



Local Government Autonomy and State Reliance on Special District Governments: A Reassessment

JERED B. CARR, WAYNE STATE UNIVERSITY

The notion that local government autonomy has important implications for a state's local government structure is fast approaching conventional wisdom. Negative binomial regression is used to analyze the link between the administrative, fiscal, functional, and structural autonomy permitted to municipal and county governments and the number of special districts in each state over the 1992-2002 period. This pooled analysis reveals that this relationship to be far more limited than previously thought. This study challenges the findings of previous studies showing that limitations on local autonomy strongly encourage a splintering of local government authority due to the creation of numerous special districts. Tax and expenditure limitations (TEs) were the only restrictions that were consistently related to a greater reliance on special district governments, and only when both municipal and county governments were both strongly restricted. For the most part, state reliance on special district governments was unaffected by the extent of restrictions placed on local general-purpose governments with regard to debt and permitted functions.

More than a decade ago Nancy Burns (1994) proposed the political-economic framework that has become the dominant explanation for understanding the formation of local governments. The logic underlying her framework is that people form new governments in order to gain access to the powers attached to these units and that the choice between a municipal and special district government hinges on whether or not its proponents seek zoning powers. The power to exclude people or activities from the jurisdiction through zoning policies is virtually the only power remaining exclusive to general-purpose local governments and Burns concluded that when this power was desired, forming a municipal government was the logical choice. This rationale is compelling for explaining why proponents of a new government would choose to form a municipal government instead of a special district when exclusion powers are sought, but it is less useful for explaining the more general case where the powers sought are available from both forms. For instance, what is the logic underlying this choice in the most general case, when the objective is to gain access to public services?

This work is largely directed at this latter question. Where local actors seek to gain or enhance service delivery, how this is achieved depends on the extent to which state legislatures empower (or restrict) the ability of existing general-purpose governments to meet these demands. Special districts, along with counties, municipal governments

(which may include villages and/or towns), several states, and townships, operate as a system of local government. Historically, these different types of government functioned as complementary elements within this system. However, over time state legislatures have created an environment in which local governments are empowered to act as service delivery competitors, where demands for expanded services may be met by county, municipal, township, and special district governments (Carr 2004; Stephens and Wikstrom 1998). Given this, restrictions on any one type of local government likely affect its attractiveness relative to available substitutes for these services and, consequently, the general-special-purpose government choice.¹ Local government scholars have long suspected that home rule provisions have impacts far beyond their basic role of defining the powers permitted to particular types of local government (Bollens 1986; Feiock and Carr 2001; Miller 1981), and the notion that these provisions may have important implications for a state's local government structure is fast approaching conventional wisdom (Lewis 2000). This outcome has been termed the "unintended consequences" of restricting local government autonomy (Bowler and Donovan, 2004).

If state restrictions on local government autonomy do have important implications for local government structure, then two other questions directly follow. First, do restrictions on certain areas of local government decisionmaking

NOTE: Versions of this article were presented at the annual meetings of the Midwest Political Science Association in Chicago, April, 2005 and the Southern Political Science Association meetings in Atlanta, 2006. This research was supported by a grant from the Richard J. Barber Fund for Legal Research. I would like to thank Charles Elder, Richard Feiock, Barbara McCabe, and Marjorie Sarbaugh-Thompson for their comments and Bethany Sneed and Kasey Bracken for research assistance.

¹ This is a fairly general statement with some limitations in practice. In some instances, several types of governments may be sufficiently empowered to act as service delivery competitors, but in a specific circumstance, one or more options may be unfeasible or impossible. For example, a special district may be formed on property too far from an existing municipality to be annexed, or on a parcel too small (in land area or population) to support a new municipal government. Another example is that certain functions, such as seaports or airports, may have only a single possible local provider. In cases such as this, a regional special district—and not county or municipal provision—may be the only feasible (or legal) avenue.

have greater unintended consequences than in others? For example, do restrictions on permitted functions matter less than restrictions on debt and revenue growth in encouraging the use of special district governments? Are restrictions on municipal government autonomy more significant in these decisions than restraints imposed on county governments? Most studies have focused on municipal fiscal home rule, preventing this kind of analysis, and the few including multiple measures are unable to assess the relative impacts of different areas of home rule because of limitations in the design of these studies. Second, how restrictive must these limits be in order to trigger the actions described above? Do limitations have to be severe before they encourage the kind of choice suggested above, or do minimal restrictions lead to similar outcomes? Extant work has been largely silent on this question as well.

This study fills these gaps by examining the link between the autonomy permitted to general-purpose local governments and state reliance on special district governments. Previous work has mostly focused on the role played by fiscal restrictions in encouraging the use of special district governments, largely ignoring the effects of other important limitations to local government autonomy. In addition, with the exception of McCabe (2000), these studies have also overlooked the role played by the autonomy permitted to county governments in decisions to form special district governments. Instead this work takes a more comprehensive approach, examining the autonomy permitted to municipal and county governments on questions of finance, structure, functions, and administration. The next section describes how variations in grants of autonomy to local general-purpose governments are expected to affect the incentives local actors face for choosing special district governments. The subsequent section presents an empirical analysis of the link between these different forms of autonomy and the number of district governments in the state. The analysis provides very modest support for the notion of a link between the level of autonomy provided general-purpose governments and state reliance on special district governments. For the most part, there is no statistical relationship between the measures of local government autonomy and counts of special districts. Only in the case of tax and expenditure limitations is there evidence of a consistent relationship, and this connection is far more limited than previously thought. The findings suggest that previous studies have overstated the role played by restrictions on general-purpose governments in encouraging reliance on special districts.

HOME RULE AND SPECIAL DISTRICT GOVERNMENTS

Burns' (1994) work has prompted many others to examine the relationship between the extent of home rule provided by state governments to municipal and county governments and the formation of special districts. Although the states have fairly similar structures of local government, comprising a set of counties spanning the entire state and various forms of municipal governments within—and in a

few instances spanning—these counties, there are substantial differences in the home rule powers permitted these local units. Home rule is “the power of a local government to conduct its own affairs—including specifically the power to determine its own organization, the functions it performs, its taxing and borrowing authority, and the numbers, types, and employment conditions of its personnel” (Advisory Commission on Intergovernmental Relations ‘ACIR’ 1981: 1).

While no previous study has examined all four areas covered in the ACIR definition—function, structure, finances, and administration—several have investigated one or more forms of home rule. By far, the area of autonomy that has received the most scholarly attention is fiscal home rule.² Efforts to examine the linkage of fiscal limits to the formation of new district governments really began with Susan MacManus's (1981) analysis of tax and borrowing restrictions on local governments on the increase of property-tax-based districts in the south. Analyzing the increase in property-tax-based special district formations in ten southern states, she found that both property tax and borrowing restrictions were positively correlated with increases in the numbers of these districts. These bivariate correlations provided early, albeit weak, evidence for the argument that local governments use special districts as a way to circumvent these restrictions. Similarly, the most recent work on this topic also concluded that special district governments are a means to circumvent fiscal constraints. Bowler and Donovan (2004) found that those states adopting tax and expenditure limitations relied more heavily on special districts than those states without these restrictions, but only if the state permitted ballot initiatives that were relatively easy to use. They concluded that the credible threat of anti-tax groups being able to put limitations on the ballot gives states an incentive to adopt a wider range of fiscal innovations. Among the innovations states might consider are various types of special district governments, home rule charters permitting more fiscal autonomy, and the removal of barriers to services contracting.

In the most comprehensive study of special district formation to date, Foster (1997) examined the role of several different measures of municipal autonomy in stimulating the creation of these governments. Like MacManus, she found that those states imposing debt limits also had a greater reliance on special district governments. However, in contrast to MacManus she found that heavy property tax limits on municipal governments reduced metropolitan reliance on special district governments. She largely attributed this result to a recognition by local government officials that those tax limits placed on municipal governments are generally reflective of an anti-tax sentiment for all types

² The impact of tax and expenditure limitations on local revenue systems has also received considerable attention in recent years (MacManus 1981; Mullins and Joyce 1996). MacManus' (1981, 1982) analyses provided early evidence of the linkage between special districts and the level of property taxes in the community.

of local governments, a conclusion that is somewhat at odds with Bowler and Donovan's contention about anti-tax sentiments encouraging the participants to seek out fiscal innovations, such as special district governments.

McCabe (1997, 2000) has conducted the broadest examination of fiscal home rule and special district formations, going beyond property tax and debt constraints to include expenditure limits and sales and income tax measures. Her work has lent additional support to the notion that special districts are vehicles to circumvent fiscal constraints. She confirmed the earlier findings that debt limits generally increased the likelihood that more special district governments are formed in a state. Also, she found that those states imposing tax and expenditures limitations on municipal governments were more likely to experience special district government formations. Yet McCabe's most important contribution to this literature was her inclusion of measures of county autonomy in her model. Despite the obvious role played by county services in the general-special-purpose government decision, measures of county autonomy have been absent in previous works. McCabe included a broad measure of county home rule and two measures of county fiscal autonomy, whether or not county governments were empowered to enact income and sales taxes, in her model. Her findings suggest an important role for county powers in explaining district formations. She showed that states permitting county home rule were less likely to see districts formed. States permitting counties, but not municipalities, to impose sales and income taxes were also less likely to form new districts. Yet where these same taxing powers were provided only to municipal governments, or to both municipal and county governments, the probability that special district governments were formed increased.

Paul Lewis (2000) provides a contrasting view on the role of fiscal restrictions in encouraging reliance on special district government. He examined the effect of California's property tax limitation Proposition 13 on local government structure in the state, finding that Proposition 13 did not alter existing patterns of growth in municipal and special district governments. He concluded that California's local government structure had been remarkably stable over time and suggested this was because local governments are often able to adapt to changes in their fiscal environment without resorting to the creation of new local governments.

While this literature has focused on the effects of fiscal limitations in encouraging the use of special district governments, a few other measures of local government autonomy have also been examined through these studies. Both Foster and McCabe included measures of two features of municipal structural home rule, the ease by which new municipal governments can be formed and constraints on the ability of existing municipal governments to be expanded through annexation. Since municipal governments are still seen as the primary vehicle for many public services, restrictions on their formation or expansion are expected to make districts a more attractive option. Conversely, a lack of restrictions is expected to obviate the need for districts, as municipal gov-

ernments can easily be formed or expanded to meet service demands. McCabe showed that states with restrictive annexation policies were more likely to form new special districts, but that limits on municipal incorporation made district formations less likely. In contrast, Foster found that both incorporation and annexation restrictions were associated with a lower reliance on special districts.

Finally, Foster also examined the role of functional home rule for cities in metropolitan area reliance on special district governments. Her analysis showed that broad grants of functional home rule were associated with a greater reliance on subcounty districts and on those districts encompassing area in more than one county. This is an interesting finding given the key role ascribed to the demand for services in popular accounts of the growth of special district governments. Prior to Foster's analysis, the conventional wisdom on this issue was that restrictions on functional autonomy played an important role in encouraging the use of special districts, as these governments served as a vehicle for circumventing these restrictions.

HYPOTHESES, DATA, AND METHOD OF ANALYSIS

This study examines two sets of questions. The first is the most straightforward extension of previous efforts. What is the relationship between state grants of autonomy to general-purpose governments and the use of special-purpose governments? I expect that greater restrictions on local government autonomy are associated with a higher reliance on special district governments, as public officials, property owners, and local residents turn to special districts to circumvent these limitations. As for the different forms of local government autonomy, there is no obvious basis for predicting which aspect will have the strongest link to special districts. The effect of fiscal autonomy on local government structure has received the most attention, but to date there is no evidence that it has greater impacts than functional, administrative, or structural home rule.

The second set of hypotheses focuses on the combined effects of municipal and county home rule on the use of special district governments. From the perspective of the demand for services, strong restrictions on both types of government should lead to more extensive use of district governments. Likewise, where there is a fundamental imbalance in the autonomy permitted to the two types of governments, more district governments are likely to be created, because the imbalance in autonomy encourages the more restricted government to use districts as an instrument of competition with its neighbors. Following this logic, the only time we might expect to observe fewer special district governments are if both governments have broad home rule powers.

Finally, I follow Foster by examining variations in the local government autonomy-special district relationship across several different geographic subtypes of special district governments. Kathryn Foster's most important contribution to this literature was her articulation of a set of motivations for why locals opt for services through special

districts that move us far beyond simple discussions of meeting services demands. The conceptual framework she developed in her highly influential book, *The Political Economy of Special Purpose Government*, has become the dominant framework for thinking about the interaction of local politics, general-purpose government autonomy, and special-purpose government boundaries. She proposed that special districts of differing geographic subtypes may also be vehicles for targeting benefits to specific parties (sub-county), for political and fiscal capitalizing (municipal- and county-coterminous), and for collaborating on services with scale economies and on activities affecting multiple jurisdictions (multi-county). Implicit to hypotheses based on the need to provide services is that general-purpose provision is something of a default position in communities and that locals turn to special districts when this option becomes less attractive for meeting service demands. However, if particularizing, capitalizing, or regionalizing objectives motivate district formation, the autonomy provided to general-purpose governments may be of less consequence. Instead of circumvention activities driving the decision, local politics and the cost characteristics of the services in question may be far more important to understanding the choices locals make. In meeting the kind of objectives suggested by Foster, local actors may opt for special district provision even when the municipal or county government has sufficient autonomy to provide the desired services.

At a minimum, Kathryn Foster's (1997) framework suggests that local government autonomy is only part of the story of why locals might choose district provision of services. She argued that legal explanations are necessary, but not sufficient predictors of local government structure:

... [L]egal structures, although clearly consequential, do not alone drive the institutional choices of public officials, residents, or developers. State-based legal attributes cannot explain intrastate differences in the distribution of districts. Faced with an identical set of legal parameters, government actors within the same state may make different choices about local-government structure and the implementation of public services (143).

For this study, I simply assume that Foster is correct and that the different geographic subtypes are both instruments for meeting service demands when general-purpose avenues are limited and for providing other kinds of benefits to those who seek their creation. I make no prior assumptions about how the alternative forms of local government autonomy will be related to reliance on special districts of differing subtypes other than I expect to see changes from the patterns observed when special district governments are examined without accounting for differences in geographic boundaries. This expectation is based in part on findings in this regard reported by Foster (1997) and by the expectation that the legal environment provides the context within which decisions about how these other benefits can be best achieved are made.

Model and Data

I examine these questions through cross-sectional-dependent, pooled analyses of the number of special district governments in each state at three different points in time: 1992, 1997, and 2002.³ The dependent variables are measured differently than those used in previous studies. McCabe (1997, 2000) and Bowler and Donovan (2004) examined district governments at the state level. McCabe's work examined net new formations, whereas Bowler and Donovan studied the number of special district governments in each state. Foster (1997) examined the number of special districts in metropolitan areas and Lewis (2000) focused on changes in the numbers of local governments and in the dispersion of expenditures among these governments in California counties. However, my interest is in understanding the role home rule plays in altering a state's system of local government over time, and thus the focus is on the number of special district governments in each state. Following Foster, state reliance on special district governments is examined through five different models: special district governments of all geographic types, subcounty districts not coterminous with a municipal government, districts coterminous with an underlying municipal or county government, and district governments spanning areas in multiple counties.⁴

Each model includes three groups of explanatory variables: The first group is comprised of measures of functional, administrative, and fiscal home rule for municipal governments. The second group is a set of interaction terms examining the combined effects of the autonomy permitted to municipal and county governments in the state. Ideally, measures of county home rule would have been included in these models, but these variables were excluded due to fairly substantial collinearity with the municipal measures. Including county measures through an interaction term avoids this problem and permits an examination of joint effects.⁵ Finally, the models include several control variables to capture variations in state laws that affect the range of

³ This study examines the topic through a state level analysis because the analysis is directed at understanding how state grants of autonomy to municipal and county governments have shaped the incentives for local actors to use special district governments for the provision of public services and public and private infrastructure. My interest is in understanding how home rule affects general statewide patterns of special district use over time. Still, a state level analysis is unable to effectively capture key differences in autonomy provided to local governments of the same type within states. Also, a substate analysis would permit the inclusion of measures to control for variations in key service demand indicators, such as population change, economic growth, and per capita income. Measures of this type were not included in this analysis because I believe their influence on these factors is localized and statewide averages are not particularly informative for understanding the choice locals make between general and special-purpose governments.

⁴ Analyses focusing on Foster's second dimension, modes of financing district activities, are not included because the Census of Governments did not report this information in 1997 and 2002.

⁵ The models were also estimated with indicators of county home rule replacing the municipal measures. The two different specifications lead to the same conclusions in all five models.

service delivery alternatives available to local actors, state population, and the number of county governments in each state.⁶ Table 1 presents the specific variables included in the analysis and describes the coding and source(s) for each.

The relationship between home rule for general-purpose governments and reliance on special district governments is analyzed using negative binomial regression. Each model was initially estimated assuming a Poisson distribution, but overdispersion in the dependent variable indicated that the data were a better fit to a negative binomial distribution.⁷ A characteristic of special district governments is that the number of governments observed in any one period is the product of decisions in both current and previous periods. Given that counts of special districts are independent across space (states) but not time, the estimates are clustered by states and robust standard errors are used.⁸

⁶ The models include several controls for state laws creating service delivery possibilities that function as alternatives to municipal and county provision: permitting interlocal contracting, special district enabling laws, and the use of township governments. Most of the remaining control variables (municipal incorporation and annexation indices, and charter counties) are measures of structural home rule. Ideally, these measures would have been included in the first group with the other home rule measures, but several limitations in these measures prevented this: First, structural home rule is a very broad concept, ranging from the ability to determine the governance structure of the local government, including specific offices and powers of officials, to the autonomy to expand the borders of existing units, and the measures in this model capture only a small part of this form of home rule. Second, comparing municipalities and counties on this aspect of structural home rule is problematic given that issues of incorporation and annexation are different issues for municipal and county governments. Finally, the measures included in the models are not the same for both municipal and county government as is the case for the other home rule measures. Given these limitations, the measures of structural home rule function as control variables. Also, the number (log) of county governments in each state is included in the model, but the number of municipal governments is excluded due to endogeneity with the various structural home rule measures.

⁷ The event count models were estimated using STATA 9.0. Expected values and first differences were produced using CLARIFY: Software for Interpreting and Presenting Statistical Results. Version 2.1. Stanford University, University of Wisconsin, and Harvard University, available at <http://gking.harvard.edu/>. Diagnostic tests of each model confirm that counts of special district governments follow a negative binomial distribution. The Poisson model assumption that the conditional mean equals the conditional variance is not supported in any of the five models. In addition, the overdispersion parameter, μ , in each model is significantly different from 0 ($p < .05$), indicating the data are not a good fit to a Poisson distribution. See Cameron and Trivedi (2001) and King (1989) for a discussion of the issues raised by analyses of count data.

⁸ Models are estimated as pooled cross sections with clustering on states instead of a three-period panel. In data with repeated measures on units, clustering acts much like a panel model in that it assumes dependence within units (states) and independence across them. Stata calculates the Huber/White/sandwich estimator of variance when clustering is specified. Others have proposed that special district formations are also not completely independent across space. For example, McCabe (2000) included regional controls in her pooled Poisson analysis of net new district formations in the states from 1972-1992 to account for similarities in district reliance within regions. The reality probably lies between these two assumptions: considerably independent across states, but with some regional dependence based on shared cultures, common development histories, and similar systems of local governments.

DISCUSSION AND ANALYSIS

Table 2 reports the findings of the five negative binomial regression models.⁹ These findings provide very modest support to the notion that state reliance on special district governments is related to variations in local government autonomy. As a group, the coefficients for the municipal home rule measures display signs in the anticipated direction, with the one glaring exception of the municipal TELs. The finding that less restrictive TELs are associated with a greater reliance on districts conflicts with the findings of earlier studies (Bowler and Donovan 2004; McCabe 2000). Another unexpected finding is the lack of statistical support for the debt restriction measures. For the most part the signs are in the predicted direction, but the coefficients did not achieve statistical significance. Previous studies (Foster 1997; MacManus 1981; McCabe 2000) had found a consistent link between debt restrictions on municipal debt and a reliance on districts. The findings for the two fiscal home rule measures are important given the prominence in previous works of municipal fiscal autonomy in explanations of why new district governments are created. Neither measure lends support to the idea that fiscal restrictions on municipalities are associated with a greater reliance on districts. These findings suggest that circumvention activities are a less important part of the special district explanation than previously thought.

The findings for the administrative home rule measure are also interesting. Foster (1997) made the connection between this type of home rule and district formation, observing that special district governments are often less restricted by state law on administrative matters than are general-purpose governments, but she never tested this proposition. Her models included measures of structural, functional, and fiscal home rule, but omitted measures of administrative autonomy. The analyses presented here provide the first empirical test of the role of administrative autonomy, and Foster's proposal is confirmed. Those states imposing fewer training and hiring mandates on municipal governments were also likely to have fewer special district governments. The analyses also reveal interesting differences across the geographic subtypes for this measure, the only form of municipal home rule where this was the case. The coefficients were statistically significant only in the case of the two forms of coterminous districts. This finding makes intuitive sense on two levels. First, municipal- and county-coterminous districts are the two subtypes where the costs for local government officials of giving up general-purpose provision are the lowest because the administrative control of the new government is often stronger than in the case of the other forms and the same service area is maintained. Second, avoiding administrative

⁹ Because they function as controls, I do not provide interpretations of the findings for the measures of structural home rule and service alternatives included in the models. However, the findings for the structural home rule measures suggest relationships that are largely consistent with previous work (Foster 1997; McCabe 1997, 2000).

≡ TABLE 1
VARIABLES AND DESCRIPTION OF MEASURES

	Mean Variance	Min/ Max	Description/Coding	Source
Dependent Variables				
Special District Governments (All Geographic Subtypes)	675.25 449,674.28	14 3,145	Number of independent special district governments of all geographic subtypes in state.	U.S. Census Bureau, 1992-2002.
Subcounty Districts	281.45 109,041.08	3 1,716	Number of independent subcounty special district governments in state. Subcounty districts are not coterminous with municipal governments.	U.S. Census Bureau, 1992-2002.
Multi-County Districts	77.90 8,658.43	0 504	Number of independent special districts governments in state spanning areas in more than one county.	U.S. Census Bureau, 1992-2002.
Municipal Coterminous Districts	116.09 18,031.85	2 649	Number of independent special district governments in state with boundaries coterminous with a municipal government.	U.S. Census Bureau, 1992-2002.
County Coterminous Districts	97.11 6,693.62	0 349	Number of independent special district governments in state with boundaries coterminous with a county government.	U.S. Census Bureau, 1992-2002.
Independent Variables				
<i>Home Rule Measures:</i>				
<i>Municipal Autonomy</i>				
Services Options/Levels	2.46 .45	1 3	Categorical variable capturing functional home rule permitted to municipal governments. Takes on values of 1 (none), 2 (limited), and 3 (broad).	ACIR, 1993; Krane et al., 2000
Administrative Mandates	2.36 1.68	0 6	Additive index capturing administrative home rule permitted to municipal governments. Index begins at seven and decreases by one for each of the following state mandates in effect: collective bargaining, retirement benefits, merit system, worker's comp, required training for police, required training for firefighters, and procedures for filling vacancies in elected offices.	ACIR, 1993; Krane et al., 2000
Debt Purposes/Levels	2.36 .68	1 4	Additive index capturing fiscal (debt) home rule permitted to municipal governments. Index begins at four and decreases by one for each of the following restrictions in effect: debt limit, uses of debt limited to specified purposes, and public referendum required. Index increases by one if state permits short-term borrowing.	ACIR, 1993; Krane et al., 2000
Revenues, Expenditures Levels	8.54 1.06	6 10	Additive index capturing fiscal (TELS) home rule permitted to municipal governments. Index begins at ten and decreases by two for each of the following restrictions in effect: limits on general revenues, general expenditures, property tax revenues, assessment increases, and millage limits.	ACIR, 1995; Krane et al., 2000.

TABLE 1 (continued)

	Mean Variance	Min/ Max	Description/Coding	Source
<i>Home Rule Measures:</i>				
<i>Municipal-County Interactions</i>				
Services Options/Levels	5.52 8.78	1 9	Interaction term capturing joint effects of municipal and county functional home rule. County measure is coded in the same way as the municipal variable described above. Large values (approaching 9) indicate strong HR for both municipal and county governments in state. Small values (approaching one) indicate limited home rule for both governments. Zero values indicate home rule is not provided to one or both governments.	ACIR, 1993; Krane et al., 2000.
Administrative Mandates	5.26 23.79	0 18	Interaction term capturing joint effects of municipal and county administrative home rule. The county index is constructed in the same way as the municipal index described above, except that firefighting training mandates are excluded. Large values (approaching 18) indicate strong HR for both municipal and county governments in state. Small values (approaching zero) indicate limited home rule for both governments. Zero values indicate home rule is not provided to one or both governments.	ACIR, 1993; Krane et al., 2000.
Debt Purposes/Levels	6.64 19.16	1 20	Interaction term capturing joint effects of municipal and county fiscal (debt) home rule. The county index is constructed in the same way as the municipal index described above. Large values (approaching 20) indicate strong HR for both municipal and county governments in state. Small values (approaching one) indicate limited home rule for both governments. Zero values indicate home rule is not provided to one or both governments.	ACIR, 1993; Krane et al., 2000.
Revenues, Expenditures Levels	74.56 290.87	36 100	Interaction term capturing joint effects of municipal and county fiscal (TELS) home rule. Large values (approaching 100) indicate strong HR for both municipal and county governments in state. Small values (approaching zero) indicate limited home rule for both governments. Zero values indicate home rule is not provided to one or both governments.	ACIR, 1995; Krane et al., 2000.
<i>Controls for Other State Laws</i>				
Ease of Mun Incorporation	2.50 1.26	0 4	Additive index of restrictions on municipal incorporation. Index begins at four and decreases by one for each of the following minimum requirements in effect: population, land area, tax base, and distance from existing units.	ACIR, 1993; Krane et al., 2000; U.S. Census Bureau, 1992-2002.

TABLE 1 (continued)

	Mean Variance	Min/ Max	Description/Coding	Source
Ease of Mun Annexation	7.34 1.88	5 10	Additive index of restrictions on municipal annexation. Index begins at seven and decreases by one for each of the following requirements in effect: public hearing, county government approval, and referendum and majority approval in the city, county, all affected cities, unincorporated areas of county, and the area to be annexed. The index increases by one for each of the following provisions: state have general law establishing annexation process, city officials may initiate annexation, and property owners may initiate annexation proceedings.	ACIR, 1993; Krane et al., 2000; U.S. Census Bureau, 1992-2002.
Charter Counties Allowed	.40 .24	0 1	Dichotomous measure indicating whether state permits counties to adopt a home rule charter. Variable takes on values of 0 (No) or 1 (Yes).	Marando & Reeves, 1993; Krane et al., 2000.
Use Township Governments	.40 .24	0 1	Dichotomous measure indicating whether or not state has township governments. Variable takes on values of 0 (No) or 1 (Yes).	U.S. Census Bureau, 1992-2002.
Interlocal Contracting Allowed	.84 .14	0 1	Dichotomous measure indicating whether or not state permits local governments to enter into service contracts with one another. Variable takes on values of 0 (No) or 1 (Yes).	ACIR, 1993; Krane et al., 2000.
SD Enabling Laws	14.24 61.33	0 44	Number of general enabling laws for special district governments in state.	U.S. Census Bureau, 1992-2002.
County Govs (Log)	3.67 1.42	0 5.54	Log of number of county governments in state.	U.S. Census Bureau, 1992-2002.
State Population (Log)	6.52 .19	0 7.54	Log of population in state.	U.S. Census Bureau, 1992-2002.

mandates may be a form of the capitalizing behavior described by Kathryn Foster. If special districts enable service provision free of administrative mandates, political benefits may accrue to public officials, and where reduced operating costs is an objective of obtaining administrative flexibility, then opting for district provision might bring fiscal capitalizing benefits as well. Given that subcounty and regional districts are not expected to provide the same capitalizing benefits it is not surprising that the analyses reveal a much weaker connection between administrative autonomy and these two types of districts.

Finally, the expectation that states permitting autonomy to municipal local governments on questions of what functions to provide and flexibility in how to fund them would be less likely to rely strongly on special-purpose governments is not supported in any of the models. The coefficients

for each measure are negative as predicted, but none achieve statistical significance. This null finding conflicts with Foster's conclusion that greater functional autonomy was statistically linked to a greater reliance on special districts.

This picture changes somewhat when municipal and county autonomy are examined jointly. There is still no statistical support for the expected relationship between debt restrictions and special districts, and virtually none (one of five models) for the expectations for functional autonomy. However, when the levels of municipal and county TELs are interacted, the finding of the earlier studies about the importance of fiscal autonomy is confirmed. Those states adopting revenue and expenditure limitations on both governments are more likely to rely on special districts. Similarly, the interaction of county and municipal autonomy on administration reveals the relationship between this form of home rule and

≡ TABLE 2
NEGATIVE BINOMIAL REGRESSION ANALYSIS OF SPECIAL DISTRICT GOVERNMENTS, 1992-2002

Independent Variable	All Districts	SubCounty	Municipal Coterminous	County Coterminous	Multi-County
<i>Home Rule Measures:</i>					
<i>Municipal Autonomy</i>					
Services Options/Levels	-.026 (.144)	-.082 (.212)	-.144 (.173)	.139 (.120)	-.135 (.182)
Administrative Mandates	-.249 (.074)***	-.140 (.103)	-.296 (.110)*	-.228 (.064)***	-.175 (.125)
Debt Purposes/Levels	-.202 (.301)	-.084 (.403)	-.133 (.436)	-.108 (.260)	-.416 (.467)
Revenues, Expenditures Levels	1.32 (.292)***	1.485 (.391)***	.731 (.449)*	1.068 (.296)***	1.000 (.331)***
<i>Home Rule Measures:</i>					
<i>Municipal-County Interactions</i>					
Services Options/Levels	.072 (.057)	.137 (.083)*	.092 (.093)	-.031 (.055)	.066 (.069)
Administrative Mandates	.038 (.023)*	-.011 (.031)	.072 (.028)***	.036 (.020)*	.065 (.032)**
Debt Purposes/Levels	.036 (.056)	.016 (.073)	-.010 (.078)	.045 (.053)	.073 (.089)
Revenues, Expenditures Levels	-.091 (.018)***	-.107 (.025)***	-.050 (.025)**	-.065 (.018)***	-.077 (.020)***
<i>Controls for Other State Laws</i>					
Ease of Mun Incorporation	-.166 (.096)*	-.258 (.120)**	-.057 (.136)	-.109 (.071)	-.199 (.112)*
Ease of Mun Annexation	.005 (.066)	.003 (.099)	.009 (1.000)	-.091 (.051)*	.071 (.085)
Charter Counties Allowed	-.356 (.183)**	-.430 (.282)	-.239 (.319)	-.354 (.200)*	-.273 (.193)
Use Township Governments	.505 (.175)***	.401 (.236)*	1.190 (.273)***	.266 (.162)*	.433 (.201)**
Interlocal Contracting Allowed	-.045 (.194)	.327 (.257)	-.314 (.260)	-.296 (.158)*	-.053 (.228)
SD Enabling Laws	.047 (.012)***	.060 (.016)***	.036 (.014)***	.043 (.013)***	.046 (.011)***
County Govs (Log)	.048 (.078)	-.252 (.108)***	.045 (.108)	.582 (.081)***	.551 (.106)***
State Population (Log)	.706 (.146)***	.701 (.189)***	1.037 (.212)***	.375 (.172)**	.272 (.208)
Constant	-2.877 (1.849)*	-3.292 (2.464)*	-4.883 (2.754)**	-3.968 (1.827)**	-2.814 (2.065)*
Alpha	.257 (.048)***	.420 (.075)***	.442 (.094)***	.178 (.049)***	.301 (.049)***
Chi ²	236.17***	244.94***	138.89***	568.79***	265.59***
Log Likelihood	-1023.8045	-912.521	-784.387	-708.770	-689.570
N (Observations)	150	150	150	150	150
N (Clusters, States)	50	50	50	50	50

Notes: Robust standard errors in parentheses.

*p < .10, **p < .05, ***p < .01; two-tailed tests.

reliance on special districts is more complicated than is indicated when municipal autonomy is examined in isolation. States enacting restrictive administrative mandates on municipal governments are more likely to have larger numbers of districts coterminous with a municipal or county government, but when counties are also restrained by similar mandates, states are likely to rely less on coterminous and multi-county districts. Both findings underscore the importance of building models that include measures of autonomy provided to both types of governments.

The expectation that the relationship between local government autonomy and reliance on special districts would vary from one type of district subtype to another was not confirmed. Foster found important differences across the subtypes in the nature of the municipal autonomy–special district relationship in the case of functional home rule, and

for the measures of fiscal (debt limits) and structural autonomy (annexation and incorporation laws). In contrast, these models show a remarkable stability across the four different geographic subtypes. The level of autonomy provided on debt and functions did not matter in virtually every context and the autonomy on revenues and expenditures did matter in every context, but in the very same way. Ironically, the only measure displaying any variation across the four geographic subtypes is administrative autonomy, the only form of home rule not captured in Foster's models.

Substantive Implications

Interpretation of the estimated coefficients and tests of statistical significance are useful for assessing whether the analysis provides support for hypothesized relationships,

≡ TABLE 3
 EXPECTED VALUES AND FIRST DIFFERENCES IN THE NUMBER OF SPECIAL DISTRICT GOVERNMENTS, 1992-2002

	Change in Expected Value				
	Minimum to Maximum	1st to 25th Percentile	26th to 50th Percentile	51th to 75th Percentile	76th to 99th Percentile
<i>Home Rule Measures</i>					
<i>Municipal Autonomy</i>					
Services Options/Levels	-33.14 (0, 2)	-22.052 (0, 1)	-11.09 (1, 2)	0 (2, 2)	0 (2, 2)
<i>Administrative</i>					
Mandates***	-687.79 (0, 6)	-203.28 (0, 1)	-154.16 (1, 2)	-117.49 (2, 3)	-212.86 (3, 6)
Debt Purposes/Levels	-261.23 (1, 4)	-151.56 (1, 2)	0 (2, 2)	-79.03 (2, 3)	-30.64 (3, 4)
<i>Revenues, Expenditures</i>					
Levels ***	3,537.78 (6, 10)	222.53 (6, 8)	0 (8, 8)	652.96 (8, 9)	2,662.29 (9, 10)
<i>Municipal-County Interaction</i>					
Services Options/Levels	145.59 (0, 4)	0 (0, 0)	64.22 (0, 2)	81.37 (2, 4)	0 (4, 4)
<i>Administrative</i>					
Mandates**	422.28 (0, 18)	14.71 (0, 1)	48.74 (1, 4)	99.43 (4, 9)	259.40 (9, 18)
Debt Purposes/Levels	580.83 (1, 20)	26.98 (1, 4)	0 (4, 4)	81.30 (4, 9)	472.55 (9, 20)
<i>Revenues, Expenditures</i>					
Levels ***	-17,912.68 (36, 100)	-16,781.44 (36, 64)	-365.03 (64, 68)	-450.53 (68, 90)	-66.13 (90, 100)

Notes: For each estimate, all other variables are set to mean values. The expected value for all special district governments in the average state is 490.16. Expected value and first differences were calculated with the CLARIFY program, Version 2.1 (Tomz, Wittenberg, and King 2003) using 1000 simulations. *p < .10, **p < .05, ***p < .01; two-tailed tests.

but they reveal little about the substantive implications of these relationships. To this end, Table 3 presents expected values and first difference calculations for each of the eight measures of autonomy in the model. Calculating expected values highlights the average effects of the explanatory variables in the model on the number of districts observed in the average state (King, Tomz, and Wittenberg, 2000). The benefit of calculating expected values for each model is that they illustrate how the expected number of special districts changes as the value of a specific explanatory variable is altered (while the other explanatory variables are held constant at their means).

Analyzing the first difference calculations is a two-step process: First the change in special districts is examined as the home rule measures are moved from their minimum to maximum values. Second, the distribution of the change along the range of the home rule measures is examined through a quartile analysis. Together, these difference calculations reveal the extent of change in the expected number of special districts and where along the distribution of each home rule measure this change is concentrated. Examining first differences also provides a basis for comparing the effects of the explanatory variables. This approach represents a significant improvement over the use of standardized coefficients (betas), which despite their well-known limitations, are still frequently used to make these kinds of comparisons.

For brevity, only the all-districts model is shown in Table 3. However, the four geographic subtypes models reveal the very same patterns seen in this model. The first difference calculations show that the TELs measures have the largest impacts on the number of special districts in the state. The

effects on the average expected number of districts from changes in the TELs measure is greater than the sum of effects from the other three home rule measures. Equally interesting are the relatively small effects exerted by the functional home rule and debt measures. Depending on the particular model, it is the functional home rule or the debt measure that shows the smallest effects on the average expected number of districts. This is an important finding given the attention these two forms of home rule often receive in accounts of special district formation.

Examining the dispersion of the change in the expected values also provides important insights into the relationship between local government autonomy and district reliance. Knowing whether the change is evenly distributed across the entire range of the measure or concentrated in a narrow portion provides important information about the nature of this relationship. For example, the two TELs measures reveal interesting—and very different—impacts on the numbers of district governments in the state. In both cases most of the change is concentrated at one end of the index. In the case of the measure capturing municipal home rule, most of the change in expected value is seen in the upper-quarter of the distribution, where the values indicate the greatest autonomy. These states enact few—if any—restrictions on the revenue and expenditure decisions of municipalities. However, the first differences calculated for the municipal and county interaction TELs term reveal that most of the change is concentrated in the bottom-quarter of the distribution, where the values of the index indicate more restrictive conditions for both governments. Thus, examining the dispersion adds depth to the earlier conclusions about the role played by

TELS: While those states permitting municipalities the most autonomy on revenue and expenditure decisions are also more likely to use special districts, the bulk of this effect is in those states with virtually no restrictions at all. Those states at the other end of the index, where municipalities face numerous restrictions on taxes, revenues, and expenditures, are also more likely to rely on special-purpose governments, but they add many fewer districts. This finding is not the strong endorsement of the restriction-circumvention link suggested by previous studies. The added insights about the joint effects of municipal and county TELS are even more interesting. While district reliance increases in states restricting the autonomy of both governments, the bulk of this effect is in those states enacting the most restrictive laws. This finding does support the idea that these TELS are associated with circumvention activities, but it shows that the relationship is far more limited than previously thought. To the extent that circumvention does occur, it is primarily when both city and county governments operate in highly restricted fiscal environments.

CONCLUSION

This study challenges the conventional wisdom that limitations on local autonomy encourage a splintering of local government authority due to the creation of numerous special districts. These findings contradict the conclusions of previous studies, particularly with regard to the important role played by fiscal restrictions on municipal governments in encouraging the formation of special districts. It is only when municipal and county TELS are examined jointly that we see the relationship suggested by previous works, that larger numbers of special districts are seen in those states with the most restrictive TELS. Yet this result too is qualified by the finding that only states in the most restrictive environments had substantially more special districts. This kind of insight has not been revealed in previous studies, most obviously because the researchers did not go beyond interpreting coefficients and significance tests. However, another reason this kind of finding has gone unnoted is that these studies have not focused on the interaction of municipal and county government autonomy and its implications for how service provision is distributed across state systems of local government.

In addition to the general finding that variations in local autonomy were not statistically related to state reliance on special districts, this analysis conflicts with Foster's (1997) finding that variations in local government autonomy are also part of the explanation for the choices locals make in forming subcounty, municipal- and county-coterminous, or multi-county districts. She concluded that legal factors, while not the only, or even most important predictors of district reliance, were an important part of the story. In the same work, she proposed a powerful and compelling framework for understanding motivations beyond meeting demands for services or to circumvent restrictions on autonomy when it came to choosing among special districts of

differing geographic reach. It was her contention that these motivations are a key part of this story and that particularizing, capitalizing, and regionalizing motivations should be added to explanations based on variations in local government autonomy.

However, the analyses presented here provide very little support for the idea that local government autonomy is an important part of the explanation for interstate variation in special-purpose governments, whether districts are viewed as an undifferentiated group or in terms of geographic categories. It seems likely that Paul Lewis (2000) is correct in his assessment that local government officials, property owners, and other interested parties have sufficient tools at their disposal to adapt to restrictions in local government autonomy without resorting to special district governments to circumvent these laws. It also seems likely that these governments are formed for reasons in line with the particularizing, capitalizing, and regionalizing objectives articulated by Kathryn Foster. The difficulty in making these assessments lies in the absence of studies capable of capturing the complex interplay of the political, institutional, and demographic factors that likely determine these choices. Indeed, Foster's own empirical models do not directly examine the role of these motivations in reliance on special district governments. The variables in her models of metropolitan reliance on district governments are measures of service demand and local government autonomy, and none of the variables capture the far more difficult—and perhaps—more important particularizing, capitalizing, and regionalizing motivations for choosing these governments. Future efforts should focus on developing empirical studies that are able to test directly the explanations generated by Foster's powerful framework. These works are necessary to fill the still large gaps in our understanding about why locals choose service delivery through special district government.

REFERENCES

- Advisory Commission on Intergovernmental Relations (ACIR). 1981. *Measuring Local Discretionary Authority*. Washington, DC: ACIR.
- _____. 1993. *State Laws Governing Local Government Structure and Administration*. Washington, DC: ACIR.
- _____. 1995. *Tax and Expenditure Limits on Local Government*. Washington, DC: ACIR.
- Bollens, Scott A. 1986. "Examining the Link Between State Policy and the Creation of Local Special Districts." *State and Local Government Review* 18 (3): 117-24.
- Bowler, Shaun, and Todd Donovan. 2004. "Evolution in State Governance Structures: Unintended Consequences of State Tax and Expenditure Limitations." *Political Research Quarterly* 59 (2): 189-96.
- Burns, Nancy. 1994. *Formation of American Local Governments: Private Values in Public Institutions*. New York: Oxford University Press.
- Cameron, A. Colin, and Pravin K. Trivedi. 2001. "Essentials of Count Data Regression" in Badi H. Baltagi, ed., *A Companion to Theoretical Econometrics*, pp. 331-48. Oxford: Blackwell.

- Carr, Jered B. 2004. "Whose Game do we Play? Local Government Boundary Change and Metropolitan Governance." In Richard C. Feiock, ed., *Metropolitan Governance: Conflict, Competition, and Cooperation* pp. 212-39. Washington, DC: Georgetown University Press.
- Feiock, Richard C., and Jered B. Carr. 2001. "Incentives, Entrepreneurs, and Boundary Change: A Collective Action Framework." *Urban Affairs Review* 36 (3): 382-405.
- Foster, Kathryn A. 1997. *Political Economy of Special-Purpose Government*. Washington, DC: Georgetown University Press.
- King, Gary. 1989. *Unifying Political Methodology: The Likelihood Theory of Statistical Inference*. Cambridge, MA: Cambridge University Press.
- King, Gary, Michael Tomz, and Jason Wittenberg. 2000. "Making the Most of Statistical Analyses: Improving Interpretation and Presentation." *American Journal of Political Science* 44 (2): 341-55.
- Krane, Dale, Platon N. Rigos, and Melvin B. Hill, Jr., eds. 2001. *Home Rule in America: A Fifty State Handbook*. Washington, DC: CQ Press.
- Lewis, Paul G. 2000. "The Durability of Local Government Structure: Evidence from California." *State and Local Government Review* 32 (1): 34-48.
- MacManus, Susan A. 1981. "Special District Governments: A Note on Their Use as Property Tax Relief Mechanisms in the 1970s." *Journal of Politics* 43(November): 1206-14.
- _____. 1982. "Special Districts: A Common Solution to Political Pressures Stemming from City-County Fiscal Inequalities." *Journal of Urban Affairs* 4 (2): 1-10.
- Marando, Vincent, and Mavis Mann Reeves. 1993. "County Government Structural Reform: Influence of State, Region, and Urbanization." *Publius* 23 (Winter): 41-52.
- McCabe, Barbara C. 1997. "Revenue, Structure and the Grassroots: The Causes and Consequences of State Tax and Expenditure Limits on Local Governments." Ph.D. Dissertation. Florida State University.
- _____. 2000. "Special-District Formation Among the States." *State and Local Government Review* 32 (2): 121-31.
- Miller, Gary J. 1981. *Cities by Contract: The Politics of Municipal Incorporation*. Cambridge: MIT Press.
- Mullins, Daniel R., and Philip G. Joyce. 1996. "Tax and Expenditure Limitations and State and Local Fiscal Structure: An Empirical Assessment." *Public Budgeting and Finance* Spring: 75-101.
- Stephens, G. Ross, and Nelson Wikstrom. 1998. "Trends in Special Districts." *State and Local Government Review* 30 (2): 129-38.
- Tomz, Michael, Jason Wittenberg, and Gary King. 2003. *Clarify: Software for Interpreting and Presenting Statistical Results*. Available at <http://gking.harvard.edu/>
- US Bureau of the Census. 1992, 1997, 2002. *Census of Governments: Volume 1 Government Organization*. Washington, DC: US Department of Commerce.

Received: August 12, 2005

Accepted for Publication: November 16, 2005

jcarr@wayne.edu