitive opportunities. However, our results show that municipalities are primarily differentiated by their level of well being (poverty, income) and use of privatization, and secondarily by their overall level of service provision, transaction costs, and use of inter-municipal cooperation.

The model is most effective at discriminating suburban behavior. Over 70% of suburban places are classified as such based on their economic status, restructuring behavior,

**TABLE 4**

**Discriminant Analysis: Function Correlations**

| | 1992 | | 1997 | |
|---|---|---|---|---|
| | Function 1 | Function 2 | Function 1 | Function 2 |
| Form of service provision: | | | | |
| Public | −0.260* | 0.027 | −0.068* | −0.028 |
| Cooperation | 0.200 | −0.240* | 0.064 | −0.211* |
| For-profit | 0.257* | 0.027 | 0.145* | 0.110 |
| Responsibility: | | | | |
| Provision level | −0.087 | 0.501* | −0.071 | 0.621* |
| Factor indices: | | | | |
| Motivator index | 0.026 | 0.559* | −0.034 | 0.709* |
| Obstacle index | −0.005 | 0.644* | −0.094 | 0.535* |
| Monitoring index | 0.154 | 0.489* | 0.110 | 0.579* |
| Capacity and need: | | | | |
| P.C. income | 0.680* | 0.227 | 0.665* | 0.215 |
| % Poverty | −0.907* | −0.064 | −0.918* | −0.084 |
| Model quality: | | | | |
| % Variance Explained | 87.3 | 12.7 | 84.0 | 16.0 |

and transaction costs. Prediction of metro core and independent rural places is slightly lower at 52 to 60%. Metro core and independent rural places are likely to be confused with one another about a quarter of the time, but they are rarely confused with their suburban counterparts. Suburban governments are less likely to report fiscal stress, opposition or monitoring of contracts. This lowers the cost of contracting, especially under competitive conditions in which markets self-monitor. Metro core and independent municipalities are similar in their high levels of poverty and low per capita income, although their restructuring behavior is different. Metro core governments have higher motivators and monitoring but also face more obstacles. Although their costs of contracting may be higher, they rely more heavily on privatization than their rural counterparts.

From the functions, a score can be calculated for each observation and plotted on a scale to show the relative position of each case on each function. We plot the centroid values for each group of observations creating a territorial map that shows a clear differentiation between metro core, suburban, and independent rural governments. See Figure 1. From the map we see that metro core municipalities are concentrated on the low income, high poverty, high public provision end of the spectrum. If they restructure, they are more likely to use for-profit privatization than cooperation. Independent rural municipalities also cluster on the lower income, higher poverty, higher public provision side of the map, but if they restructure it is primarily via cooperation. Suburban places rank higher on income and privatization (Function 1) and inter-municipal cooperation (Function 2) than either metro core or independent rural municipalities, however, they rank lower on level of service provision and restructuring factors (Function 2). It is interesting that core metro governments rely more heavily on privatization, despite higher obstacles, and that cooperation remains lower despite a dense public market of neighboring municipalities.

The map confirms our prediction that market solutions are more common among suburban municipalities. With higher income and lower poverty, suburban governments utilize both privatization and cooperation and offer fewer public services overall. Market

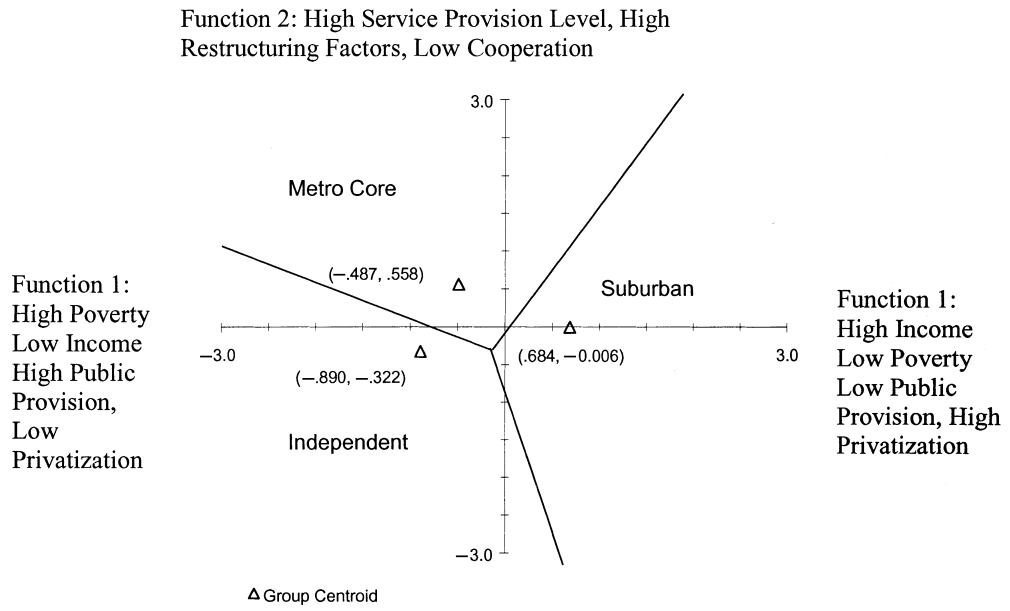


**FIGURE 1**

**Discriminant Analysis: Territorial Map with Group Centroids, 1997**

solutions appear to reflect inequalities in the metropolitan region by offering suburbs wider latitude in service delivery alternatives compared to their core metropolitan or rural counterparts.

## CONCLUSION

Although market solutions may facilitate service integration and economies of scale in the fragmented metropolitan region, this article has shown theoretically and empirically that market solutions are more common among suburbs despite higher motivation and monitoring among metro core governments. The uneven incidence of these market solutions by metro status is most closely related to differences in income and poverty. This suggests market solutions may be more profitable in municipalities with medium density, higher income and lower poverty—characteristics of suburbs.

Higher levels of opposition and monitoring in metro core communities represent higher transaction costs but also may reflect concerns over service quality and access or the desire to maintain public employment. However, differences in use of market solutions are more closely associated with differences in fiscal capacity than differences in transaction costs (motivation, opposition, monitoring).

The challenge for planners is to identify a governance mechanism that combines markets and direct public provision based on an analysis of both transaction costs (opposition and monitoring) and market externalities (fiscal inequality). Can markets be structured to

promote equity at the regional scale? It may be that core metropolitan and independent rural areas represent new markets where private interests could be encouraged—similar to proposals for inner city economic regeneration (Foley & Martin, 2000; Porter, 1995).

Use of privatization increases from 1992 to 1997, but inter-municipal cooperation does not. Does the public market for cooperation favor outlying suburbs by allowing them to gain scale and competitiveness without joining with their metro core neighbors, or does the large scale of metro core governments make cooperation less essential? Cooperation is voluntary, and the higher use of cooperation by outlying suburbs and the lower use by metro core municipalities may reflect political unwillingness to share service responsibility across the inequitable fiscal landscape of the broader metro-suburban region.

For independent rural places, where the density of potentially cooperating governments is lower, the ability to gain scale by working with private markets would seem to provide a better alternative than government to government cooperation. However, the higher costs associated with serving a low density population may make these governments less attractive to private suppliers, causing them to explore the potential for a public market via inter-governmental cooperation. Case study evidence suggests rural governments may use inter-municipal cooperation first to gain scale and then use this greater market power to secure more favorable private contracts (Warner, 2000).

The challenge is to identify how markets and regional solutions can be integrated to ensure the broader collective well being of the metropolitan region. The logic of individual community self-interest creates externalities in the market for public goods (Briffault, 2000). Markets must be structured to promote attention to collective interests (by internalizing market externalities).

This article has shown that market solutions are widely used but mirror the fiscal inequality in the metropolitan region. However, so too does direct public provision. Thus, the issue is not whether market solutions or public delivery are better in some idealized sense but how well each alternative addresses equity, efficiency, and voice concerns (Warner & Hefetz, 2002). Alexander (2001) argued that we should move beyond the market versus planning dichotomy and, by building on a transaction cost framework, recognize the mixed public/private nature of service delivery. Regionalism has received wide academic attention as the preferred solution to metropolitan efficiency and equity. However, its use in practice has been limited, in part due to concerns over loss of local voice. Evidence from our research shows it is time to recognize the widespread use of market solutions. The challenge, however, is to identify how markets can be structured to internalize the externalities related to regional fiscal inequality.

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