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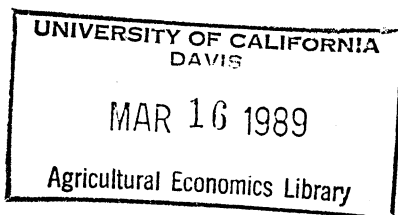
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FISCAL CAPACITY AND COMMUNITY SERVICE
PROVISION: A PARADOX OF ECONOMIC DEVELOPMENT



by

Josef M. Broder and Sara M. Haddow

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The authors are professor, Department of Agricultural Economics, University of Georgia, and cooperative extension agent, Richmond County Cooperative Extension Service, Augusta, Georgia. This research was supported by State and Hatch Funds allocated to the Georgia Agricultural Experiment Stations under Project H862, "The Economics of Community Service Financing and Delivery."

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FISCAL CAPACITY AND COMMUNITY SERVICE PROVISION: A PARADOX OF ECONOMIC DEVELOPMENT

ABSTRACT

Relationships between fiscal capacity, service provision, and financial stress in local governments are examined. A recursive system of equations is used to measure the impacts of fiscal capacity on service provision. Evidence of stress related to economic development was found and discussed in the context of growth management.

FISCAL CAPACITY AND COMMUNITY SERVICE PROVISION: A PARADOX OF ECONOMIC DEVELOPMENT

Since World War II there has been substantial growth in the size, power and scope of local governments. Increasing responsibilities and demands for services have led to a shift in fiscal responsibilities from federal and state to local jurisdictions (Savas, 1982). Many jurisdictions, in their attempts to match service needs of growing or declining populations, have overstepped their fiscal capacities. As these jurisdictions adjust to changes in service demands and fiscal limitations, many experience temporary or persistent financial stress.

This paper examines the relationship between fiscal capacity and financial stress. More specifically the objectives of this paper are (1) to develop a conceptual framework of fiscal capacity and financial stress, (2) to examine the impact of fiscal capacity on the service delivery process, and (3) to discuss implications for rural development and growth management. This paper presents evidence of and offers explanations for an apparent paradox of economic development; that economic development may contribute to financial stress among local governments.

CONCEPTUAL FRAMEWORK

A working definition of financial stress is a prerequisite to empirical analysis on the subject. Financial stress in local governments can be compared to financial stress among individual consumers or households. A household is under financial stress when its members are unable to meet regular expenses and must incur debts. Another form of financial stress results when households maintain balanced budgets but underinvest in goods and services such as health care, education, nutrition, or housing.

Local governments are also in the business of allocating budgets to meet citizens' demands for community services. Financial stress results when local governments experience deficits when providing adequate service levels or when service levels are inadequate to meet effective demands. More specifically, financial stress may be characterized by deficit financing of services, an absence of investments in deteriorating infrastructures, excessive reliance on intergovernmental revenues, and/or persistent underprovision or overprovision of services. In a utility framework, financial stress is

comparable to losses in individual or community welfare resulting from (1) a misallocation of resources among public expenditures, (2) a misallocation of resources between public and private expenditures, (3) a misallocation of resources across governments, and (4) other governments dictating the mix and level of services in the local area.

Thus, financial stress is largely the result of allocative inefficiencies in the public sector. Allocative inefficiencies and the resulting financial stress may be temporary disequilibrium responses to sudden changes in demand and supply conditions or persistent disequilibrium resulting from imperfections in the allocative process. Such imperfections may result from high transactions costs in the demand articulation process or from local monopolies in the service demand and delivery process.

Several measures of financial stress are found in the literature (Cuciti, 1978; Clarke, 1976; Touche Ross, 1979; Reeder, 1984; Stinson, 1981; U.S. Advisory Commission, 1971). Many of these studies were limited by one or more of the implicit assumptions that (1) equal service levels are desirable across jurisdictions, (2) ability-to-pay is synonymous with willingness-to-pay, (3) fiscal capacity is synonymous with the well being of local communities and/or, (4) certain socio-economic indicators are good proxies for public expenditure need.

Limitations of previous studies on financial stress are largely due to difficulties in determining optimal service provision as defined by effective service demand. In the current study, optimal service provision is assumed to result when the collective decision process provides a level and mix of community services, consistent with effective demand (Haddow, 1988). Specifically, that service allocation be responsive to both willingness-to-pay and ability-to-pay.

The current study defines a jurisdiction's ability-to-pay as fiscal capacity which is treated separately from the jurisdiction's willingness-to-pay. In this study an index of fiscal capacity is developed from a composite of local revenue sources. Next, willing-to-pay estimates are obtained from local governmental officials, charged by the electorate with managing the service allocation process. Elected officials are assumed to allocate public resources consistent with the preferences of the median voter (Bowen, 1943; Downs, 1957; Brennan and Buchanan, 1985; Bergstrom and Goodman, 1973). The median voter model was deemed appropriate given that many of the jurisdictions surveyed in this study

provided a minimal level of services and were served by elected officials who served on a part-time basis.

DATA AND ANALYSIS

Estimates of fiscal capacity and willingness-to-pay were obtained from separate data sources. Fiscal capacity data were derived from Georgia Department of Community Affairs annual survey of local finances. These data are unaudited annual data as reported by Georgia local governments for the period ending June 1984. Tax related data were obtained from The 1985 Georgia County Guide (Bachtel, 1985). Willingness-to-pay data were obtained from a 1986 survey of county commissioners in Georgia.

A simple recursive system with two models was used to examine the effects of fiscal capacity on service provision. The first model uses ordinary least squares (OLS) to develop an index of a county's fiscal capacity. This fiscal capacity index is then used as an explanatory variable in a second OLS model which is designed to explain service (in)adequacy as perceived by county commissioners.

Fiscal Capacity

Revenue variables used in the fiscal capacity model reflect the county's ability to generate revenues without assistance from other governmental units. A priori, local revenue sources were hypothesized as being positive determinants of fiscal capacity while external revenue sources were hypothesized as being negative determinants of fiscal capacity. The negative feature of external revenue sources was attributed to local official uncertainties and their lack of control over these revenues.

Variables used in the fiscal capacity model are shown in Table 1. The dependent variable was defined as the sum of all locally generated governmental revenues from property, sales, and other taxes; from licenses, permits and fees; from locally operated utilities; and from service and other charges. To control for population differences across counties, all variables were entered on a per capita basis. As specified, the model develops an index of a county's fiscal capacity or revenue potential. Estimates of the dependent variable represent the county's ability to pay and not just current revenue effort.

Table 1. Factors Associated with the Fiscal Capacities of County Governments in Georgia, 1985.

Variable Name	Variable Description ^a	Mean	Estimated Coefficient ^b
(Dependent Variable)			
FC	Fiscal capacity of county government	139.13	--
(Explanatory Variables)			
1. Intercept	--	--	118.15***
2. PROP	Net taxable property values	8.50	7.52*** (5.59)
3. IGRS	Intergovernmental revenue surplus	-27.81	-0.19 (1.21)
4. TLRIGR	Intergovernmental revenues as a percentage of total governmental revenues	0.31	-311.09*** (7.92)
5. TAXP	Gross taxable sales	4.07	10.25*** (5.28)
6. UTILV	Net taxable value of public utilities	1.32	3.74*** (4.52)

Number of observations = 158; R² = 0.57

^aAll variables were entered on a per capita basis.

^bt values shown in parentheses.

***significant at the alpha = 0.01 level.

Ordinary-least-squares estimates of fiscal capacity are shown in Table 1. Model estimates were consistent with a priori expectations. With the exception of intergovernmental surplus per capita (IGRS) all variables were statistically significant.

Service Adequacy

County commissioners in Georgia were asked to assess the (in)adequacy of community services provided by their respective counties. Commissioners were asked to indicate the extent to which the ten most frequently provided services would have to be increased (decreased) to meet citizen demands, as perceived by county commissioners. These percent increases (decreases) were multiplied by current operating expenditures for each of the ten services, summed, and computed on a per capita basis. These estimates of needed increases in service expenditures were used as a measure of service inadequacy, and the dependent variable of the second model.

Commissioner perceptions of service inadequacy were hypothesized to be a function of the county's fiscal capacity, population growth and distribution, commission structure, and individual commissioner characteristics. A brief description of the explanatory variables and the model results are shown in Table 2.

Ordinary least squares estimates of the model suggests that perceptions of service inadequacy tends to be positively related to fiscal capacity, population growth, the commissioner's willingness to increase taxes, the size of commission and the percentage Black population. Conversely, services were viewed as being more adequate in counties with commissioners who were politically conservative and were long-time residents of the county, and in counties with larger rural populations. With the exception of commissioner willingness to increase taxes and rurality, all variables were found to be statistically significant.

IMPLICATIONS

Growth Paradox

This analysis suggests that fiscal capacity may be positively related to perceived levels of service inadequacy. Thus, programs to enhance the county's fiscal capacity may contribute to rather than alleviate the county's financial stress. This apparent paradox of

Table 2. Factors Associated with Community Service Inadequacy in Georgia Counties, 1986

Variable Name	Variable Description	Mean	Estimated Coefficient ^a
(Dependent Variable)	Index of service inadequacy	14.20	--
(Explanatory Variables)			
1. Intercept	--	--	17.85 (1.42)
2. FC	Fiscal capacity	139.13	0.07* (1.83)
3. CHGPOP	Percentage change in population, 1980-1984.	4.44	0.54** (2.27)
4. PHIL	Political philosophy of commissioner 1 = liberal and 10 = conservative	7.41	-2.16** (2.14)
5. LONG	Commissioner's years of residence in county	41.62	-0.24** (2.23)
6. RAISE	Commissioner's willingness to increase taxes	3.00	0.93 (1.24)
7. SIZE	Size of commission 1 = sole commissioner 0 = multiple commissioners	0.17	13.65*** (2.55)
8. BLACK	Percentage Black population, 1980	28.45	0.33*** (2.76)
9. RURAL	Percentage rural population, 1980	69.82	-7.78 (1.21)

Number of observations = 62; R² = 0.47.

^at values shown in parentheses. Significant at the alpha = 0.10 (*), 0.05 (**), or 0.01 (***) levels.

economic development can be explained, if not reconciled, in the context of growth management and/or changes in public official preferences.

Growth related financial stress can be viewed in the context of growth management. Mulkey argues "that as counties grow, demands on resources become more diverse and more numerous, and that the allocation of resources requires more sophisticated allocative mechanisms (1987)." Economic development generally leads to an increase in the local governments' fiscal capacity. However, existing institutional arrangements may be unable or unwilling to translate fiscal capacity into adequate service delivery (Ellickson, 1977). Policies to enhance the fiscal capacity of local jurisdictions should be sensitive to the institutional arrangements in the service delivery process.

An alternative explanation of the paradox can be described in the context of the median voter model. The conceptual linkages between commissioner perceptions and adequate service demand was based on the assumption that commissioner preferences are consistent with that of the median voter. However, Buchanan has argued that unless bureaucrats are explicitly constrained by budgetary and political factors, their preferences may deviate from those of the median voter (Brennan and Buchanan, 1985). Increases in fiscal capacity may remove some of the budgetary constraints on commissioners and result in deviations between commissioner and median voter preferences. Fiscal capacity may introduce a Leviathan effect in which commissioners overstate effective demands for services in pursuit of personal objectives (Downes, 1987). The later explanation suggests that, with economic growth, additional political/constitutional constraints may need to be imposed on local officials to ensure that local governmental expenditures are consistent with effective demand for services.

The findings of these models should not be interpreted as being for or against economic growth. Policy-makers must invariably weight the stress associated with stagnant local economies, unemployment, declining populations, and deteriorating community service infrastructures with that associated with greater local revenue efforts. Policy-makers are also faced with the reality that public sector stress is not borne equally by all groups in the community. Hence, efforts to increase revenue effort in response to economic growth are likely to shift the financial burden across income groups. This redistribution of stress might have the greatest impact upon, and thus receive the greatest resistance from,

established communities who have developed private market alternatives to education, health, water, and other services.

Strategic Growth Initiatives

The erratic and uncertain nature of economic growth forces many communities to react to rather than manage growth and its costs and benefits. Growth related stress is thought to be most prevalent in communities which lack a strategic growth initiatives, i.e. a strategic plan for managing the service delivery process in response to economic development. While the growth process is likely to differ across communities, a strategic growth initiative would involve:

1. Assessing the performance of the local governments' service delivery process.
2. Identifying sources of public sector financial stress in local communities.
3. Evaluating existing institutional arrangements which impact on the service allocation process.

In the context of this research, local governmental performance was largely a function of how well local governments provided services consistent with service demands. The performance of the service delivery process in Georgia counties is shown in Table 3. The survey of county commissioners found that 75 of the 77 counties in the survey recommended that service levels be increased to meet local citizen demands. When the cost of increasing service levels were subtracted from existing governmental revenue surpluses, 58 counties experienced deficits, 2 counties broke-even, and 17 counties maintained surpluses. When averaged across counties, the recommended adjustments in service levels would generate a per capita deficit of \$30.46.

The county's ability to adjust its service levels depends largely on its financial condition. A summary of the financial condition of Georgia counties with and without recommended adjustments in service levels is shown in Table 4. By contrasting financial conditions with service levels, this table provides a useful tool for identifying sources of stress, that is, whether stress is due to inadequate service levels, poor financial conditions, or both. This table is also useful for developing growth management strategies for individual counties.

Of the 77 counties surveyed, 72 assessed their existing service levels as being less-than-adequate (underprovision), 3 as being adequate, and 2 as being

Table 3. Characteristics of Commissioner Recommendations for Service Level Adjustments in Selected Georgia Counties, 1986.

Number of Counties	77
Number of Counties Recommending:	
Decreases in service levels	2
Increases in service levels	75
Per Capita Difference Between Total Governmental Surplus and Costs of Recommended Change in Service Levels: ^a	
Mean	-\$30.46
Number of Counties with values:	
Negative	58
Zero	2
Positive	17

^aTotal governmental surplus equals total governmental revenues from all sources minus total governmental expenditures on all programs and activities. Costs of recommended change in service levels equals current expenditures on ten most-provided services times the percentage change in service levels as recommended by the county commissioners.

Table 4. Financial Performance of Selected Georgia Counties With and Without Recommended Adjustments in Service Levels, 1986.

Revenues- Expenditures	Community Service Levels			Totals
	Under- provision	Adequate Provision	Over- provision	
	-----number of counties ^a -----			
Deficit:				
Without	43	0	0	43
With	43-57	14-0	0	57
Break-even:				
Without	0	3	0	3
With	0	3	0	3
Surplus:				
Without	29	0	2	31
With	0-15	15-0	2	17
Totals:				
Without	72	3	2	77
With	43-72	32-3	2	77

^aTotal number of counties surveyed = 77.

more-than-adequate (overprovision). Of these 77 counties, 43 experienced operating deficits, 3 broke-even, and 29 experienced operating surpluses. Among all groups, the 43 counties with deficits and less-than-adequate service levels may experience the greatest stress and create the most difficult problems for growth management. Lacking both in local revenues and services to attract development, these counties are the least likely to develop without intergovernmental revenues. A growth strategy for these counties might focus on attracting state and federal level monies for infrastructure investments.

A second group of 29 counties with inadequate services may be in a better position for growth management by virtue of their revenue surplus. When revenue surpluses in these 29 counties were used to finance recommended increases in service levels, 14 counties generated deficits while 15 counties maintained their surpluses (at lower levels). Counties with adequate service levels and revenue surpluses may consider reducing local taxes. The 14 counties which may or may not have been able to achieve adequate service levels by allocating their surpluses to additional services may explore a mix of internal and external revenue sources.

When adjustments in service levels fail to achieve adequate service levels, an assessment and redesign of existing institutional arrangements for service provision are essential to growth management. The service provision process may be constrained by existing methods of financing services, state and federal mandates for minimum service levels, and/or local political structures which are unable to respond to the growing complexity of the service delivery process.

CONCLUSIONS

Charged with providing services, local governments play an integral role in determining the quality-of-life in local communities. While improving the quality-of-life for many, the service provision process creates problems for those who feel that governments are unresponsive to their needs. As the scope of local governmental activities become more complex the need for growth management becomes more acute. Community development researchers can help local governments assess the costs and consequences of economic change and develop realistic strategies to adjust to these changes.

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