

IMPACT FEES, GROWTH MANAGEMENT, AND DEVELOPMENT A Contractual Approach to Local Policy and Governance

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This article explores economic consequences of impact fees on local economic development and job growth. The authors focus on the implied contractual relationship between local governments and the development community in shaping patterns of economic growth in the community. Pooled time series cross-section analyses are employed to estimate economic consequences of impact fees in 66 Florida counties from 1991 to 2001. Contrary to the conventional wisdom that impact fees increase development costs and impede economic development, the authors report that implementation of impact fee systems enhances economic performance and lead to job growth.

Keywords: *impact fees; economic development; political institutions; local policy; local governance; local government; administrative capacity; growth management*

Growth management has captured increased attention as a means to pursue sustainable development in many communities. While considerable knowledge of the consequences of certain growth management instruments

AUTHORS' NOTE: An earlier version of this article was presented at the annual meeting of the American Society for Public Administration, April 2-5, 2005, in Milwaukee, Wisconsin. We wish to thank Michael Pagano and Irene Rubin for comments on an earlier version. This article is based in part upon work supported by the National Science Foundation under grant 0214174. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the authors and do not necessarily reflect the views of the National Science Foundation.

URBAN AFFAIRS REVIEW, Vol. 41, No. 6, July 2006 749-768

DOI: 10.1177/1078087406287165

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such as urban containment and zoning on economic performance has been accumulated, much less is known about the consequences of development impact fees for economic growth (see Nelson and Moody 2003). Case studies of impact fees in individual localities have typically focused on either the building cost and land price changes that resulted from newly adopted impact fees (Huffman et al. 1988; Yinger 1998) or the social policy implications of impact fees (Connerly 1988). To date, only one comparative study has examined the economic development consequences of impact fees (Nelson and Moody 2003). Nelson and Moody (2003) report a positive, rather than negative, correlation between use of impact fees and job growth. This finding is surprising because the development community has long asserted that land-use regulation in general, and impact fees in particular, adversely affect business activities and consequently the local economy. The authors suggest this might indicate that earmarked impact fee revenues improve infrastructure and thus have a positive economic impact (Nelson and Moody 2003).

Even though Nelson and Moody's (2003) study provides some new and interesting findings regarding the relationship between impact fees and economic development, their work suffers from several limitations. They do not provide a political economy framework to guide their analysis. Moreover, a critical omission from their research design is the failure to take into account local government institutions or the performance of the state economy. Extant work has established that government institutions play a mediating role in determining policy outcomes (Clingermayer and Feiock 2001; Dalenberg and Duffy-Deno 1991; Feiock and Stream 2001) and reduce transaction costs (Lubell, Feiock, and Ramirez 2005). In addition, state economies in the 1990s experienced an unprecedented boom, which might explain job growth patterns at the local level. This study builds upon Nelson and Moody's work. But we develop an institutional theory of local governance to examine economic consequences of impact fees by expanding the time frame, including government institutions, and considering the state economy. Impact fees are defined as "single payments required to be made by builders or developers at the time of development approval and calculated to be the proportionate share of capital costs of providing major facilities—arterial roads, interceptor sewers, sewage treatment plants, regional parks, etc" (Frank and Downing 1988, 3).

Our analysis of the relationship between growth management and economic development uses a contractual approach to institutions that focuses on transaction costs. This framework emphasizes institutional incentives and constraints, which affect transaction costs as well as production costs. This departs from the standard political economy model of growth management,

which focuses on how production costs resulting from government regulation hinder private investments and adversely affect economic development. We argue that certain types of local government growth management institutions can mitigate the effect of increased production costs by reducing the risk and the uncertainty of private investments (see also Feiock and Stream 2001).

The private transaction costs of development are high because of the risks private actors face during the legislative and administrative process for approving and permitting new development. Delay or rejection of development permits can force developers to incur substantial economic losses (Feiock and Jeong 2002; Nelson and Moody 2003; Burge and Ihlanfeldt 2006). Nelson and Moody (2003) contend that impact fees reduce the risk and the uncertainty in the approval of projects and permits. The following section outlines this theoretical framework. The implementation of impact fees is then examined in 66 Florida counties¹ in the third section. The fourth section delineates our research design and data, and the fifth section reports findings regarding the effect of impact fees on economic development and job growth. The final section discusses the theoretical and policy implications of this study for the use of impact fees.

THEORETICAL FRAMEWORK: LOCAL GOVERNANCE AS A RELATIONAL CONTRACT

Williamson (1985) views the governance structure of a firm as a contractual arrangement governing specific types of transactions. Certain institutional arrangements replace high-power market incentives with lower power bureaucratic incentives that help secure the contract and reduce the transaction costs (Williamson 1985). Institutions provide incentives and/or constraints for those who interact and consequently reduce uncertainty in political and economic transactions (Clingermayer and Feiock 2001). Opportunistic behavior and information asymmetry increase the costs of transacting. If existing institutions create uncertainties in processes or outcomes, demand may emerge for new institutions that revise or change existing property rights. Institutional arrangements that operate as a safeguard to secure contracts and reduce transaction costs are at the core of efforts to reduce uncertainties (Williamson 1985). Several scholars have extended this logic to local government constitutional provisions (Maser 1998; Frant 1996; Feiock 2002; Feiock, Jeong, and Kim 2003; Johnson 2004; Feiock and Yang 2005).

Maser (1998) suggests that constitutions² operate as relational contracts to delineate how decisions are made “thereby allocating rights that safeguard

participants' interests" (p. 560). Institutional arrangements facilitate and safeguard exchange; that is, under established rules and norms, actors build stable and reliable expectations in a relationship of mutual exchange. At the local constitutional level, Maser (1998) describes how local charters operate as contracts to safeguard citizens and various interests in the community from governmental actions that could harm them and to create reliable expectations in a relationship of mutual exchange. Constitutional-level institutions, such as the form of municipal government, have been linked to this argument. For example, Feiock (2002) argued that the choice of cities to offer financial incentives to attract economic development, as opposed to using nonincentive approaches, would be shaped by the difference in responsiveness to business demands under mayor-council and council-manager governments. Subsequent empirical analyses provided strong support for this proposition (Feiock, Jeong, and Kim 2003). Similar findings regarding the responsiveness of different forms of government to development and environmental interests were reported for local land-use and conservation decisions (Feiock 2004a, 2004b; Lubell, Feiock, and Ramirez 2005).

Using the arena of growth management and economic development decision making, we elaborate the concept of a contractual relationship between local governments and development interests and how this relationship is embedded in the choice of impact fees as a policy instrument. To date, contractual approaches to local governance have focused almost exclusively on constitutional-level rules (see McCabe and Feiock 2005). Buchanan (1975) drew a sharp distinction between constitutional and policy choice. Dixit (1996) argues that this distinction is not nearly as clear cut in practice as the terminology suggests: Constitutions are incomplete contracts allowing for *ex post* manipulations, and long-lasting policy acts often have many characteristics of rules. Thus, he envisions a spectrum of policy making, characterized throughout by substantial transaction costs. Similarly, Ostrom and Ostrom (2004) delineate three levels at which institutions operate. Constitutional rules define who is eligible to participate in policy making and the rules that will be used to undertake policy making. Policy (or collective choice) rules are policy decisions made within the constraints of constitutional rules. Policy decisions then affect operational rules to generate outcomes directly in the world.

The adoption of impact fees is a policy (or collective choice) decision, not part of a constitution or charter. Nevertheless, it can be viewed as an institutional choice. The key provision of the implicit constitutional contract in the adoption of this policy instrument is that developers should bear all or a part of the costs to provide infrastructure that benefits their developments. In return, local governments are less likely to delay or reject

new development and its permits because the necessary infrastructure is provided, citizen opposition is reduced, and payment of fees conveys an understood right to develop. In other words, impact fees can reduce the uncertainty for development permitting and approval of development (Nelson and Moody 2003; Burge and Ihlantfeldt 2005). The payments developers make to government are offset by reduction in costs from delay in regulatory review and permitting.

In addition to functioning as a safeguard to secure contractual relationships and reduce the potential transaction costs of private investment, impact fees can make development more acceptable politically by shifting the costs of growth from existing to new residents. For example, citizens' perceptions of new developments are typically enhanced when earmarked funds from the private sharing of infrastructure costs and allocation schedules operate to relieve financial burdens of taxpayers while increasing probability of development approval.

IMPACT FEES IN FLORIDA

In Florida, the local property tax remains the major revenue source for local governments but is constrained by state regulations and strong citizen resistance to tax increases. Florida sets the maximum property tax millage rate for local governments at 10 mills. The Florida Advisory Council on Intergovernmental Relations³ reported that as of 1989, the 10-mil cap makes poor and small counties with populations less than 50,000 especially vulnerable to problems in financing growth (see also MacManus 1998, 220). Furthermore, homestead property tax exemptions allowed home owners to exempt \$25,000 of the assessed property value, which consisted of 28.65% of total property taxes across 67 Florida counties (MacManus 1998, 220).

In Florida, state growth management legislation in the 1980s required that new development and construction should accommodate infrastructure when developments were completed. Traditionally, new infrastructure was financed by existing residents through property tax increases, which were politically unfavorable and resulted in greater taxpayer resistance. While local governments were limited in raising property taxes under the statutes, impact fees were relatively easier to impose and collect as one alternative revenue source.

One of the major challenges, which Florida faces now and in the future, is rapid population growth and subsequently rising demands for public services and expenditures. In particular, among the fastest growing segments of the population are the elderly, school-aged, and immigrant populations

(MacManus 1998, 194). Impact fees are imposed on new developments and help accommodate new or expanded capital projects under the concurrency requirements⁴ of Florida statutes. For example, using the case of Broward County, Florida, Auerhahn (1988) suggests that one of the primary purposes of impact fees is to finance capital projects resulting from new developments.

IMPACT FEES AND ECONOMIC DEVELOPMENT

As one growth management institution, impact fees coordinate the financial burden of infrastructure incurred from new development. This financial burden of infrastructure construction is supposed to be shared by the public and private sectors together under the impact fee system. In the traditional economic development policy approach, state and local governments used financial incentives to attract private investments to communities. While local development policy can provide lucrative financial aid and favorable deregulation, many commentators report that economic consequences including new employment and income growth are often minimal (Feiok 1991; Wolman 1988). Under the impact fee system, it is assumed that local governments impose the costs of new development on the private sector. This implies that local governments should accommodate citizens' needs for infrastructure and quality of life on one hand and growth demands on the other. With an impact fee system, the development community is required to pay for growth; that is, impact fees may function as fiscal disincentives by imposing a financial burden on the private sector for the provision of public facilities or infrastructure.

Economists contend that government intervention or regulation in the private market often has negative consequences, such as deadweight loss. Regulatory compliance burdens are linked to increased production costs. The opponents of impact fees underscore the higher development cost, which they contend has adverse effects on private investment. For example, Jeong (2006) reports that the development community has sometimes mobilized in opposition to the adoption of impact fees. What is sometimes overlooked is that impact fees also reduce the risk and the uncertainty of government infrastructure and private investment decisions (Nelson and Moody 2003). Private investors face potential risks and uncertainties from at least three sources: permit or approval determination; future land markets in the context of demand and supply of land, housing, and businesses; and available infrastructure to support development. In this context, government officials and developers may be considered as partners in a contractual relationship. Capital improvement planning based on development impact fees supports the construction of key public facilities such as roads, water, sewer, and so on (Nelson and Moody 2003). In regard to government permit

approval and expedition, impact fees that are measured and collected for capital projects may bind future decision making for the development (Nicholas 1988, 128; see also Horn 1995). The anticipated governmental approval of new development reduces the risk and the uncertainty for private investment. In this way, impact fees help reduce transaction costs of private development decisions. More important, with partial payment for the growth of economic development, impact fees also reduce the negative perception in the local community of undesirable consequences resulting from new development, consequently reducing local resistance to growth. Thus, impact fees can be identified as both the regulatory constraints and safeguards for new development. Improved public sentiment regarding economic development may benefit the development community by reducing the uncertainty of development permit and approval (Altshuler and Gomez-Ibanez 1993). We hypothesize that adoption of impact fees will have a positive effect on local economic performance.

In addition to impact fees, our model includes factors linked to local economic growth in the literature: political institutions, administrative capacity, local interest groups, economic development policy, population growth, and the performance of state economy (Rubin and Rubin 1987; Fleischman, Green, and Kwong 1992; Feiock 1991; see also Brace 1991).

COUNTY POLITICAL INSTITUTIONS AND ECONOMIC DEVELOPMENT

The political institutions of county government are salient because centralized leadership can coordinate diverse interest in land-use control and economic development (Svara 1993; see Frederickson and Johnson 2001). Under the traditional "nonreformed" commission-only form of county government, political power is not separated between the executive and legislative branch. The commission initiates and oversees implementation of policy. Commission members respond to demands and problems or issues within the community. In addition, under the traditional county commission form, "row officers" who are state constitutional officers play the primary role in courts, law enforcement, tax assessment, and tax collection. With authority fragmented to row officers, the nonreformed commission form of government has little room to develop a comprehensive and effective management system (Svara 1996; Benton 2002).

However, social change over the past four decades has led many county governments to reconsider their political structures. This has been most prominent in counties that experienced rapid demographic and economic change as a result of urbanization and faced new demands that required coordination of economic development and infrastructure needs. In coping

with these issues, structural reform of political systems focused on centralized leadership and professionalism (Svara 1993; Benton 2002). One of the primary elements in county reform was the establishment of chief executive positions to centralize decision making and professionalism in county administration. Professional management was less vulnerable to diverse political interest groups in local land-use control. Furthermore, professional norms and training of the appointed county administrator (or manager) bring effective management and coordination of diverse conflicts and interests (see Lubell, Feiock, and Ramirez 2005).

Home rule authority also had significant influence on county decision making with regard to revenue sources, service provision, and policy initiatives (Benton 2002). Home rule authority gives local policy makers greater opportunities to initiate new options to cope with economic development and growth management. Greater discretion and flexible use of resources may increase a county's capacity to deal with its economic situation. Therefore, we posit that a reformed county government emphasizing executive leadership and home rule authority will be more effective in pursuing economic development. Thus, we expect that reformed counties with centralized leadership and a home rule charter will promote the local economy.

ADMINISTRATIVE CAPACITY, COMMUNITY CHARACTERISTICS, AND THE STATE ECONOMY

Several characteristics of communities, local governments, and the environments in which they are embedded are also linked to economic growth. The significance of administrative capacity for reducing transaction costs has been confirmed in the context of environmental policy, where administrative and regulatory capacity was related to stronger economic growth (Feiock and Stream 2001). The assumed trade-off between regulation and the economy has been challenged by several studies documenting benefits of improved environment quality without economic harm, in which institutional structures and administrative arrangements play mediating roles (Goetz, Ready, and Stone 1996; Feiock and Stream 2001). For example, one-stop permitting can reduce the steps of administrative procedures for private firms and increase regulatory compliance without harming business activities (Feiock and Jeong 2002). Regulation is embedded in administrative arrangements that shape the context of regulatory uncertainty and risk of private firms. Certain administrative arrangements can enhance economic activities by reducing uncertainty and thus providing a more favorable environment to firms' profit maximization (Feiock and Stream 2001).

Administrative agencies with higher administrative capacity tend to have more staff and financial resources to implement policies more effectively (see also Brace 1991, 1993). These resources also make agencies less vulnerable to diverse demands of interest groups, especially business groups (Elkins et al. 1996; Feiock 2002). Thus local government administrative capacity is expected to positively influence the local economy.

Interest group theories identify diverse local groups that have a stake in government policy making, even though they have dissimilar political power. The growth machine model centers on the development interests of local business groups (Logan and Molotch 1987), which are well organized and raise a strong voice for growth elites. The regime theory also suggests that urban regimes exert great power on local politics of economic development (Stone 1989). On the other hand, antigrowth coalitions often mobilize in opposition to environmental deterioration and traffic congestion resulting from economic development (Schneider 1992) and consequently oppose unplanned growth and development. Citizens with higher incomes and educations express and mobilize strong antigrowth sentiments (Clark and Goetz 1994). The political strength of the development community is expected to have a positive effect on local economy, but antigrowth constituencies may have a negative effect.

Our analysis also controls for local economic development policy and population growth. Economic development policy has drawn much attention over the past four decades, but its effect on local economy has been, and still is, inconclusive (Brace 1991; Feiock 1991; Eisinger 1995). Population decline may put pressure on local governments to promote economic development (Fleischmann, Green, and Kwong 1992), but communities experiencing rapid population growth may feel less pressure to stimulate economic development or may try to control growth (Fleischmann, Green, and Kwong 1992).

Local economies are not completely independent of the performance of their state's economy. Local financial incentives, employee training programs, and business-friendly regulatory environments are attempts by communities to control and manage their economy. Nevertheless, many economic factors are often beyond their ability to control, and the state economy can often exert substantial influence on local economic performance (see also Rubin and Rubin 1987; Brace 1991). Controlling for state economic health reduces the impact of the state economic environment in our model of local economic performance. This allows us to examine the differential effects of impact fees and to compare each county with other counties (see also Leight and Jenkins 1994; Brace 1991).

RESEARCH DESIGN AND DATA

The effectiveness of impact fees for economic growth is examined with data from 66 Florida counties between 1991 and 2001. This time period can provide useful insights into the change in primary local activities because it allows us to consider the rise and fall of state economies.

DEPENDENT VARIABLES

Local economic growth is measured by job growth. Alternative measures, such as income growth and investments of manufacturing industries, can be used to measure local economic development (Feiock and Jeong 2002). However, job growth is a more sensitive concern than any other issues at the local level (Nelson and Moody 2003). Nelson and Moody (2003) measured job growth using a two-year time lag to capture the effect of impact fees.⁵ We build on Nelson and Moody's design and measure job growth in a similar manner. The job growth variable indicates changes in employment per 1,000 population between a given year ($t + 2$) and a base year (t).

EXPLANATORY VARIABLES

Our primary explanatory variable is the adoption of impact fees for local growth management in local ordinances. We hypothesized that impact fee adoptions had a positive effect on local economic growth, even though the development community opposed new regulatory as well as financial burdens through impact fees. The impact fee variable is measured as a dichotomous variable coded 1 for effective years of an impact fee system for each county-year observation and otherwise 0. During the research period, more than half of the counties (35) adopted impact fees of some type.⁶

To classify political structures, a two-by-two matrix was used to code two dimensions of county government structure—nonreformed (or commission form) and reformed form of county (commission-administrator and commission-mayor)—and charter adoption: noncharter and charter county. This matrix results in four nominal categories: (1) commission and noncharter county, (2) commission-administrator/mayor and noncharter county, (3) commission and charter county, and (4) commission-administrator/mayor and charter county (see also Benton 2002). We included three dichotomous variables to compare nonreformed and reformed counties using commission and noncharter county as a base. Forty-six counties established commission and mayor/manager form of government, and 16 counties adopted home rule charters.

Administrative capacity is difficult to define, but we refer to an “effective management system” in implementation of policy and programs (see also Brace 1991; Jeong 2006). Administrative capacity is operationalized by per capita expenditures to finance and planning departments.⁷ High expenditures might be associated with administrative capacity, specifically coordination, communication, and negotiation capacity in deciding and allocating the private share of capital investment (Elkins, Bingham, and Bowen 1996). This capacity affects the size and the time frame of impact fee collection and implementation (see also Nunn 1990, 338).

Certain groups of citizens may have dissimilar preferences for local growth. Citizens with higher income will actively voice their concerns for quality of life compared to local growth and participate in local policy decision making. Following the convention in previous studies, antigrowth preferences of citizens are measured by resident per capita personal income (Lubell, Feiock, and Ramirez 2005). On the other hand, progrowth politics may be influenced by business interests such as the development community. Stone (1989) asserts that a business presence in local jurisdictions reflects a crucial part of local politics in general and economic development policy making in particular. Because there is no direct and consistent measure of political strength of the development community, we use a proxy measure based on organization size. We assume that large firms are more likely to exert a strong political clout on local politics to promote a business-friendly economic environment. Since there is no clear-cut point for defining large versus small businesses, we use the proportion of development establishments with more than 50 employees to indicate the extent to which the development community is populated by larger developers.

Economic development policy focuses on local effort to create a business-friendly economic environment. This local effort is measured by local expenditures per capita for employment opportunity, downtown and industrial development, and housing and urban development. As mentioned before, economic development efforts may also include regulatory relief and numerous financial incentives. However, because of data limitations, those components are not included in this analysis. County population growth is measured by changes in total population between a given year ($t + 2$) and a base year (t).

The state economy may reflect statewide private capital investment and market factors that influence local economic growth. In general, the state economy is measured by job growth and income (Goss and Phillips 1997). This article uses only a state job growth measure because of its political salience for citizens and politicians (Nelson and Moody 2003). The indicator is changes in state-level employment per 1,000 population between a

given year ($t + 2$) and a base year (t). Table 1 presents measures of variables and data sources.

ANALYSIS AND DISCUSSION

The relationship between local economic development and impact fees is estimated using pooled cross-sectional time series techniques for 66 Florida counties between 1991 and 2001. Pooled cross-sectional time series data are likely to have problems in error structures, such as serial correlation, heteroscedasticity, and spatial correlation (Gujarati 1995; Wooldridge 2002; Greene 2003). While generalized least square (GLS) techniques may solve those problems, GLS estimates, even if unbiased, underestimate the variability of the standard errors of parameters and thus lead to overconfidence in standard errors, which will distort the hypothesis tests (Beck and Katz 1995). We used ordinary least squares (OLS) estimates with panel-corrected standard errors (PCSEs) to accommodate unobserved effects in the model (Beck and Katz 1995, 1996).⁸

The empirical results provide support for our contention that impact fees have a positive, rather than negative, influence on county economic performance. County growth management institutions and county reform contribute positively to an increase in county employment. Impact fees are not likely to create disincentives to the private investments and thus to drag economic development. Furthermore, reformed political structures with home rule authority are related to economic development as predicted. Table 2 reports OLS estimates with PCSEs.

Growth management institutions matter for the local economy. Impact fee adoptions have a positive influence on county job growth. While impact fees may increase firms' production costs, impact fees are invested to improve infrastructure. This may thereby create a more suitable business climate for local governments' approval and permit process and thus reduce potential costs (or transaction costs) resulting from the uncertainty and the risk of delay or disapproval of development. This empirical finding is consistent with Nelson and Moody's (2003) conclusions and corroborates the "false trade-off" argument concerning the relationship between environment regulation and economic growth.

County reform has a modest effect on economic growth.⁹ The county reform variables, except for reformed form of county without charter, are statistically significant. Under the nonreformed commission-only forms of

TABLE 1: Description of Variables and Data Sources, 1991-2001

<i>Variable</i>	<i>Measure</i>	<i>Source</i>
Dependent variable		
Job growth	Change in employment per 1,000 population between a given year ($t + 2$) and a base year (t) in each county	Florida Statistical Abstract
Explanatory variables		
Impact fees	Counties with impact fees, 1; otherwise, 0	Burge (2004), and FACIR
County reform	Three dichotomous variables (base: noncharter and commission) Noncharter and commission-administrator Charter and commission Charter and commission-administrator/mayor	Municipal Year Book Telephone interview by author
Administrative capacity	Per capita expenditures (\$) of financial agencies Per capita expenditures (\$) of planning agencies	Department of Financial Services, Florida
Citizens' political strength	Per capita personal income (\$)	Florida Statistical Abstract
Political strength of development community	Proportion of business establishment with more than 50 employees (%)	County business patterns
Local economic development expenditures	Per capita expenditures (\$) for local economic environment	FACIR
State job growth	Changes in employment per 1,000 between a given year ($t + 2$) and a base year (t)	Statistical Abstract of the United States
Population growth	Changes in total populations between a given year ($t + 2$) and a base year (t)	Florida Statistical Abstract

NOTE: FACIR = Florida Advisory Council on Intergovernmental Relations. All variables are measured at a base year (t) except for local and state job growth and population growth.

TABLE 2: Effects of Impact Fees on Economic Growth, 1991-2001

<i>Independent Variable</i>	<i>Coefficient</i>	<i>SE</i>
Impact fees	7.09	2.46***
County with charter and commission-manager/mayor form	4.03	2.18*
County with charter and commission-only form	8.71	3.37**
County with noncharter and commission-manager/mayor form	1.07	2.19
Planning expenditures	-0.008	0.012
Finance expenditures	0.001	0.003
Personal income	-0.0001	0.0002
Business strength	0.24	0.294
Economic development expenditures	-0.009	0.021
Population growth	-0.0002	0.00006***
State job growth	1.392	0.519***
Lagged employment	0.605	0.12***
Constant	-7.78	5.04
<i>N</i>		593
Adjusted <i>R</i> ²		.501
χ^2		135.53

p* < .10. *p* < .05. ****p* < .01.

government, county administration is fragmented into commission and row officers, making it difficult to deal with development conflict. On the other hand, counties with centralized leadership and home rule authority may improve coordination and accountability within government agencies as well as between the public and government (see also Frederickson and Johnson 2001; Svava 1993). However, one note that deserves mention is that counties without home rule authority were not as likely to experience growth. While there have been numerous studies of the impact of political structures and home rule authority on tax and expenditures, we know little about what consequences county reform has on the local economy. This finding updates ongoing debates on policy consequences of political structures at the local level (Lineberry and Fowler 1967; Morgan and Kickham 1999; Benton 2002).

We expected that higher administrative capacity might facilitate coordination, communication, and negotiation between government officials and the development community and thus have a positive effect on economic growth. Expenditures for both planning and finance departments were not found to have a statistically significant effect. Furthermore, planning department expenditures show a counterintuitive negative relationship¹⁰ with job growth, but it is not statistically significant. Perhaps future research should

take into consideration more direct measures such as the number of personnel, expertise, and years of experience.

Although the coefficients for personal income and the strength of the development community were in the predicted directions, they did not achieve statistical significance. We speculate that since the state Growth Management Act of 1985 requires strict review processes for local land-use changes through the comprehensive planning process, local governments applied strict rules or guidelines to accommodate the demands of interest groups in compliance with state rules. Local expenditures for a business-friendly economic environment also did not significantly influence local job growth. Over the past four decades, local and state governments have experienced much frustration with the failure of generous financial and regulatory incentives to attract businesses (Feiock 1991; Brace 1991). Population growth decreased county employment growth, which implies that as a county experiences an increase in total population, proportions of county employment per 1,000 population decline. Although somewhat counterintuitive, this finding is not surprising. Consistent with Fleischmann, Green, and Kwong's (1992) conclusion, rapid population growth puts fewer pressures of economic development on local governments and sometimes pushes them to control growth.

In addition to internal factors of local communities, we also control for the effect of the external state economic environment. State economic performance has a positive relationship with patterns of county job growth. The finding confirms that local economic performance is not completely independent from state economic environment. That is, the state economy has a positive effect on the local economy (see also Brace 1991; Rubin and Rubin 1987).

CONCLUSION

This study examined how the application of impact fee systems and the structure of county governments shape the political transaction costs of economic development. While Florida counties may not be typical in their growth management practices, at least 22 states currently initiate and implement impact fee systems in a more or less similar way (Nelson and Moody 2003). Moreover, economic development is an ongoing issue for local governments because of ongoing concerns about tax base and employment. A challenge for local government is to sustain economic development with limited revenue sources constrained by citizens' resistance to tax increases and deteriorating infrastructures. Florida's attempt to incorporate infrastructure need and sustainable growth may provide a good policy research laboratory

(see also Lubell, Feiock, and Ramirez 2005). As a consequence, there is much potential to extend the lessons of Florida to other states.

Overall, the findings suggest that government institutions play a significant role in explaining local economic performance. More specifically, certain government institutions for growth management in a growing community may not drag private investment and local economic development, even though the development community sometimes opposes them. Earmarked impact fee funds from private firms are used to improve local infrastructure and thereby shape public sentiments on economic development. In addition, private burdens for public facilities may reduce the financial problems of local governments, which are less likely to approve development permits without adequate infrastructure in place. It is notable that local governments have tried to, and still do, promote economic growth through providing a favorable business climate using lucrative tax incentives and publicly funded infrastructure. However, as local governments confront increased financial burdens and citizens' resistance to tax increases, alternative policy instruments may be necessary. Growth management institutions that reduce the uncertainty of private investment can allow local governments to sustain coordinated regulation as well as help the local economy. In addition, county reform has implications for local economic development. In particular, a home rule charter provides greater discretion to initiate new options for economic development and to have flexible use of resources (Benton 2002). The analysis indicates that charter adoption has a significant effect on the local economy. This finding will hopefully contribute to the ongoing debates on political structure and policy consequences (Lineberry and Fowler 1967; Lyons 1978; Morgan and Kickham 1999; Benton 2002). Administrative capacity and interest groups had no significant effect on the local economy. But the role of external economic environments such as the state economy also deserves mention. Consistent with Brace (1991), the results provide evidence that the state economic environment has a close relationship with local economic performance.

Finally, this analysis introduces the concept of an implied contractual relationship between local governments and developers in managing local growth through institutions that define roles and allocate costs among public and private sectors. Developers bear in part the costs resulting from new development, while local governments are more likely to approve or expedite development activities and support that development with public infrastructure. It can be seen as a win-win strategy consistent with a false trade-off argument. We confirm that government institutions provide incentives as well as constraints. In other words, certain growth management tools may have adverse effects on the private investments by increasing production costs, but

there can also be positive incentives in the context of property rights by reducing the transaction costs associated with the approval of development permits. Future research should examine this contractual relationship at a more micro level and evaluate the benefits and costs to each party.

NOTES

1. Because of its consolidated city-county government structure, consistent data does not exist for Duval County; consequently, it has been omitted from this article.

2. In long-term relations, constitutions can be understood as relational contracts, which ensure cooperation and reduce uncertainties by stipulating procedures to cope with unforeseen events (Maser 1998, 528).

3. The Florida Advisory Council on Intergovernmental Relations was renamed the Florida Legislative Committee on Intergovernmental Relations.

4. The concurrency requirements imply that "public facilities and services needed to support development shall be available concurrent with the impact of such development" (Florida Statute 163.3177(9)).

5. Nelson and Moody (2003, 18) indicate that impact fee revenues are spent through capital improvement plans (CIP) and assert that "it seems reasonable to expect that the economic effects such as job gains should be measurable mid-way the CIP cycle on any one project, here taken to be two years." This two-year lag of job growth may make it difficult to dismiss the reverse causation between job growth and impact fee system. But this is an empirical question rather than theoretical one. The bottom line is that impact fees, even in growing communities, may not drag private investment and local economic growth. For that matter, we control for previous experiences of economic growth using lagged dependent variable (see below).

6. Water and sewer impact fees are excluded due to inconsistency in their classification across counties such as tap fees, connection fees, system development charges, and impact fees.

7. Economic development agency (or department) is directly in charge of implementation of local development policy (Fleischmann, Green, and Kwong 1992). However, not every county has such an agency and thus, we dropped it in the analysis. While expenditure is an imperfect measure of administrative capacity, better funded public agencies may have a higher capacity to deal with complex formulas required in implementation of impact fees.

8. We conducted diagnostic tests using ordinary least squares (OLS) residuals. A Breusch-Pagan test was employed to diagnose the possible heterogeneity. As expected, unequal variance or heterogeneity that may result from unobserved effects in each unit or county was detected. Second, annual measures of counties are serially correlated. When time-series and cross-sectional data violate the OLS assumptions above, OLS estimates are consistent but inefficient. Following Beck and Katz's suggestions, the final model included lagged dependent variable (two-year time lag of job growth) to model autocorrelation and used panel-corrected standard errors to deal with panel heteroscedasticity and contemporaneous correlation (Beck and Katz 1995, 1996; Beck 2001). We also conducted simple correlation tests between lagged job growth and other explanatory variables. Correlation coefficients ranged between $-.19$ and $.29$, which had no serious collinearity problems.

9. Possibly, reformed counties may be those that experience rapid growth. We conducted simple correlation tests in which correlation coefficients ranged between $-.04$ and $.14$.

10. Simple correlation between planning expenditures and job growth also has a negative sign.

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