

The Effects of Intergovernmental Fiscal Cooperation on Applying for Federal Grants in Florida*

정부간 재정 협력구조가 연방정부 교부금 제도에 미치는
영향력에 대한 연구: 미국 플로리다 주를 중심으로

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Abstract

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This research examines the effects of intergovernmental fiscal cooperation on federal grant programs. Specifically, it looks at how the likelihood of applying for federal grant programs can be affected by intergovernmental fiscal cooperation with other cities. The findings show that using the level of professionalism in municipal governments as a proxy variable for measuring the existence of interactions between localities is statistically significant to explain municipal governments' likelihood of applying for the Small Cities Community Development Block Grant (Small Cities CDBG) in Florida. On the other hand, the municipal governments are negatively associated with governments' behaviors of applying for the federal grant. The findings also illustrate the effects of income and fiscal stress on the governments' activities for spending and obtaining resources. For instance, city governments where professionalism is evident and there are higher median incomes, governments are less likely to apply for federal grants, indicating that they are somewhat insulated from fiscal stress. In contrast, city governments under fiscal pressure have fewer options to secure enough resources, so that they are more likely to apply for federal grants.

주제어: 지방정부 협력, 집단행태, 재정연방주의, 보조금 프로그램, 플로리다 지방정부

Key Words: Local Cooperation; Collective Action; Fiscal Federalism; Grant Program; Florida City Governments

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I. Introduction

Local governments have difficulty in maintaining proper levels of public services while constraining costs. In striving to deliver efficient and effective public services, many local governments choose to contract with nonprofit organizations and third party groups. Alternatively, some local governments build cooperative relationships with other local governments. Interlocal cooperation has emerged as an important way to improve public services through sharing revenue among localities. Since 2000, it has been emerged as a solution to multi-jurisdictional problems in localities such as environmental pollution (Ostrom et al., 1961), regional economies (Jung & Kim, 2009), public service delivery.

Why do local governments attempt to build cooperative relationship with others? A feature of fragmented in local governments can bring a lack of resources such as administrative and/or financial capacity to resolve complicated and wicked problems that one single government cannot deal with. Local governments tend to collaborate with others to leverage limited resources and to overcome complex problems that require collective action. These cooperative relationships usually appear in both physical and fiscal forms. Holcombe and Zardkoohi (1981) point out, “government has been cooperative both by directly providing additional revenue to smaller governments through revenue sharing, and by providing grants for such things as public assistance programs, economic opportunity grants, and man power training programs” (p.393). Bickers and Stein (2004) argue that interlocal agreements facilitate inter-jurisdictional grant coalitions for institutional infrastructures. That is, intergovernmental cooperation can be shown in the process of grant awards.

Various types of public services are supported by federal grant programs such as food stamps, housing vouchers, and income supplements to the poor. Federal grants are one of the most important sources of local revenue in the United States. Allocation of federal grants can be affected by diverse factors including legislators, bureaucrats, and interest groups. Some recent studies focus on local governments’ roles in influencing the distributions of federal grants. They have studied various determinants affecting the distribution of federal grant programs. Much research has tried to illustrate which factors or actors have more influence

in allocations or distributions of federal grants. However, the previous studies have not paid sufficient attention to efforts of intergovernmental cooperation or collaborations as one of factors in seeking grants from federal government. Existing research mainly focuses on such variables as community needs, political influences, population sizes, and prior experience with grants programs. Although the found factors significantly influence the amounts of grants or their variations, they overlook the possible added influence of intergovernmental collaboration on determining allocation of federal grant to local applicants.

To address this limitation and fill the lacuna in extant research, this research examines the effects of interlocal fiscal cooperation on federal grant programs. It assumes that fiscal cooperation between city governments can affect a municipal government's success in obtaining federal grants. To empirically investigate financial cooperation among cities, this study assumes that more intergovernmental fiscal cooperation among cities will lead to more municipal government applications for federal grant programs. This research focuses on the relationship between intergovernmental fiscal cooperation and frequency of applying for federal grant programs. Furthermore, we provide an advanced theoretical framework drawn from network theory and institutional collective action theory to illustrate how efforts of financial interlocal cooperation can impeded or facilitate city efforts to increase cities' capacity to obtain federal grant. Regarding a statistically methodology, we apply panel data analysis to statistically test several hypotheses drawn from this framework.

II. Literature Review and Theoretical Review

Through this section, we attempt to provide an advanced theoretical framework to explore impact of financial interlocal cooperation on a determinant of federal grant program. Applied theoretical framework on this research is built through synthesizing network theory and institutional collective action theory. These two theories conceptualize decision making process for localities to build collective action.

1. Collective action as financial cooperation among governments

Governments tend to cooperate with other institutions when their resources and capabilities are limited. Network perspectives provide a framework to understand complex structures of problem solving and decision making. Many studies based on network theory have revealed diverse factors associated with the emergence of cooperation: limited resources, increase in task complexity, and uncertainty (Isset and Provan 2005; Krueathep et al., 2008). With increase in complexity and uncertainty, public groups or organizations need to find new ways to deliver public services, some do this by forming cooperation with other public organizations. Networking utilizes cooperation as an alternative way to solve wicked problems that cannot be properly handled by individual governments (O'Toole, 1997; Krueathep et al., 2008). Cooperation with diverse partners in networks offers advantages to public institutions such as reduction of uncertainty, increase of opportunities for resources, and improvement of public service delivery (Provan and Milward, 1995; O'Toole, 1997 Agranoff and McGuire, 2001).

Van Bueren et al. (2003) also address the necessity of forming networks to deal with wicked problems that require collective actions, even though there are obstacles that impede interactions between policy actors such as institutional barriers, cognitive difference, and dynamics of interactions. In addition to those obstacles, they argue that the reexist cognitive, strategic, and institutional uncertainties in problem solving and decision making processes, and those uncertainties preclude joint actions and interactions between policy actors. As a part of a solution, however, networks help actors reduce complexity and uncertainty. Furthermore, cooperation through forming networks provides more opportunities to solve problems.

Similarly to the network theory, institutional collective action theory also attempts to explain why cooperation at the levels of governments occurs. Olson (1965) emphasized collective action within individual levels; he also pointed out that collective action is accomplished by persons who believe that cooperative action can improve their self-interests. Feiock (2004) argues that institutional collective actions promote public organizations, including local governments, to

take joint actions voluntarily to resolve free rider problems and externalities. It can help them achieve their collective goals by generating social capital throughout multiple and independent jurisdictions. In fact, desires to attain self-interests while also achieving common goals, such as reducing free riders, can motivate collective actions at the individual and organizational levels respectively.

According to Bicker and Stein (2004), “like collective action among individuals, collective action among institutional actors is motivated by a desire to achieve a shared goal or preference that could not be realized by solitary action” (p.804). They also claim that public organizations which share free rider problems tend to take actions collectively to handle those problems more effectively. Metropolitan areas as governments with higher population density make greater use of inter-governmental cooperation (Bicker and Stein, 2004). In addition, individual leaders who have an incentive to overcome the cost of collective action can stimulate institutional collective action (Schneider, Teske, and Mintrom, 1995; Bicker and Stein, 2004). Expectations play a key role; “policy entrepreneurs have an incentive to promote institutional collective action when they expect their constituents to receive a disproportionate benefit from the product of collective action, even if not the entirety of the benefit” (Bicker and Stein, 2004, p.805). Consequently, the main idea of institutional collective action is that high transaction costs can be reduced by collective action or cooperation between public organizations and governments (Kwon, 2008).

In terms of federal grant applications, cooperation is likely to increase demands for federal grants since the interactions between public institutions help to share information and reduce transaction costs. From this line of reasoning, a hypothesis can be set up as follows:

H1: The existence of interaction through networks is likely to increase applications for federal grant application

The network perspective and institutional collective action theory help to explain how cooperation between local governments can more readily shape decision making situations. This increases awareness of opportunities to

cooperate with other public organizations to solve wicked problems that require collective actions. That is, cooperation formed as a result of limited resources, increased complexity and uncertainty and so forth, can help to identify alternatives for solving wicked problems with which each government cannot handle by itself.

2. Financial cooperation

Transaction costs stimulate institutional collective action between governments, and governments try to reduce their costs through intergovernmental cooperation (Bicker and Stein, 2004). Linden (2004) mentions that local governments may cooperate to produce services more efficiently or to take joint actions in order to achieve common goals. Intergovernmental fiscal cooperation can be understood as a type of collective action for reducing costs and increasing effects.

Kwon (2008) explains, “many local governments have both the opportunity and incentives to work with their governmental neighbors to pursue efficient use of fiscal resources for service delivery” (p.7). Some scholars have found that intergovernmental fiscal cooperation occurs frequently where there are overlapping jurisdictions or close geographical proximity (Bicker and Stein, 2004; Shrestha and Feiock, 2006). The amounts of expenditures that a city spend on intergovernmental contracting for services, goods, and joint ventures is an indicator of cooperation fiscally between local governments (Bicker and Stein, 2004; Kwon, 2008).

In addition, intergovernmental revenue transfer represents cooperation of local governments with other neighboring local governments (Shrestha and Feiock, 2006; Kwon, 2008). Many local governments do not have enough resources to deliver alternate public services for their residents. They provide limited public services with scarce resources and they are constrained in promoting future development. Using intergovernmental fiscal cooperation, localities can achieve their goals more efficiently and provide public services effectively through financial cooperation with other neighboring local governments. Kwon (2008) points out that politicians and executive officials perceive intergovernmental fiscal cooperation as an important local government management issue since increased

efficiency as a result of use of cooperative fiscal resources is related to the regional development and to re-election of elected officials. Bicker and Stein (2004) describe that institutional collective action in local governments can influence the incidence of grants awards, since cooperative grant seeking activities between local governments are more likely to reduce grants search costs and increase opportunities for receiving grants. This study hypothesizes that local governments will have chances to obtain federal grants if they are fiscally coordinated with other local governments.

H2: Intergovernmental financial cooperation is likely to increase applications for federal grant application

3. Determinants of grant allocations and applications

Nice (1987) observed that the majority of federal grant programs are designed to encourage recipients to implement specific public policies. As Nicholson-Crotty (2004) pointed out, “when federal money is received but no subsequent increase in targeted jurisdictional spending occurs, the assumption is that the money has been diverted to another expenditure category” (p.110). In general, federal grants stimulate particular expenditures related to specific public purposes.

Several types of variables affect federal grants allocations. Rich (1989) categorized factors that influence the distribution of grants into three sections: political influence, community needs, and local demand and prior program experience. The finding indicates that political representation, prior experiences on federal grants, population size, and region can affect federal grants allocations.

Most existing research focuses on the supply side in grant allocations, but some scholars emphasize the demand side of grant allocations. Stein (1979) argues that grant allocations vary depending on differences in governments’ desires for federal funding and the levels of recipient needs and assertiveness. In fact, local governments’ differing needs for federal grants and varying levels of recipient assertiveness have significant effects on the amounts of federal grants allocations (Stein, 1979). In addition, Rich(1989) claims that local government

characteristics are the factor that most affects the quality and the quantity of federal grant allocations. With regards to intergovernmental financial cooperation, Bicker and Stein (2004) indicate that institutional collective action in local governments can influence the incidence of grants awards, since cooperative grant seeking activities between local governments are more likely to reduce search costs and increase opportunities for receiving grants.

Therefore, this research assumes that different political and social variables such as population size, poverty rate, unemployment rate, and form of governments are likely to affect grants distributions. Those factors frame local governments' behaviors for applying federal grant programs. These variables are closely associated with local government's budget and finance priorities. In other words, variations in the federal grants and application behaviors of local governments can be influenced by political and social factors in addition to the intergovernmental fiscal cooperation.

H3: Population size is positively associated with the frequency of federal grant applications

H4: Median incomes are positively associated with the frequency of federal grant applications

H5: Poverty rate is positively associated with the frequency of federal grant applications

H6: Unemployment rate is positively associated with the frequency of federal grant applications

H7: Council-manager form of government is positively associated with the frequency of federal grant applications

III. Method

This study examines the effects of intergovernmental fiscal cooperation on the federal grant applications of local governments. Intergovernmental revenue transfer is used as a primary independent variable and a particular federal grant program as a dependent variable. More specifically, this study employs shared

revenues from other local governments as a primary independent variable and it targets the Small Cities Community Development Block Grant program (Small Cities CDBG) as a dependent variable. Three year data from 2011 to 2013 were collected to analyze the effect of intergovernmental fiscal cooperation on the likelihood that a local government applies for a federal grant. The study employs Logistic Time–Series Cross–Sectional Analysis as a statistical research method, which provides a framework to analyze data collected across several times and tries to investigate time effects in the model. The unit of analysis is cities in Florida.

1. Variables

Dependent variable

This study employs governments' application behaviors for federal grant programs as a dependent variable. Although there are various federal grant programs, the study targets the Small Cities Communities Development Block Grants (Small Cities CDBG) program and governments where apply for this federal grant program since it is a competitive federal grant program. In order for measuring government's application behavior for this grant program as a dependent variable, it is defined as whether or not governments apply for the Small Cities CDBG. It is a binary variable.

Small Cities CDBG provides funding for housing and community development. The purposes of community development block grants are to give benefits to low and moderate income persons, to prevent or eliminate slums, and to address urgent community development needs. The Small Cities CDBG program is administered by the Florida Department of Economic Opportunity. The State of Florida has received between 18 and 35 million dollars annually since the year of 1983. Low and moderate income populations, the number of persons below the poverty level, and the number of housing units with more than one person per room are considered in the allocation process. Eligibility criteria include: cities

with fewer than 50,000 residents, counties with fewer than 200,000 residents, and cities that opt out of the urban entitlement program.

Independent variable

This research sets up intergovernmental fiscal cooperation as a primary independent variable. Kwon (2008) defines intergovernmental revenue as “financial support from other local governments for activities administered by recipient locality, including its dependent agencies” (p.46). Some studies indicate that the amount of intergovernmental revenue transfer is an indicator of the tendency for local governments to cooperate with one another (Shrestha and Feiock, 2006). Similar to prior research, this study assumes that intergovernmental revenue transfer can represent the degree of intergovernmental fiscal cooperation. In order to measure intergovernmental fiscal cooperation, the study uses the “shared revenues from other local units” category in the Florida Revenue Sheet as a primary independent variable. This variable is collected from the Florida Department of Revenue and the Florida Department of Financial Services, it is a binary variable that is coded as one if local governments receive shared revenue from other local units.

In order to measure the existence of interaction between governments, this study employed the Certificate of Achievement for Excellence in Financial Reporting Program (CAFR program) as the second independent variable. The Certificate of Achievement is awarded only to local governments that choose to participate in a rigorous peer review process. Receipt of the award is an indicator of the presence of employees who are active professionals. Undergoing peer reviews is a characteristic of professions. Members of professions are members of professional networks. They are likely to interact with persons in other governments who are members of the same profession. Receipt of the certificate, as an indicator of the presence of financial professionals who chose to undergo a peer review process that is conducted by a professional organization, is used here as a surrogate indicator of the likelihood that a

government's employees interact with employees of other local governments. It is also a binary variable that is coded as one if a government receives the certificate, assuming that winners or participants of the certificate program would interact and communicate with other governments and it would influence to the government's application behavior for the federal grant programs. The CAFR program was established by the Government Finance Officers Association (GFOA) to encourage governments to prepare high quality comprehensive annual financial reports using generally accepted accounting principles. More than 3,900 state and local governments participate in the CAFR program in the USA and Canada.

Table1. Variables, Measurements, and Data Source

Variables	Definition	Data Source
Federal Grant Application	Government activity to apply to Small Cities CDBG program; coded 1 if a government applies	Florida Department of Economic Opportunity
Shared Revenue	Shared revenue from other local governments; coded 1 if a government received revenues from other local governments	Florida Department of Financial Services
Professionalism	Winning of the Certificate of Achievement for Excellence in Financial Reporting Program; coded 1 if a government receives the certificate	Government Finance Officers Association
Form of Government	Form of government; coded 1 if a city has council–manager form of government	Municipal Year Book
Population	Total population; transformed with natural logarithm	Census, American Community Survey
Income	Median income; transformed with natural logarithm	Census, American Community Survey
Poverty Rate	The ratio of the number of people who fall below the poverty line and the total population	Census, American Community Survey
Unemployment Rate	Percentage of total workforce who are unemployed and are looking for a paid job	Census, American Community Survey

In addition, population size, poverty rate, unemployment rate, form of government, and median income are used as additional independent variables

which can describe characteristics of communities. Previous studies have shown that those variables are related to grant allocations (Stein, 1979; Rich 1989). The data for population size, poverty rate, unemployment rate, and median income were gathered from the Bureau of Census, and the data on form of government were collected from the Municipal Year Book. This study investigates the effect of intergovernmental fiscal cooperation with those control variables on governments' application behaviors for federal grant programs.

2. Model and frameworks

This study assumes that intergovernmental fiscal cooperation has impacts on governments' application behaviors in seeking federal grants. Logistic random effect time-series cross-sectional analysis is used to analyze the relationships between intergovernmental fiscal cooperation and a government's application behavior for federal grant programs. Although the data consist of repeated information by year, there were no time fixed in the dataset and random effect model is preferred based on the Hausman test. This study, therefore, employs Logistic random effect time-series cross-section analysis rather than logistic fixed effect times-series cross-sectional data analysis. Before conducting the analysis, normality, multicollinearity, and autocorrelation were tested to get precise estimation; the population and median income variables were transformed with logarithms to comply with the normality assumption.

IV. Findings

This research examines the impacts of intergovernmental fiscal cooperation on governments' likelihood of applying for a particular federal grant program. This research targets the Small Cities Community Development Block Grants program in the State of Florida to analyze the relationships. Table2 shows characteristics of each variable in the model; it is below:

Table 2. Descriptive Statistics

Variables	Mean	S.D.	Min	Max
Federal Grant Application	.1462963	.3535667	0	1
Shared Revenues	.4305556	.4953834	0	1
Professionalism	.325	.4685918	0	1
Council–Manager	.5611111	.4964813	0	1
Population	9177.815	11725.3	7	59952
Income	50809.05	30279.11	17188	250000
Poverty rate	17.36937	10.78615	0	58.4
Unemployment rate	10.86834	5.421696	0	33.3

As shown above, table 2 shows the three years of descriptive information for the cities in Florida that are entitled to apply for the Small Cities CDBG program. Variables of ‘application’, ‘fiscal cooperation’, ‘interaction’, and ‘form of government’ are binary variables, indicating that their minimum values are zero and maximum values are one respectively. Average population size of cities was 9177.815, meaning that around 9,178 people resided in an ‘average’ city. The median income was about 50,809, 17.36 percent of people were under the poverty level on average, and the mean unemployment rate in the cities was 10.86 percent.

This research first examined whether there were time fixed or random effects on the dataset. Although the data include repeated information on variables across three years and it assumes that there are time effects influencing government’s application behavior, the test results of likelihood ratio and the Hausman test revealed that there were no time effects on government’s activity applying federal grant programs, so that the Logistic Random Effect Time–Series Cross–Sectional (TSCS) Analysis was employed to investigate the hypothesized relationships.

Table 3 represents the results of the logistic random effect TSCS analysis for the impacts of intergovernmental fiscal cooperation on governments’ likelihood of applying to the Small Cities CDBG program. This logistic random effect TSCS regression model explains which variables are significant for examining variations in the model. As a whole, the model accounts for a very modest 14 percent of

variation in application activity for the Small Cities CDBG in the State of Florida. As a result of logistic analysis, some of the measurements for the grants application play statistically significant roles to explain variation in applications to the Small Cities CDBG programs. Some of variables are positively related to grants applications and some of them have negative relationships with grants applications.

The primary independent variable, intergovernmental fiscal cooperation measured by the concept of shared revenue from other local units is not significant in explaining the application activity of the Small Cities CDBG programs, while the variable on professionalism is statistically significant and it has a modest explanatory power on governments' application for the federal grant program. In addition, results show that median income is significantly related to the variation of governments' grant program application activities.

Table 3. Logistic Random Effect Time-Series Cross-Sectional Model

Variables	Coefficient	S.E.	z
Shared Revenues	-.0237517	.2598449	-0.09
Professionalism	-1.063588	.343405	-3.10***
Council-Manger	-.1193334	.278195	-0.43
Population	-.1053539	.1041704	-1.01
Income	-1.620175	.5054999	-3.21***
Poverty rate	.0190954	.0157822	1.21
Unemployment rate	.0249518	.0223938	1.11
Year12	-.01166	.2462774	-0.05
Year13	.1938089	.2439311	0.79
Cons	15.52732	5.576875	2.78***
Pseudo R ²	0.1376		

Note. N = 1071, * P < .1, **P < .05, ***P < .01

In terms of hypothesis testing, results show that there are only two statistically significant relationships in the model. At first, this researcher expected that the existence of professionalism would be positively associated with governments' federal grant application activity. The existence of professional peer reviews is statistically significant in explaining governments' behaviors in

applying for federal grants. Although the study assumes positive relationships between variables, the results illustrate that there are negative relationships. The value of coefficient is -1.0636 and its odd ratio is equal to 0.3452 , meaning that the odds of applying Small Cities CDBG program would decrease by 65 percent for government with greater presence of professional activity, controlling for other variables. In other words, the existence of professionals seeking peer reviews is more prevalent where governments are less likely to apply for Small Cities CDBG program. This is the opposite result expected in the initial hypothesis.

With regard to the effects of income on governments' activity in applying to the Small Cities CDBG program, the study hypothesizes that income is positively associated with the federal grant application behaviors. Contrary to the hypothesis assuming positive relationships, the results show negative relationships between income and governments' likelihood of applying for the Small Cities CDBG program. The value of coefficient of income is -1.6201 and its odd ratio is equal to 0.1978 , meaning that the odds of applying Small cities CDBG program would decrease by 81 percent with a percent of median income increases, controlling for other variables. On the one hand, a government with increased median income would be less likely to apply for the Small Cities CDBG program than a government with decreased median income.

Those two variables – seeking professional recognition and median income – have modest significant effects in explaining government's application behavior for Small Cities CDBG program. But the relationships are negative instead of positive as stated in the initial hypotheses. In contrast to these two significant variables, other variables including intergovernmental fiscal cooperation, form of government, population, poverty rate, and unemployment rate did not have explanatory power on governments' tendencies to apply to the Small Cities CDBG program. Coefficients and p-values of each of them are not statistically significant, indicating that they are not meaningfully related to governments' application. The hypotheses on form of government, population, poverty rate, and unemployment rate are rejected.

In addition, the model examines year effects on governments' application to the Small Cities CDBG program. This study assumes that governments' application

behavior for the federal grant program varies by year, indicating that a year variable might show impacts on determining governments' application decisions. However, application behavior in the years 2012 and 2013 was statistically insignificant compared to application activity in year 2011. In other words, year variables are not significant determinants affecting government's application behavior for the federal grant programs.

Therefore, evidence of professional recognition seeking, as well as median income, are factors that affect governments' application activity for the Small Cities CDBG program in Florida, but they are negatively associated with governments' application behavior. For instance, governments where finance professionals sought peer recognition are less likely to apply for the federal grant program. In addition, governments where people have higher median incomes are less likely to apply for the federal grant program. In contrast, other variables such as intergovernmental fiscal cooperation, form of government, population, poverty rate, and unemployment rate are not statistically significant in explaining local governments' grant application activities. Those activities did not vary much in the years studied.

V. Conclusion

This research examines the impacts of intergovernmental fiscal cooperation on governments' application behaviors for the federal grant programs. In order to measure those effects, this study pays attention to both financial cooperative relationships between local governments in Florida and existence of networks or interactions between governments as independent variables. The government's application behavior for the Small Cities Community Development Block Grant program in the State of Florida is considered to be a dependent variable, while other control variables are added into the model. The results show that the level of financial professionalism in local governments and median incomes are statistically significant, but they are negatively associated with governments' likelihood of applying for the Small Cities CDBG program. It illustrates that local governments tend to be mostly motivated by financial capabilities. In addition to

test results on governments' likelihood of applying for the federal grants, the relationship between intergovernmental fiscal cooperation and governments' applications for the federal grants can be understood in terms of fiscal stress in each local government.

On the one hand, governments' likelihood of applying for the federal grants would be an indicator in explaining whether local governments currently are under fiscal pressures. For instance, governments where professionalism is evident and have higher median incomes are less likely to apply to the federal grants because they have enough resources and strong fiscal structures. Governments are able to make a high and low priority in terms of spending public monies and obtaining financial resources. However, governments that do not show an indicator of professionalism and have lower median incomes are more likely to apply to the federal grants in order to get enough resources and relieve fiscal stress. Perhaps governments under fiscal stress cannot afford to spend time seeking professional recognition awards. It seems that local governments under fiscal pressure have different priorities, namely to get enough resources, so that they are more likely to apply to the federal grants.

Although this study tried to explore a relationship between intergovernmental fiscal cooperation and the likelihood applying for federal grants, it did not succeed. Its limitations provide suggestions for future research.

At first, this study found no clear relationships between intergovernmental fiscal cooperation and governments' behaviors toward the federal grant applications. There seems to have been an omitted variables as conducting analysis. In other words, there are likely other variables that can better explain likelihood of governments' applications to the federal grants and only a few variables are included in this model.

The study would have more explanatory power if other variables are added into the model but it is not clear what those variables might be. In addition, the use of the proxy variable for measuring interactions between governments, 'professionalism', was misunderstood in the study. This research employed 'professionalism' to measure interactions and networking among local governments, but it turned out to be an inappropriate measure to capture governments' interactions and networking. It identifies a government that chooses

to participate in a rigorous peer review process. Even though this study uses ‘professionalism’ as a variable for measuring interactions and networking between local governments, it is a surrogate variable, which has possibilities not to represent precise governments’ interactions contrary to assumptions of this study. It is likely to lead to bias or misunderstanding of the research. It seems likely that governments where median incomes are higher have more ‘slack’, meaning the time to participate in peer review processes. The time required to participate in the GFOA awards process might not exist in poorer governments.

Secondly, this study focuses on the specific federal grant program and it could cause representativeness problems. That is, the results of this study may not explain whole relationships between intergovernmental fiscal cooperation and likelihood of governments’ applications to other federal grants. In other words, the findings may or may not be applied to describe governments’ likelihood of applying for other federal grants since this study only focuses on the impacts of the intergovernmental fiscal cooperation in Florida. There may be different reasons and variables that can explain governments’ likelihood of applying to the federal grants in other states and local governments. In addition, this study only collected three years data to conduct analysis. It cannot provide more obvious causalities between intergovernmental fiscal cooperation and the desires for the federal grants than the research with using longitudinal data. For instance, test results show that there are no time effects on governments’ application to the federal grants. The more precise causal relationship between the intergovernmental fiscal cooperation and the governments’ likelihood of applying to the Small Cities CDBG programs need to be studied using data for several decades. Therefore, these limitations should be fully considered in the future research, and it is necessary to provide more accurate explanations of the relationships between intergovernmental fiscal cooperation and governments’ likelihood of applying to the federal grants.

References

- Agranoff, R. & McGuire, M. (2001). Big questions in public network management research. *Journal of Public Administration Research and Theory*, 11:

- 295–326.
- Bickers, K. N., & Stein, R. M. (2004). Interlocal Cooperation and the Distribution of Federal Grant Awards. *The Journal of Politics*, 66(3): 800–822.
- Holcombe, R. G., & Zardkoohi, A. (1981). The Determinants of Federal Grants. *Southern Economic Journal*, 48: 393–399.
- Isset, K. R., & Provan, K. G. (2005). The evolution of dyadic interorganizational relationships in a network of publicly funded nonprofit agencies. *Journal of Public Administration Research and Theory*, 15(1): 149–165.
- Jung, Changhoon., & Kim, Juchan. (2009). Patterns and the determinants of interlocal cooperation in American cities and counties. *International Review of Public Administration*, 14(1): 11–25.
- Krueathep, W., Riccucci, N. M., & Suwanmala, C. (2008). Why do agencies work together? the determinants of network formation at the subnational level of government in Thailand. *Journal of Public Administration Research and Theory*, (20): 157–185.
- Kwon, S. W. (2008). *Regional Organizations and Interlocal Cooperation among Florida Cities*. Ph. D. Dissertation, Florida State University.
- LeRoux, K., Brandenburger, P. W., & Pandey, S. K. (2010). Interlocal service cooperation in U.S. cities: A social network explanation. *Public Administration Review*, 70(2): 268–278.
- Linden, R. (2004). Collaboration across Boundaries: The Basics for Change. ICMA. *IQ Report*, 36(5)
- Nice, D. C. (1987). *Federalism: The Politics of Intergovernmental Relations*. New York: St. Martins Press.
- Nicholson–Crotty, S. (2004). Goal Conflict and Fund Diversion in Federal Grants to the States. *American Journal of Political Science*, 48(1): 110–122.
- O'Toole, L.J. (1997). Treating networks seriously: Practical and research–based agendas in public administration. *Public Administration Review*, 57: 45–57.
- Ostrom, V., Tiebout, C., & Warren, R. (1961). The organization of government in metropolitan areas: A theoretical inquiry. *The American Political Science Review*, 55(94): 831–842.
- Provan, K.G., & Milward, H. B. (1995). A preliminary theory of interorganizational network effectiveness: A comparative study of four community mental health systems. *Administrative Science Quarterly*, 40: 1–33.
- Rich, M. J. (1989). Distributive Politics and the Allocation of Federal Grants.

- American Political Science Review*, 83(1): 193–213.
- Shrestha, M. F., R. (2006). Transaction Characteristics of Service and Interlocal Cooperation in Local Public Goods Supply: A Transaction Cost and Social Exchange Explanation.
- Schneider, M., Teske, P., & Mintrom, M. (1995). *Public Entrepreneurs: Agents for Change in American Governments*. Princeton: Princeton University Press.
- Stein, R. M. (1979). Federal Categorical Aid: Equalization and the Application Process. *Western Political Quarterly*, 32(4): 369–409.
- VanBueren, E. M., Klijn, E. H., & Koppenjan, J. F. (2003). Dealing with wicked problems in networks: Analyzing an environmental debate from a network perspective. *Journal of Public Administration Research and Theory*, 13(2): 193–212.

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