Evaluating the Policy Consequences of Local Government Autonomy: A Stratified Sampling-Cross Sectional Study

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INTRODUCTION

Some of the most well known models of local government present the policy-making process as a result of the interaction of different groups of agents (actors). The authors of these models typically include residents (voters), businessmen, other interest groups, bureaucrats, and politicians in the explanation of these models (Elkin, 1987; Schneider, 1989). However, local politics is far from being an island isolated from the outside. Local policy output is not only the result of the interaction of the purely local actors because local governments cannot do all they wish. In fact, the most important constraints worth mentioning result from: 1) the state and federal intergovernmental action—rules, regulations, money, grants, taxes, as well as functional responsibility; and 2) economic conditions that determine the real capacity or flexibility of choosing among different options—tax base, fiscal capacity, and the ratio benefits/taxes.

The purpose of this study is to explore a research design strategy that deals with some of the constraints local governments face, mainly institutional constraints. I call this the autonomy of local governments, and I evaluate its influence on local policy. Local government institutions are not at complete liberty to define their options. Since the combination of limits or constraints facing each local government is different, one can discuss the consequences and the implications of different degrees of autonomy. This topic is important, as I argue in the literature review section. In reality, in contrast to some other nations, American local governments have different degrees of autonomy.

What follows is a research strategy designed to analyze this relation. I begin with a review of the relevant literature. Following that, I propose and explore a theoretical model. Then I discuss the process of empirical evaluation of the hypothesis, focusing on the data and its analysis. The issue of how to measure the concepts and collect the data is discussed. Also provided is a description of the empirical test procedures and criteria.

LITERATURE REVIEW

The Study of Autonomy of Local Governments

The literature on the autonomy of local government is basically constructed around two issues. One is the identification of what limits its ability to shape its own policies. Here, the works of Tiebout (1956), Peterson (1981), and Schneider (1989), are central. The other issue is the justification of why this is important and what are the effects of different degrees of autonomy. Here, the works of Wolman and Goldsmith (1990), and Goldsmith (1995) are relevant.

Tiebout (1956) constructs the seminal model of choice in local government. In his original paper, Tiebout assumes that residents have unlimited mobility and have varying tastes for public goods and services. This creates a situation in which residents 'vote with their feet', which is a strong incentive for competition. Local politicians are driven to respond to the demands of voters, by implementing their most preferred

packages of services and taxes. The theoretical result is efficiency of choice (due to different alternatives) and efficiency of provision (due to competition). The structure of the model, can be found in economic reasoning. For that reason, it is considered the basic framework of the public choice analysis of local government.

However, the model has important drawbacks, mainly because of its unrealistic assumptions. First, mobility is far from perfect, because, among other things, shopping costs are high. More importantly, Tiebout´s model assumes that local governments are entirely independent concerning the choice of local public goods and services, as well as the tax burdens. That is, Tiebout assumes they have complete *autonomy* to settle policies. But they do not. Furthermore, the degree of autonomy varies quite a lot. At this point, another famous piece of work is very important. Paul Peterson (1981) makes the point that "city politics is limited politics", which means that local governments[1] "are limited in what they can do" (Peterson, 1981: 4). Local government can offer different benefit/cost ratios to their residents. This ratio is the relation between local public goods and taxes paid. Local governments are limited because there are policies that are not feasible for the interest of the whole city; those policies have to do with growth. Different policies—developmental, distributive, and allocational (Peterson, 1981)—have different effects on the ratio. This is a decisive extension of the Tiebout (1956) approach. Schneider (1989) joins both models and talks about a local market for public goods,

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[1] The literature on local politics and public policy uses the terms: city, urban, and local government more or less interchangeably referring to local institutions. For now, I do not make the distinction. Later, more precision will be needed to clearly define the population to be studied.

where the key agents involved interact. The main elements in this market are politicians, residents, firms and interest groups, bureaucrats, politicians, as well as the external limits. The latter, includes economic conditions and its change, social variables (racial division), and intergovernmental limits.

The local market defined this way is a descriptive simplification of the complex policy-making process. In particular, it makes it easier to understand the role of autonomy as an element of that process. The intergovernmental limits are what define the autonomy of local governments, at least, autonomy in the sense considered here. This fact is much of what this research design is all about, that is, the limitations imposed by higher levels on local institutions. This is what I take as *autonomy* of local governments to the purposes of this study.

In a very different sense from these models, Stephens (1974) constructs a measure of autonomy. He identifies local autonomy basically as the opposite of state centralization. According to his definition:

> "a decentralized state is one in which local governments control
> public policy, allocate whatever resources they have at their disposal,
> and deliver public goods and services to residents." (Stephens, 1975:52).

With the purpose of explaining the erosion of autonomy (state decentralization), he develops the quantitative measure of state centralization to analyze the topic over time. Three components compose the measure:

> "1) Financial responsibility, or which level pays for the public goods
>   and services;
> 2) Determination of the level which delivers each of 15 major functional
>   activities;

3) Distribution of public personnel between levels modified by the relative intensity of labor of different services rendered by state and local governments" (Stephens, 1997: 46).

The composite index is a simple one, resulting in the linear combination of the three individual indices of centralization from each of the components. His measure clearly resembles that of administrative autonomy. For example, it does not integrate any component concerning the constraints facing local governments, such as regulations and socioeconomic constraints, nor the consequences for public policy. Nevertheless, it is one of the few quantitative measures of autonomy that allows for the understanding that it is much more a matter of degree than a measure of a discrete variable.

Another different treatment is due to Wolman and Goldsmith (1990). Their central point is to provide the importance of autonomy to local governments. They start by expressing their dissatisfaction with what they call traditional literature, which defines autonomy as the "discretion local governments possess to act free from control by higher levels of government" (Wolman and Goldsmith, 1990: 24). They claim that the traditional treatments do not provide a rationale for the study of local politics:

> "Instead, we ask a much different and, to our minds, more fundamental question: Do local government in urban areas have autonomy in the sense that their presence and activities have impacts on anything important? Does urban politics matter?" (Wolman and Goldsmith, 1990: 3).

Their answer is clear. Yes, urban politics matter, because it can affect the well-being of residents. Therefore, they assume that the greater the level of autonomy, the greater the ability to increase the well-being of residents in the urban area. After providing this definition, they explore what constitutes the well-being—for example,

monetary and non-monetary income and non-income welfare – and, then, try to ask "what scope remains available to local governments" (ib.: 24). To determine that scope, it is also necessary to analyze the limitations which local governments face, that is, it is also necessary to use the traditional definition of autonomy. Overall, the authors conclude that there is not much scope for local governments. At first glance, this way of defining the question seems very appealing and appears to make sense. It is appealing because it tries to advance a step further in the traditional definition. It is also true that it justifies and significantly legitimizes the study of the autonomy of local government.

Goldsmith (1995) provides different reasons for the relevance of the concept autonomy. At first, the existence of elected local governments ought to imply the ability to 'determine themselves'. This is a valuable argument, which strongly rests on the virtues of democratic society. The second reason is basically a 'public choice' argument. The emphasis on decentralization points to the efficiencies gained by allowing local governments to tailor its tax and service packages to the preferences of residents (voters). At the roots of this are the models of Tiebout (1956) and Peterson (1981) already referred, and Goldsmith (1995) adopts the arguments of this public choice approaches. In this sense, he argues that autonomy (decentralization) enhances responsiveness and accountability.

In sum, autonomy is identified here as the limits imposed by higher levels of government (Schneider, 1989; Wolman and Goldsmith, 1990; Goldsmith, 1995). This definition is the one I work with in this research design. That is, I define autonomy by how the intergovernmental limitations can shape local government public policies.

METHODOLOGY

Having defined autonomy, the next step is to empirically evaluate its impact on local governments, in particular whether or not it tends to increase responsiveness to local public demands. Therefore, the task is to design a research strategy that allows us to analyze that impact. The research then follows:

Research question

Does the degree of autonomy of a local government matter to public policy and does it result in responsiveness to local public preferences?

Definition and Measurement of Concepts

At this point, it is necessary to define what one means the concepts employed in the model. From a nominal concept, one must advance to an operational definition and then to its measurement.

Autonomy

Up until this point, I work with a definition of autonomy, which refers the limitations of local governments in making policy. Following from the explained literature on local government in this research design, the definition can be stated as follows: how far the local level of government is able to operate with some degree of autonomy and discretion from other levels (Goldsmith, 1995: 228). *Autonomy means the degree of limitations imposed by states on local government activity.*

The concept of autonomy is operationalized as an index that combines the different indicators (variables), such as legislation, rules, etc. Autonomy has not only one or two indicators, even though, for example, financial autonomy is considered to be a key aspect of autonomy. That is why I deal with an index combining all the indicators and I end up with a measure that is different across states.

There are a large number of different indicators to be integrated in an index of autonomy. Using the information provided in the study by the *Advisory Commission on Intergovernmental Relations* (1993) regarding state laws governing local governments, the indicators of local autonomy are grouped into six categories:

A. Form of Government;

B. Altering Boundaries and Responsibilities;

C. Local Elections;

D. Administrative Operations and Procedures;

E. Financial Administration;

F. Personnel Management.

Each of these categories includes a group of variables, which can be condensed to construct a unique index of autonomy. Thus, the statistical analytic technique used to construct that index is factor analysis. This is the technique used to investigate the relationship between theoretical concepts—in this case autonomy—and empirical indicators. It reduces a large number of items that are associated with each other and combines them into a few indices.

However, factor analysis is not the technique I use here. One decisive reason justifies the option. Although the quantity of the data is quite large (79 variables), all of the variables are dichotomous in format (for example, either the state law imposes limits on incorporation of local government or it does not). There is another pragmatic reason, which has to do with the fact that the referred study already includes a global measure condensing those variables (see Zimmerman, 1995: 6-7). Therefore, I use that global measure as the measure of local autonomy, which varies across states. It is my key cause independent variable.

Research Design

First of all, it should be recognized that, ideally, the best research design to deal with the question I have in hand would consist in a time-series strategy. Using that design, each substantial change in the relations between states and local governments would be considered a treatment, leading to an interrupted time-series design (Spector, 1981; Rossi and Freeman, 1993). However, two practical reasons do not allow me to implement that ideal study. The first reason has to do with the limitations in collecting

data to be used in reasonable time. The second, linked with the first but goes much beyond that, is related with the difficulty in identifying the precise points in time in which those important changes happened. This difficulty is a relative rather than an absolute impossibility. The relativity is in regard to the amount of research necessary and the time available. Given the specific context, I study the impact of autonomy in local public policies through a different strategy. Despite its own limitations, a cross section design turns out to be a pragmatic choice.

In the USA federal system, there are some significant differences and some consistent patterns in the relations between local governments and the other levels of government, in particular the state level. It is possible to discern groups of states according to the way they deal with state local-relations. This is an issue that needs to be considered here, because the research design needs to account for it. The question has implications for the process of sampling because it is necessary to ensure that there is a balance of local governments from all the possible patterns. This is a decisive issue. Basically, it determines the degree of variability in the key cause variable (autonomy) I propose to study. One should remember that the degree of autonomy varies mainly across states, not within states.

I divide the fifty American states in three groups of a reasonable number with respect to the substantial cases of state-local relations and the number of stratified samples. In a 1981 study, the *Advisory Commission on Intergovernmental Relations* classifies the states according to the degree of state dominance of fiscal partnership and according to state-local legal relationship. In both classifications, the states are divided into three categories (see in Zimmerman, 1995: 207-208; Christensen, 1995: 89).

Another author groups the states according to the fiscal responsibility with respect to local governments (this division is made by Roy Bahl, 1984 and is referred in Anton, 1989: 46). This is the classification I use here to divide the states according to its specific character in state local relations (see Table 1) and to construct the sample. Of course, higher financing responsibility means more intervention and responsibility of states on local financing affairs.

Table 1- States Financing Responsibility with Respect to Local Governments

High	Alabama, Alaska, Arizona, California, Delaware, Idaho, Kentucky, Maine, Minnesota, Mississippi, New Mexico, North Carolina, Oklahoma, South Carolina, Washington, West Virginia.
Moderate	Arizona, Florida, Georgia, Indiana, Iowa, Louisiana, Maryland, Michigan, Nevada, North Dakota, Pennsylvania, Rhode Island, Tennessee, Texas, Utah, Virginia, Wisconsin.
Low	Colorado, Connecticut, Illinois, Kansas, Massachusetts, Montana, Missouri, Nebraska, New Hampshire, New Jersey, New York, Ohio, Oregon, South Dakota.

The empirical test, then, is a cross-section of a sample of local governments belonging in a balanced way to each of the three groups of states considered. The analytical technique used is regression analysis, which in the context of evaluation of impact "tries to establish whether or not the treatment is a significant predictor of outcome when other variables are taken into account" (Rossi and Freeman, 1993: 315). Of course, in this case, the treatment is the degree of autonomy and the other measures are the variables consistently use in the literature as causes of the level of local policy

output, namely local taxes, intergovernmental grants, and median income (see Farnham, 1990 and Turnbull and Djoundourian, 1994).

The strategy presented is a quasi-experimental design (see, among others, for example Rossi and Freeman, 1993). In particular, this is a single group cross-sectional design (Spector, 1981). The empirical findings are the result of the interpretation of the coefficients and its statistical significance, providing that the controls are considered. It allows one to reject or not the impact of the degree of autonomy and, eventually, to have some idea about the direction of the impact.

Another way to develop the design is to consider three different samples and run the same regression model to each one. I will make this test too, but only as an alternative. If the behavior of the coefficients is compared among the three groups, one ends up with a three-group design (Spector, 1981). One must remember that the three groups are constructed according to three different levels of state-local financial responsibility. However, I am aware that these comparisons can be made, but with a significant dose of caution.

Collection of Data: Stratified Sampling

Unit of Analysis: Which Local Governments?

The are very different types of local governments: Cities (Municipalities); Counties; Towns and Townships; Special Districts and School Districts. Despite the variety, it is more or less recognized that cities are the most important form of local

government in America. Cities are "what most people think of as local government" (Christensen, 1995: 70). Therefore, this study of the impact autonomy on local governments of United States uses cities as unit of analysis.

Which Cities to Select?

For related reasons, the data available in the usual governmental organizations, the population object of this study is all the cities of the states of the United States over 25,000 persons. However, it is neither possible nor desirable to use the procedure of simple random sampling of all of the population. The sample should be randomly selected, but, at the same time, it should have cities belonging to as many states as possible. In this way, it is possible to maximize the variation in the degree of the autonomy variable, the key cause variable. Thus, the task is to define three workable preliminary samples, one for each of the groups considered (see Table 1). The first group (HIGH) includes a total of 391 cities, the second (MODERATE) includes 372, and the third (LOW) includes 313 cities. What results from this is a process of stratified sampling (Babbie, 1998), which a "method for obtaining a greater degree of representativeness − decreasing the probability of sampling error" (1998: 216).

After dividing the states into three groupss, I proceed to the selection of 100 cities in each of the groups. Simple random selection would be a very good alternative to make sure that the same probability of being selected was attained. However, I did not use that process. Instead, I use systematic sampling that also allows obtain that equal probability but is easier to implement.   In order to do that, I randomly selected each kth city to be used in the selection process and also the number of the city start. Then, I excluded the

cities selected for which the data is not available. Given the exclusions, I end up with a workable sample of 259 cities.

The Empirical Model

The empirical model that results from the hypothesis proposed is the following regression equation.

$$\textbf{ExpendituresPC} = \beta_1 \textbf{ Autonomy} + \beta_2 \textbf{ HomeRule} + \beta_3 \textbf{ HomeRule * TaxPC} +$$

$$\beta_4 \textbf{ TaxPC } + \beta_5 \textbf{ GrantPC} + \beta_6 \textbf{ LogInc} + \varepsilon$$

Dependent Variables

As the dependent variable, I use the policy output of the city, specifically, its expenditures in the year. I measure the output as expenditures per capita to isolate from the influence of the size of the city. In addition to that global value, three different regressions are run for three different policy areas – police, health, and highways expenditures (also per capita). According to the classification of Peterson (1981), these policies are examples of allocational, distributive, and developmental policies, respectively. With this procedure, I search for the different impact, if it exists, in each of the specific areas.

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Independent Variables

Autonomy is a measure of the autonomy of city, in this case the index of autonomy. The primary objective is to test the causal effect of the degree of autonomy on the public policy output and on the three different policy areas. The measure used takes values that range from 47 to 113, where higher values represent more state laws governing cities (ACIR, 1993; Zimmerman, 1995: 6-7). This means that higher values represent more constraints, therefore less autonomy. As is theorized in the literature, the more autonomy more accountability and representativeness to the demands of the residents in the city. That demands are represented by the three control variables used: taxes, grants, and median income. Taking those demands into account, if autonomy has any impact, it must be given by statistical significant coefficients. However, the direction of that influence is not predicted in the literature. One could speculate about that, but it would be always a risky task.

Home Rule is a dummy variable, which takes the value of zero if the city possesses a provision of a broad home rule (see ACIR, 1993).

Home Rule * TaxPC is an interactive variable between the influence of the taxes and the existence of home rule in the state. The objective of its inclusion is to test the change in the importance of fiscal capacity to policy output, with and without home rule to the city.

TaxPC is the measure of fiscal capacity, computed as taxes received per capita in the jurisdiction. It determines the availability of resources that are necessary to delineating the policies. Its level corresponds to a choice of the benefit/local public goods package, explained by Peterson (1981). That is, it corresponds to a policy itself. It is measured in per capita values because the way the dependent variables are constructed, to isolate from sizing effects. Thus, the sign of β_4 is expected to be **positive**.

GrantPC is the value of intergovernmental grants received and it is the second variable concerning the availability of resources, in this case much less controlled by the cities. It is also measured as per capita values. The sign of β_5 is also expected to be **positive**.

LnINC is the natural logarithm of the median income in the jurisdiction and it is an indicator of the economic conditions. As is usual in the literature, income variables are measured as logarithmic terms (see Farnham, 1990 and Turnbull and Djoundourian, 1994). The sign of β_6 is expected to be **negative**.

Data

The data is from 1994 edition of the *County and City Data Book*. The cities included in this edition are all incorporated places 1990 population of 25,000 or more. There, the data available corresponds to the year of 1990. The variable corresponding to the degree of autonomy is from the 1993 study by the Advisory Commission on Intergovernmental Relations titled *State Laws Governing Local Government Structure and Administration* (also referred in Zimmerman (1995). It was published in 1993 but I

assume, reasonably, that it corresponds to data collected before. In addition, institutional changes are not expected to be significant in just a few years. Next table shows the variables and its units of measurement:

Table 2 – Variables and Units of Measurement

VARIABLE	Unit of Measurement
Population	Total Persons
Median Household income	Dollars
Revenues – Intergovernmental	1,000 dollars
Revenues – Total Taxes	1,000 dollars
Total General Expenditures	1,000 dollars
Health and Hospitals	Percent of expenditures
Police and Protection	Percent of expenditures
Highways	Percent of expenditures
Degree of Autonomy	Index ranging [47 - 113]

RESULTS AND ANALYSIS

The results of the main regression tested here, that is, the one concerning the impact of local autonomy in general expenditures per capita, is shown in the next table.

Table 3 – Expenditures Per Capita

Variable	Coefficient	T
Autonomy	-.009585	-2.168
Home Rule	-.605387	-2.861
HR*TaxPC	2.252944	4.704
Tax PC	1.513130	3.583
Grant PC	.126614	.491
Log INC	-.515236	-.297
Constant	2.313599	.568
R^2	.46318	
Adjusted R^2	.45040	
Standard Error	.89076	

Globally, 46% of the variation in expenditures per capita around its mean is explained this multiple regression equation. In addition, the results are statistically significant at the conventional levels of significance (5%). The exceptions are the coefficients for the influence of grants and of the median household income in the city. Particularly strong are the coefficients for the influence of taxes and, in a less extent, for the influence of autonomy.

It is not surprising that the coefficients related with taxes show a strong and statistically significant influence. It is widely known that local taxes are the most

important source of city resources. On average, each dollar increase in the amount of taxes per capita appears to lead, also on average, to an increase of 1.5 in the expenditures per capita. What is not so expected, however, is that the strong influence is even greater if the city benefits from home rule statute, as the interactive effect shows.   With that provision, the influence of taxes is not of 1.5, but of about 3.7. That is, the results seem to suggest the tendency that, providing that the city benefits of home rule, the importance of local resources is greater than if there is no home rule. For now, the results seem to suggest that home rule do matter for local public policy.

The fact that the provision of home rule makes strong the influence of local taxes on local expenditures is not all the story about the importance of autonomy. Home rule seems to have its own significant (not only statistical) importance. Home rule cities are suggested to spend less per capita. The coefficient is -0.6, which means a decrease of about 600 dollars per capita each year. This is not a little amount.

The degree of autonomy is also significant and with an influence that is not negligible. It can appear that the magnitude is very small, near to zero. That is just an apparent idea that is not quite true. In fact the coefficient is not very high, but it is certainly higher than it seems at the first look. A value of -0.0095 in that variable means a decrease of .0095 thousand dollars ($ 9.5$) per change in the measure of autonomy. It should be remembered that the measure ranges between 47 and 113, which means that change of one point in that scale does not mean much change on autonomy.   Only with values of 10 or so it is possible to have visible changes in state local relations. In that case, the real impact is not negligible at all. So, it appears that, globally, autonomy variables have impact on local public policy.

With the analysis of the same regressions but for the three different policy areas, the results are much weaker. The next table shows the results for police (allocational policy), health (distributive), and highways (developmental) expenditures.

Table A.4 – Expenditures Per Capita in Three Policy Areas

Variable	POLICE		HEALTH		HIGHWAYS	
	Coefficient	T	Coefficient	T	Coefficient	T
Autonomy	-4.221E-04	-1.028	-3.127E-04	-.474	-2.84863E-04	-1.281
Home Rule	-.060863	-3.096	-.108438	-3.436	-.004516	-.424
HR* TaxPC	.246348	5.536	.242115	3.390	.061043	2.534
Tax PC	.102806	2.620	074339	1.181	.007367	.347
Grant PC	-.075090	-3.138	-.066853	-1.740	-.011710	-.904
Log INC	.088228	.547	-.499193	-1.929	.202168	2.316
Constant	-.087613	-.231	1.225762	2.017	-.378258	-1.845
R^2	.37345		.16623		.11499	
Adjusted R^2	.35843		.14638		.09391	
Stand. Error	.08275		.13282		.04481	

The ability of these equations to explain these three policy areas is quite weak, specially in the case of health and highways. One possible explanation is the fact that there are a significant number of cities that simply do not have one or both of these expenditures. In the case of policy expenditures, the same case happens, but in a much lesser number of cases. The only term that is significant in all the three equations is the interactive term, which have the same interpretation as in the equation of general expenditures.

A different analysis can be made if the three groups of states used for the stratified sample were used as single samples to be analyzed individually. Therefore, each equation is applied to a sample of cities with different levels of financial responsibility (HIGH, MODERATE, LOW, see table 1) by the part of states. This allows to replicate the analysis already did and, more important, it allows the comparison across samples to search any particular or systematic pattern. I perform that analysis here and the results are presented and four tables of the appendix (general expenditures, police, health, highways):

[Tables A.1, A.2, A.3, A.4 a bout here]

The results are not contradictory with the ones presented before. The individual policy areas are in general weaker than general expenditures. There is an exception that is police expenditures, in which the results show some significant impact of autonomy and home rule, at least in two of the samples. However, as before, the results are better in the general expenditures, in which autonomy and home rule coefficients are significant in at least two samples.

But more important of all, the results of separate sample don't seem to suggest any discernible systematic relation among the three different samples. More research with richer data would allow a better analysis.

CONCLUSION

In this paper, I evaluate the potential impact of autonomy of local governments – an index measuring that concept and a variable of the provision of home rule – on the policy behavior of a stratified sample of 259 American cities. The results seem to suggest that the impact exist. The statistical significance of three variables seems to allow that conclusion. The first is the impact of autonomy in its broader sense, measured by a condensing index of the state laws governing local governments. The second is the impact of the provision of home rule to cities, measured by a dummy variable. The third is an interactive effect of the influence of the provision of home rule on the magnitude of local taxes to the local expenditures. All three variables appear are statistically significant at the conventional levels.

It is my opinion that the results presented here should only be considered a starting point in the problem of assessing the impact of local autonomy. The results still raise some doubts that need to be solved, mainly concerning the specific direction of the influence of local autonomy and of the provision of home rule. Better measures are certainly needed, namely, measures that account for the differences of state-cities relations within the states themselves, and not only measures of autonomy state by state. This is not an easy work, but it needs to be made. The task of improving the study of local autonomy is, in my opinion, very important, for it is another step further in the study of local institutions that shape the activity and performance of local governments. Local institutions matter in local government, as well in other political settings.

Table A.1 – Expenditures Per Capita

	SAMPLE 1		SAMPLE 2		SAMPLE 3	
Variable	Coefficient	T	Coefficient	T	Coefficient	T
Autonomy	-.012980	-3.673	.002743	1.206	-.030929	-2.067
Home Rule	-.002114	-.013	-.178762	-1.462	-1.077181	-1.926
HR*TaxPC	.176880	.351	.804387	2.687	3.999936	3.467
Tax PC	1.238584	2.829	1.198296	4.673	.771845	.706
Grant PC	1.393824	3.688	.918200	4.568	-.556401	-1.122
Log INC	-.008141	-.086	-.129604	-1.213	-.088341	-.213
Constant	1.433476	1.416	1.272335	1.126	4.486774	.939
R^2	.51692		.74212		.48662	
Adjusted R^2	.48361		.72493		.45201	
Stand. Error	.25917		.31484		1.35828	

Table A.2 – Police Expenditures Per Capita

	SAMPLE 1		SAMPLE 2		SAMPLE 3	
Variable	Coefficient	T	Coefficient	T	Coefficient	T
Autonomy	3.196E-04	.760	6.1334E-04	2.250	-.002626	-1.900
Home Rule	-.046332	-2.306	-.036249	-2.474	-.104707	-2.027
HR* TaxPC	.251829	4.205	.125370	3.494	.398655	3.741
Tax PC	.015998	.307	.070676	2.300	.024871	.246
Grant PC	.070238	1.562	-.009812	-.407	.136423	-2.977
Log INC	.017251	1.531	.009324	.728	-.008727	-.227
Constant	-.127385	-1.058	-.063565	-.469	.461699	1.046
R^2	.57619		.47385		.40824	
Adjusted R^2	.54696		.43877		.36835	
Stand. Error	.03083		.03773		.12548	

Table A.3 – Health Expenditures Per Capita

	SAMPLE 1		SAMPLE 2		SAMPLE 3	
Variable	Coefficient	T	Coefficient	T	Coefficient	T
Autonomy	-.001876	-.894	2.6745E-04	.291	3.5003E-04	.441
Home Rule	.003490	.035	-.174889	-3.542	-.040754	-1.375
HR* TaxPC	-.240763	-.805	.590745	4.885	.060796	.995
Tax PC	.264509	1.017	.121554	1.174	.088383	1.525
Grant PC	-.735153	-3.276	-.121573	-1.497	.027442	1.044
Log INC	-.109445	-1.947	-.061999	-1.437	-.001778	-.081
Constant	1.411953	2.349	.609719	1.336	-.029974	-.118
R^2	.18817		.44939		.30780	
Adjusted R^2	.13218		.41268		.26114	
Stand. Error	.15389		.12718		.07197	

Table A.4 – Highways Expenditures Per Capita

	SAMPLE 1		SAMPLE 2		SAMPLE 3	
Variable	Coefficient	T	Coefficient	T	Coefficient	T
Autonomy	-.001107	-2.424	-2.460E-04	-.769	-3.751E-04	-.698
Home Rule	-.003883	-.178	.013491	.784	-.029240	-1.455
HR* TaxPC	.049294	.758	.035512	.843	.103292	2.491
Tax PC	-.055700	-.984	.036411	1.009	-.018988	-.483
Grant PC	.113508	2.325	.014484	.512	-.031407	-1.761
Log INC	.031699	2.591	.037713	2.508	.006138	.411
Constant	-.158874	-1.215	-.318422	-2.002	.062284	.363
R^2	.16765		.18797		.16468	
Adjusted R^2	.11024		.13384		.10836	
Stand. Error	.03349		.04432		.04883	

Bibliography

ACIR − Advisory Commission on Intergovernmental Relations. 1993. *State Laws Governing Local Government Structure and Administration*.   Washington, DC: U.S. ACIR.

Anton, Thomas. 1989. *American Federalism and Public Policy: How the System Works*. Philadelphia: Temple University Press.

Babbie, Earl. 1998. *The Practice of Social Research*. 8th ed. Belmont: Wadsworth.

Christensen, Terry. 1995. *Local Politics: Governing at the Grassroots*. Belmont: Wadsworth.

County and City Data Book. 1994. Washington, DC: Government Printing Office.

Elkin, Stephen L. 1987. *City and Regime in the America Republic*. Chicago: University of Chicago Press.

Farnham, Paul (1990). "The Impact of Citizen Influence on the Local Government Expenditure." *Public Choice* 64: 201-212.

Goldsmith, Mike. 1997. "Autonomy and City Limits." In *Theories of Urban Politics,* ed. David Judge, Gerry Stoker, and Harold Wolman. London: Sage. Pp 228-52.

Morgan, David R. and Robert E. England. 1999. *Managing Urban America*. 5th ed. New York: Chatham House.

Peterson, Paul. 1981. *City Limits*. Chicago: University of Chicago Press.

Ross, Bernard H. and Myron L. Levine. 1996. *Urban Politics: Power in Metropolitan America*. 5th ed. Itasca: F. E. Peacock Publishers.

Rossi, Peter and Howard E. Freeman. 1993. *Evaluation: A Systematic Approach*. 5th ed. Newbury Park: Sage Publications.

Schneider, Mark. 1989. *The Competitive City: The Political Economy of Suburbia*. Pittsburgh: University of Pittsburgh Press.

Spector, Paul E. 1981. *Research Designs*. Series: Quantitative Applications in the Social Sciences. Newbury Park: Sage Publications.

Stephens, G. Ross. 1974. "State Centralization and the Erosion of Local Autonomy." *Journal of politics* 36: 44-76.

Tiebout, Charles. 1956. "A Pure Theory of Local Expenditures." *Journal of Political Economy* 64: 416-24.

Turnbull, Geffrey and Salpie Djoundourian. 1994. "The Median Voter Hypothesis: an evidence from general purpose local government." *Public Choice* 81: 223-240.

Wolman, Harold and Michael Goldsmith. 1990. "Local Autonomy as a Meaningful Analytic Concept: Comparing Local Government in the United States and the United Kingdom." *Urban Affairs Quarterly* 26: 3-27.

Zimmerman, Joseph. 1995. State-Local Relations: A Partnership Approach. 2nd ed. Westport: Praeger.