
IMPACT OF STATE GROWTH MANAGEMENT LAWS ON ECONOMIC DEVELOPMENT

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Abstract

What is the impact of state growth management laws on state economic performance? Growth management regulation is likely to affect private production decisions of builders and developers in ways that might hinder state economic performance. This paper combines the political economy and institutional approaches. Systematic analysis is conducted using statewide and temporal data from 1980 to 1993. The results indicate that institutional arrangements matter in explaining state economic performance such as growth state product (GSP) and personal income. The argument holds for economic development legislation, but we found partial support for growth management laws. State growth management laws had adverse effects only on personal income. The interactive effect between growth management laws and institutional arrangement is not significant both for GSP and personal income.

Introduction

Population growth, traffic congestion, and urban sprawl resulted in activist growth management legislation over the last three decades. The primary purpose of state growth management laws is to reduce precarious and unplanned growth or urban sprawl through state institutionalization of growth management regulation.

Growth management policy is best characterized as regulatory, because state and local governments use public policy to direct private behaviour (Feiock, 1994). However, the consequences of growth management are inherently distributive. Molotch (1976) depicted a city as an aggregate of competing land-based interests. Decisions regarding growth, at the local or any other level of government, are then decisions of who gets what, when, and how (Lasswell, 1936). These interests refer not only to competition for economic development but also for quality of life under the heading of growth management.

Extensive research has been undertaken at the local level regarding the economic development impacts of growth controls, but there is a clear deficit of empirical studies at the state level (Feiock, 1994; Dowall, 1981). Growth management regulation is likely to affect private production decisions by builders and developers in ways that might hinder state economic performance. Extant evidence regarding the impact of state growth management legislation upon economic development has been primarily based upon case studies and it is less than systematic. Few comparative studies have addressed this issue and none has done so nation-wide (cross-state). This paper begins to fill this lacuna by developing a pooled analysis of the fifty American states over the 1980-1993 time periods.

As a theoretical framework, we will employ a political economy approach of state regulatory costs of growth management laws and their effects on state economic development. The political economy approach is useful for inquiries about growth management and economic development in the context of local growth management actions (Feiock, 1994). However, we expand the political economy model to state growth management and state economy by incorporating state institutional arrangements. Brace (1993) convincingly argues that since the federal government shifted the public service burden to state and local government during the Reagan administration, state government policy exerted greater influences on state economies. In the context of environmental policy, Feiock and Stream (2001) contend that certain administrative arrangements and institutions for environmental regulation reduce regulatory uncertainty for business firms and thus “may enhance, rather than impede, economic development” (p. 313). Brace (1993) and Feiock and Stream (2001) suggest that without consideration of institutions or administrative arrangements, we lack full

understanding of the outcomes of state policy regardless of growth management and/or environmental policy.

A political economy approach to state growth management will be discussed in Section 2. The standard argument is that state regulation affects private investment decisions and thus restrains state economic development. However, the political economy approach of growth management will be expanded by accounting for state institutional factors. Furthermore, we include and examine economic development policy consequences on state economies. Section 3 describes data collection and research methods. Systematic analysis will be conducted using statewide and temporal data from 1980 to 1993 in Section 4. In conclusion, we derive the theoretical and empirical implications of our findings for understanding the consequences of state growth management legislation on state economic development.

Political Economy of Growth Management and State Institutions

There are two controversial and conflicting perspectives regarding the consequences of regulatory policy on economic development. Political market arguments focus mainly on increased production costs of business, suggesting that government regulation of private markets will increase private production costs and thus have adverse effects on private investment (Goetz et al., 1996; Christiansen and Haveman, 1981; Siegel and Johnson, 1993). This adverse business environment may make business firms reduce new production or search for new business sites in other business friendly states. On the other hand, while some scholars do not disagree with production costs arguments, they contend that this argument does not convincingly explain business decision-making (Feiock and Stream, 2001).

Feiock and Stream (2001) argue that benefit-maximizing firms should consider not only production costs, but also risky and uncertain business environments in making private investment decisions. In other words, for better understanding of regulatory consequences on private investment, Feiock and Stream (2001) suggest accounting for administrative arrangements, which may reduce the risk and uncertainty of private investment and in return be favorable to firms' profit maximization. Based on empirical

analysis of the 50 states from 1983-94, Feiock and Stream (2001) provide evidence that certain administrative arrangements may enhance state economic performance.

We find Feiock and Stream's argument attractive because the production costs argument misses the role of state institutional factors in general and administrative arrangements in specific. Brace (1993) contends that since the federal government shrunk the size of financial aid to states and increased delegation of public service provision in 1980s, the variation among state institutional capacity has gained a significant weight in state economic development.

This paper combines the political economy and institutional approaches and applies them to state growth management. Feiock and Stream (2001) neglected key variables in explaining economic development, such as development subsidy and the state of the national economy. That is, their model might be underspecified. This paper builds a more complete model of state economic development that incorporates development policy and the national economy in the context of state growth management laws.

State Growth Management and Economic Development

Why State Growth Management?

The pattern of growth management legislation varies widely across the fifty American states and over time. Some states, starting with Vermont (1970) and Florida (1972), adopted a series of state laws requiring comprehensive local plans. Other states, especially in the northeast, upper Midwest, and West Coast, adopted environmentally-oriented state land use laws (Popper, 1988).

Bollens (1992) argues that the first pattern of intergovernmental relationships can be best described as preemptive and regulatory. Hawai (1961), Vermont (1970), and Florida and California (1972) are examples of state programs with direct preemption of local authority and/or repeal power over all local decisions with extra-local impacts. State intervention was best characterized as growth restrictive rather than growth accommodating. While before the 1970s the locus of growth management was the local government, by the beginning of the decade this policy area was more centralized than ever before or

after.

During the 1970s the objectives involved in growth management policies expanded the tools or instruments used to enact these policies. Environmental concerns, slow growth in fast growing areas, control of urban sprawl, traffic congestion, pollution, increased crime, and decreased quality of life became some of the stated or unstated goals of growth management policy.

The second half of the 1970s and the 1980s, however, witnessed a decline in the enforcement of centralized land use regulation. Several causes have been attributed to this trend such as sluggish economic growth, increased public distrust in government triggered by the resurgence of conservatism in the Reagan years, and crisis in public finances. During this period, the same issues regarding implementation that had affected early local regulation also plagued the new centralized regulation, namely poor monitoring and enforcement (DeGrove, 1984; Popper, 1988).

Despite resistance to state legislation, planning laws were put forth in some states – Florida, California, Oregon, Washington, and North Carolina – with more delicate ecosystems, and more prone to natural catastrophes such as earthquakes, hurricanes, or flooding.

During the second half of the 1970s, the diversity of intergovernmental strategies increased, with a clear emphasis placed upon increased decentralization. This shift in state-local relationships was characterized by expanded goals in growth management. Besides environmental protection, growth management legislation addressed economic development, infrastructure, and quality of life goals (Bollens, 1992). The growth management plans resulting from this second wave can be classified as conjoint planning.

Conjoint plans are characterized by top-down implementation, with local governments expected to adopt growth management plans consistent with state goals or standards. The enforcement of these goals/standards is achieved through penalties and mandates such as the withdrawal of state funding and revocation of local discretionary powers. The best examples of state-local conjoint planning are Oregon (1973), California (1976), Hawaii (1978), Florida (1985), Rhode Island (1988), and Washington (1990).

State intervention in growth/land use issues has been mainly confined to initiating, facilitating or directing comprehensive growth management by local governments (Turner, 1990). State legislatures have not been involved in enacting state legislation regarding specific policy instruments such as the transfer of development rights (TDR), density bonuses, nor performance zoning among many others. The exception is state legislation to enable local impact fees, as in the case of Oregon and Washington (1989) and Pennsylvania (1990). As developers have been called on by local governments to bear larger costs of construction and development, they began to resort to the courts for relief. The call for state impact fee statutes was made with the expectation of avoiding conflicting court decisions across states (Peters, 1994). During the 1990s, state impact fees legislation became common, with 15 additional states enacting similar laws.

Over the years, state growth management legislation has been resisted by the construction and real estate industries in many states, in large measure due to the prevailing idea that regulation hinders economic development. With the advent of regulatory negotiation and cooperative planning capable of reducing transaction costs and uncertainty, state growth management is now increasingly the product of a large coalition of stakeholders.

Environmental Regulation and Economic Development

The question of whether a trade-off exists between environmental regulation and economic development has been addressed by the literature with mixed results. The prevailing argument is that environmental regulation raises production and investment costs, negatively affecting private production and investment decisions. In 1994, manufacturing firms in the United States invested over 7 percent of their investments in pollution abatement costs. Scholars defending the existence of a trade-off between environmental regulation and economic development argue that the increase in production and investment costs reduces the firms' outputs, increases prices and decreases income growth (Christiansen and Haveman, 1981; Siegel and Johnson, 1993). In a similar vein, Xing and Kolstad (2002) have shown that countries with less stringent environmental regulation are better able to attract foreign direct investment, specifically investments of US pollution intensive industries.

Some authors have argued that the trade-off does not exist in practice, since the benefits of regulation can be retrieved with little or no economic loss. Feiock and Stream (2001) argue that the degree of uncertainty of regulation affects the firms' production and investment decisions. As uncertainty regarding environmental policy and regulation decreases, private production and investment costs are likely to decrease generating economic growth.

Growth Management, Institutional Arrangements, and Economic Development

The discussion of the economic consequences of growth management policy is immersed in controversy. Some have argued that states should manage growth in order to curtail urban sprawl, strip development, pollution by industrial facilities, and the development of environmentally sensitive lands. In a context where the impacts became extra-local, intervention by state governments was deemed as necessary to protect the environment and preserve desirable community characteristics and was pushed to the forefront of the agenda by a coalition of environmentalists, city planners, land use lawyers, state and federal officials, progressive businesses and developers, and citizen activists (Popper, 1988). More importantly, in the presence of rapid growth, growth management/regulation is likely to increase rather than decrease the average taxpayer's benefit, since it works as a pricing mechanism to restrain the supply of new development (Feiock and Tavares, 2002).

In contrast, other researchers have pointed that the benefits of growth management are smaller than the costs generated by forgone development (Deakin, 1989; Feiock and Rowland, 1991). One of the most commonly discussed consequences of growth management is precisely its impact on housing prices and economic development. There is near consensus among economists that local growth controls raise housing prices by reducing the supply of land or its developmental potential (Dowall, 1981; Schwartz, Hansen, and Green, 1981; Denzau and Weingast, 1982; Engle et al., 1992).

Empirical evidence indicates that growth management regulation hinders economic development (Feiock, 1994; Denslow et al., 1993; Levine, 1997). Feiock (1994) found that the implementation of concurrency regulations in Florida counties had a significant negative impact on building permits. In another study, Denslow et al (1993) found that construction jobs and estimated housing starts fell

more in counties adopting comprehensive plans earlier than others adopting later. In particular, an additional year of comprehensive plan was linked with seven percentage points lower employment in construction and about eleven percentage points lower estimated housing starts. In a survey of 490, Californian municipalities Levine (1997) concluded that local growth management regulations displaced new construction towards less regulated jurisdictions and, in many cases, reduced new housing starts.

Growth management regulation aims at reducing social and environmental costs and externalities resulting from rapid growth. According to critics, these social benefits come at a price. State growth management legislation forces construction firms and real estate developers to absorb some or all costs generated by reduced land supply or increased quality in construction and developed land. As a result of this burden, the construction and development industries are likely to scale back investments and new development projects.

However, certain administrative arrangements of growth management can reduce the risk and uncertainty of private investment. If growth management laws reduce uncertainty, they can provide a favorable business environment and reduce the adverse effects of regulation.

...states with stringent regulation but stable and certain patterns and processes of regulation may have some hope of enjoying a growing economy as well as the social and environmental benefits resulting from regulation. This framework suggests that the organization, institutional structure, and administrative design of regulation programs can have important positive or negative consequences for economic growth (Feiock and Stream, 2001: p. 315).

Brace (1993) suggested that the institutional capacity should be considered in the discussion of economic development. Regardless of the type of development policy (such as supply-side incentive programs or entrepreneurial initiatives), federal government intervention resulted in economic growth, especially income growth. However, when intervention is reduced, Brace (1993) argues that the entrepreneurial state may produce higher positive outcomes than the

state with laissez-faire policies. This argument is useful in that it directs attention to the importance of “state institutional capacity.”² In other words, institutional capacity matters for the state economy. Depending on the state institutional arrangement or administrative system of regulation, growth management can have significant favorable or adverse impact for state economy.

Economic Development Policy and State Economy

Over several decades, states attempted to create business friendly climates to induce out-of-state business investments and encourage investment of already existing firms. In general, supply- and demand-side policy represented state continuing efforts to improve state economies. Developmental consequences of economic policy, whether it is supply- or demand-side policy, are inconclusive among scholars (Brace, 1991; Eisinger, 1995; Fosler, 1992; Clingermayer and Feiock, 2001; Feiock, 1996).

The distinction and effectiveness of supply- and demand-side policy respectively is beyond of the scope of this study. We do not distinguish between policies, that is, we simply define state economic development policy as state efforts to provide a favourable business climate. We posit that a highly favourable climate will provide more opportunities for business investments than a less favourable one. At a minimum, it will not function as a deterrent to state economic development.

Control Variables

The national economy is one of exogenous forces that influence state economic performance. However, studies of state economic performance seem to ignore the influence of the national economy, because the research has placed more significance on state efforts and state institutional capacity for development policy. A better understanding of economic performance requires empirical models to include the national influence (Troger, 1998). While the national economy is out of control from state governments, it might exert substantial influence on state economic activities (Brace, 1991). In other words, state economies are highly vulnerable to the ups and downs of the national economy.

One of biggest concerns relating to state economies is to improve deteriorating infrastructures and retain infrastructure

investment which may reduce costs on the part of businesses. Increased public investments on infrastructures should have a positive impact on state economy.

Through the experiences of the oil crisis in 1970s, mineral resources in general and oil in particular caught great concerns for policy makers both at the national and state levels. Brace (1989) holds that in 1970s, states with rich oil-resources were less vulnerable to the energy crisis. Trogen (1998) stresses that energy reserves have a positive impact on the state economy. In addition, regional division variables are included to identify whether geographical characteristic does matter for economic performance.

Data and Methods

State economic performance is measured by two indicators: per capita gross state product (GSP) and per capita personal income. The units of analysis consist of 48 states from 1980 to 1993.³ This time period includes the change of state primary activities such as state active initiation of growth management (Steel and Lovrich, 2000) and economic development policy—demand side and supply side development policy.

The *Land Use Law and Zoning Digest* periodical contains a short summary of all state laws enacted in the period under analysis regarding 27 topics related with growth management⁴. These growth management laws were coded as a count variable representing the number of growth management laws passed in each state in a given year. A similar procedure was used for the indicator of economic development legislation. Economic development is measured by the number of economic development laws adopted by each state and by an economic development policy additive composite score. The additive composite score data measure annual state economic development programs including incentive programs such as financial and tax incentives and entrepreneurial policy and was retrieved from the Industrial Development Site Selection Handbook.

Institutional capacity or arrangement was operationalized by legislative professionalism and the power of governor (Brace, 1991). Legislative professionalism and the power of governor were measured by legislative operating budget per member in a state in each year and governor's veto authority over legislation respectively.

Interaction terms between growth management laws and institutional arrangements and economic development laws and institutional arrangements are incorporated to measure the mediating role of institutions in the economic outcome. State capital investment in infrastructure is measured by highway expenditures in constant millions of dollars.

The national economy has an effect on state economy and thus it may be a significant determinant for state economic performance. For the measurement of the national economy, this paper utilizes per capita gross domestic product (GDP) and national per capita personal income. The variable energy was measured by the annual per capita value of extracted mineral resources. As states obtain higher per capita value of extracted mineral resources, this should lead to better economic performance. Table 1 describes variables and provides descriptive statistics.

Table 1
Data Summary (N=672)

Variable	Mean	Standard Deviation
Per Capita GSP (adGSPPC)	9462	1520
Per Capita State Personal Income (adPIPC)	7805	1207
Economic Development Policy Index (EDP)	33.74	7.39
Growth Management Laws (GMLaws)	.467	.826
Economic Development Laws (EDLaws)	.119	.367
Legislative Professionalism (LEG_PROF)	15375	13082
Gubernatory Veto Power (GOVPOW)	.854	.353
Highway Capital Expenditures (in millions)	1983	440
Per Capita GDP (adGDP_PC)	9986	694
National Per Capita Personal Income (adNPI_PC)	8344	642
Per capita value of extracted mineral resources (adENERG)	1134	351

In cross-sectional time series data, the Ordinary Least Square (OLS) technique is consistent but it does not produce efficient estimators (Beck, 2001). In other words, the pooled data is likely to have problems in error structures such as serial correlation,

heteroscedasticity, and spatial correlation (Beck and Katz, 1995, 1996). Following Beck and Katz's suggestions, we conduct data analysis using OLS regression with panel corrected standard errors (PCSE) to deal with panel heteroscedasticity (Beck and Katz, 1995, 1996). Serial correlation was detected and corrected estimating the models with a lagged dependent variable. Another common problem with panel data is heterogeneity (each state is different from the next). According to Beck (2001), heterogeneity should be viewed as an interesting feature of panel data and modeled using fixed effects to allow conclusions regarding the independent variables that apply to all states.

Findings and Analysis

Our results indicate that institutional arrangements matter in explaining state economic performance. Table 2 shows that state economic development legislation positively contributes to an increase in gross state product per capita by directly stimulating investment by individuals and firms. Economic development legislation is likely to create incentives to investment, thereby stimulating state economic performance. In addition, we argue that this type of legislation reduces uncertainty for businesses wishing to invest, because it frames the conditions under which this investment will occur. The interactive effect indicates that for each unit increase in legislative professionalism the slope of the relationship between economic development legislation and growth state product increases by .003, which supports our argument.

More professional legislatures may be associated with better state economic performance, because it indicates that governments have more effective managerial skills to stimulate economic development. This result provides support for our hypothesis, borrowed from Brace (1991), that state institutional capacity improves the state economy.

However, the results do not show support for a positive economic influence of growth management laws derived from the false tradeoff argument between environment regulation and economic development (Feiock and Stream, 2001). The interactive effect between growth management laws and legislative professionalism is not significant for GSP.

Table 2
Effects of Growth Management
and Economic Development Policies on GSP, 1980-93

Variable	Coefficient	PCSE
AdGSPPC (t-1)	.836 ***	.071
Econ. Dev. Pol. EDP (t-1)	9.77 **	4.35
GMLaws (t-1)	6.63	15.60
(GMLaws*LEG_PROF)	(.000)	(.001)
EDLaws (t-1)	90.9 **	36.62
(EDLaws*LEG_PROF)	(.003) **	(.001)
LEG_PROF	.006 ***	.002
GOVPOW	-362.4	315.3
AdINFRA	.456 ***	.142
adGDP_PC	.059	.056
AdENERG	-.035	.228
R_NE	240.1	230.0
R_MA	138.3	137.8
R_ENC	-435.3	290.2
R_WNC	244.6 ***	87.9
R_AS	-388.6	285.0
R_ESC	-6.89	130.8
R_WSC	-186.7	119.3
R_MT	246.3	664.0
N=672 R ² = .95 Wald chi ² = 76.75 Prob > chi ² = 0.000		

Notes: (t-1) indicates a lagged variable. Interactive terms in parentheses were ran replacing GMLaws and EDLaws to avoid multicollinearity problems. Model includes 8 regional dummy variables: New England, Middle Atlantic, East North Central, West North Central, South Atlantic, East South Central, West South Central and Mountain. Pacific was the excluded category. State fixed effects are not shown. * p < .10 ** p < .05 *** p < .01

As expected, state capital expenditures also produce desirable results to state economies. States investing in infrastructure are more likely to attract business investments because they reduce firms' production costs, thereby creating a more suitable climate for firms to locate. This positive effect is confirmed in the model

depicted in Table 3, where state per capita personal income is the dependent variable. We find evidence to confirm the old Keynesian argument that public sector capital investments are likely to stimulate private investment and favour economic growth.

Table 3 provides results mostly consistent with our hypotheses and the findings presented in Table 2. The second model confirms the idea that state economic development legislation associated with more professional legislatures improves economic performance due to the reduction of uncertainty regarding investments.

Once again, the interactive term involving growth management legislation and legislative professionalism is not statistically significant indicating that the change in the value of one of these variables does not affect the slope of the relationship of the other with the dependent variable. More importantly, the degree of uncertainty regarding growth management laws does not influence state economic growth. However, the approval of growth management legislation does have a negative impact upon economic growth, lending partial support for the political economy hypothesis.

Table 3
Effects of Growth Management and Economic Development
Policies
on Personal Income, 1980-93

Variable	Coefficient	PCSE
AdPIPC (t-1)	.83 ***	.060
Econ. Dev. Pol. EDP (t-1)	4.43 *	2.48
GMLaws (t-1)	-22.4 *	12.3
GMLaws*LEG_PROF	(-.001)	(.001)
EDLaws (t-1)	38.3	23.9
EDLaws*LEG_PROF	(.002) *	(.001)
LEG_PROF	.002	.002
GOVPOW	518.4 ***	192.7
AdINFRA	.301 ***	.101
adNPI_PC	.056	.044
AdENERG	-.272 ***	.105
R_NE	731.5 ***	191.6
R_MA	378.7 ***	127.8

R_ENC	-129.5 **	57.8
R_WNC	91.5	87.1
R_AS	230.6 ***	86.5
R_ESC	-81.6	96.0
R_WSC	122.0	147.5
R_MT	-142.2	206.6
N=672 R ² = .97 Wald chi ² = 150.78 Prob > chi ² = 0.000		

Notes: (t-1) indicates a lagged variable. Interactive terms in parentheses were ran replacing GMLaws and EDLaws to avoid multicollinearity problems. Model includes 8 regional dummy variables: New England, Middle Atlantic, East North Central, West North Central, South Atlantic, East South Central, West South Central and Mountain. Pacific was the excluded category. State fixed effects are not shown. * p < .10 ** p < .05 *** p < .01

The extraction of minerals has a negative effect on state economic performance. Although the goal of our paper is not to explain this counterintuitive result, we feel that there are two plausible justifications. One possible explanation for this puzzling result is that the states where extraction takes place are not the ones actually using the resources to generate economic growth. Another possible justification points out that the owners of the resources report their income in other (wealthier) states.

Conclusions

The primary inquiry raised in this paper centered on the impact of state growth laws on state economic growth across states from 1980-1993. Empirical testing built on a political economy model expanded by incorporating institutional arrangements. Overall, the results indicated that institutional arrangements matter in explaining state economic performance. Especially, the argument was supported regarding economic development legislation. More specifically, empirical findings provided useful theoretical and policy implications for the study of state growth management and economic development activity in the context of state economic growth.

First, state economic development legislation positively contributes to an increase in GSP and personal income, while the effect of economic development legislation on personal income is not

statistically significant. Furthermore, its effect is enhanced modestly by interaction terms. The interactive effect between economic development legislation and professional legislatures indicates that for each unit increase in legislative professionalism the slope of the relationship between economic development legislation and GSP increases by .003 and .002 for each of the two models, which fully supports our argument. This confirms the hypothesis that, state institutions matter for the state economy (Brace, 1991). A favourable business climate through economic development policy also facilitates state economic growth in both models. As the federal government shrank the role in service provision and production, states should bear upon an increased financial burden and thus seek eagerly to improve the state economy through friendly business environments, while maintaining coordinated regulation such as growth management.

Second, we found no support for a positive economic influence of growth management laws. State growth management laws had an adverse effect on personal income. The interactive effect between growth management laws and legislative professionalism is not significant both for GSP and personal income. Our findings do not corroborate Feiock and Stream's false trade off argument between environment regulation and economic growth (Feiock and Stream, 2001). Nonetheless, while both environment regulation and growth management can be considered regulatory activities, institutional and/or administrative arrangements may have dissimilar mediating consequences on state economic performance.

Third, increased state capital expenditures also produce desirable results for state economies. Infrastructure investments provide a favourable business climate and help firms reduce production costs. This positive effect is confirmed in both models.

Finally, the extraction of minerals has a negative effect on state economic performance. It is somewhat counterintuitive result. National economy does not produce significant consequences on state economic growth during research period.

Notes

1. In alphabetical order.

2. Institutional capacity may be explained by effective management systems. Government with effective managerial capacity will encourage the improvement of state economies by conducting “stimulative economic policies” (Brace, 1991).

3. Among the 50 states, two states (Alaska and Hawaii) were excluded in data analysis, since those states did not have all data through the research period. Since the Reagan administration we have witnessed an expansion of state autonomy and state responsibility; the entrepreneurial state movement has dominated. The time period in this research covers those changes by incorporating state economic development policy and performance between 1980 and 1993.

4. These topics include building permits, coastal zoning, conditional zoning, contract zoning, dedications and fees, environmental impact assessments, exclusionary zoning, forest lands, highways and streets, historic preservation, housing, incentives, intergovernmental agreements, interim zoning, inverse condemnation, lot regulation, mobile housing, nonconforming uses, open space, redevelopment, rezoning, special use permits, spot zoning, subdivisions, transportation, water and wetlands, and zoning ordinances.

References

Beck, Nathaniel. 2001. “Time-Series Cross-Section Data: What Have We Learned in the Past Few Years?” *Annual Review of Political Science*. 4: pp. 271-293.

Beck, N. and J. Katz. 1995. “What To Do (and Not To Do) With Time-Series Cross-Section Data.” *American Political Science Review*. 89(3): pp. 634-647

Beck, N. and J. Katz. 1996. “Nuisance vs. Substance: Specifying and Estimating Time-Series-Cross-Section Models.” *Political Analysis*. 6: pp. 1-34.

Bollens, S. 1992. “State Growth Management: Intergovernmental Frameworks and Policy Objectives.” *Journal of the American Planning Association*. 58(4): pp. 454-467.

Brace, P. 1993. *State Government and Economic Performance*. Baltimore, MD: Johns Hopkins University Press

Brace, P. 1991. "The Changing Context of State Political Economy." *Journal of Politics*. 53: pp. 297-317.

Brace, P. 1989. "Isolating the Economies of States." *American Politics Quarterly*. 17(3): pp. 648-64.

Christiansen, G.B. and R.H. Haveman. 1981. "The Contribution of Environmental Regulations to the Slowdown in Productivity Growth." *Journal of Environmental Management*. 8(3): pp. 381-390.

Clingermayer, J. and R. Feiock. 2001. *Institutional Constraints and Policy Choice: An Exploration of Local Governance*. Albany, NY: SUNY Press.

Deakin, E.A. 1989. "Growth Control: A Summary and Literature Review of Empirical Research." *Urban Land*. 11: pp. 1-17.

DeGrove, J.M. 1984. *Land, Growth, and Politics*. Chicago, IL: American Planning Association.

Denslow, D., W. O'Dell, and A. Shermeyen. 1993. "The Economic Impact of Florida's Growth Management Act." Paper presented at the annual meeting of the Southern Political Science Association. Savannah, GA.

Denzau, A.T. and B.R. Weingast. 1982. "Foreword: The Political Economy of Land Use Regulation." *Urban Law Annual*. 23: pp. 385-405.

Dowall, D.E. 1981. "Reducing the Cost Effects of Local Land Use Controls". *Journal of the American Planning Association*. 47(2): pp. 145-153.

Eisinger, Peter K, 1995. "State Economic Development in the 1990s: Politics and Policy Learning." *Economic Development Quarterly*. 19(2): pp. 146-158.

Engle, R., P. Navarro, and R. Carson. 1992. "On the Theory of Growth Controls." *Journal of Urban Economics*. 32: pp. 269-283.

Feiock, R.C. 1996. "Development Policy Competition and Positive Sum Growth: Incentive Competition and Its Alternatives." http://spaef.com/IJED_PUB/vln3_feiock.html. (October 13, 2001).

Feiock, R.C. 1994. "The Political Economy of Growth Management." *American Politics Quarterly*. 22(2): pp. 208-20.

Feiock, R.C. and C.K. Rowland. 1991. "Environmental Regulation and Economic Development." *Western Political Quarterly*. 44(2): pp. 561-576.

Feiock, R.C. and C. Stream. 2001. "Environmental Protection Versus Economic Development: A False Trade-Off?" *Public Administration Review*. 61(3): pp. 313-321.

Feiock, R.C. and A. F. Tavares. 2002. "County Government Institutions and Local Land Use Regulation." Paper presented at Lincoln Institute of Land Policy, Seminar on Analysis of Urban Land Markets and the Impact of Land Market Regulation. Massachusetts, July 2002.

Fosler, R.S. 1992. "State Economic Policy: The Emerging Paradigm." *Economic Development Quarterly*. 6(1): pp. 3-13.

Goetz S., R. Ready, and B. Stone. 1996. "U.S. Economic Growth vs. Environmental Conditions." *Growth and Change*. 27(2): pp. 97-110.

Lasswell, H. 1936. *Politics: Who Gets What, When, How*. New York, NY: Whittlesey House.

Levine, N. 1997. "The Effects of Local Growth Controls on Regional Housing Production and Population Redistribution in California." *Urban Studies*. 36(12): pp. 2047-2068.

Molotch, H. 1976. "The City as a Growth Machine: Toward a Political Economy of Place." *American Journal of Sociology*. 82(2): pp. 309-332.

Peters, R.A. 1994. "The Politics of Enacting State Legislation to Enable Local Impact Fees: The Pennsylvania Story." *Journal of the American Planning Association*. 60(1): pp. 61-69.

Popper, F.J. 1988. "Understanding American Land Use Regulation Since 1970: A Revisionist Interpretation." *Journal of the American Planning Association*. 54(3): pp. 291-301.

Schwartz, S., D. Hansen, and R. Green. 1981. "Suburban Growth Controls and the Price of New Housing." *Journal of Environmental Economics and Management*. 8: pp. 303-320.

Siegel, P.B. and T.G. Johnson. 1993. "Measuring the Economic Impacts of Reducing Environmentally Damaging Production Activities." *The Review of Regional Studies*. 23(2): pp. 237-253.

Steel, B.P. and N.P.Lovrich. 2000. "Growth Management Policy and County Government: Correlates of Policy Adoption across the United States." *State and Local Government Review*. 32(1): pp. 7-19.

Trogen, P. 1998. "Which Economic Development Policies Work? Determinants of State Per Capita Income." *International Journal of Economic Development* 1(3): pp. 256-279.

Turner, R.S. 1990. "Intergovernmental Growth Management: A Partnership Framework for State-Local Relations." *Publius: The Journal of Federalism*. 20(2): pp. 79-95.

Xing, Y. and C. Kolstad. 2002. "Do Lax Environmental Regulations Attract Foreign Investment?" *Environmental and Resource Economics*. 21: pp. 1-22.

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