
MEASURING LOCAL ECONOMIC DEVELOPMENT POLICY AND THE INFLUENCE OF ECONOMIC CONDITIONS *

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Abstract

Based on a completed, large-scale study of suburban cities in Southern California (N=202) this paper reports on the existence and usefulness of measuring local economic development policy in various ways. The policy measures were derived from an extensive survey of local economic development officials. Comparisons between simple additive scales of total policy activity and additive scales derived from factor analysis are made. After comparing the results of regression analysis of local policies measured in several ways, it is concluded that in some instances explanations of local policies are best approached by measuring policy in fairly simple ways. In this case, our set of conventional independent variables explains the most amount of variation in the additive measure. Moreover, the patterns of findings do not alter in substantively important ways when the policy measure is altered. The most salient finding is that both poverty levels and average income were both negatively correlated with our policy measures. Further examination of income and poverty show empirical support for Goetz's uneven development hypothesis.

Introduction

Competition among localities for economic growth is among the most pervasive facts of contemporary urban life. States and localities, in order to keep existing or attract new commerce, find themselves in bidding wars with neighboring jurisdictions and, sometimes, with distant counterparts. So we have the spectacle of communities in California and Virginia

competing against each other for a Legoland theme park. A growing lore exists regarding these on-going economic battles over shopping centers, department stores, manufacturers, professional sports teams, auto centers, and government office buildings. Subsidies, incentives, and a host of efforts to shape the locational decisions of businesses have proliferated. Indeed, in any given period, when considering the nation as a whole, billions of dollars are allocated or committed by states and localities in order to woo commerce or to retain the affections of those commercial establishments that already reside there.

Whether or not these efforts amount to anything for a state or locality is another matter. Indeed, there is a lively debate over the efficacy of these various efforts to attract and retain economic activity (Bartick, 1992; Feiock, 1991). But apart from the impact of these policies, it is clear that many resources are tied up in this competition and most local officials seem to believe they are beneficial, if not necessary. Indeed, whether or not such policies actually affect local economic activity, there are powerful political incentives for localities participating in the competition. Without state government actions to reduce such competition, it is likely that local government will continue to try to influence the deployment of economic activity. Moreover, in states where state revenue is disproportionately returned to communities of origin and where revenue-raising constraints have become severe there are fiscal motivations to seek the sort of development that raises more revenue than it imposes in service costs.

There are at least two other reasons that communities might, apart from any evidence respecting the impact of such policies, continue to enact programs that purport to attract economic activity. First, as localities produce programs to attract economic development, their neighboring locales might react in what is perceived as a required response to “stay competitive.” Second, the logic of competition makes even skeptical local officials likely to enact policies, since not producing is politically risky, while enacting them is not. For example, in a context where localities see one another as competing for economic development, officials who eschew enacting such policies run the risk of being indifferent to the well-being of their constituents. If a business locates in a community that courted that business and another locality was perhaps “in the running,” then if officials seemed indifferent, then they will be blamed for the business locating elsewhere. If officials try by producing policies that seek to attract that business or others, then if the business does not come, they can at least claim to have tried. And if and when other business does locate in the locality, officials are positioned to take credit. Doing nothing leads to blame. Producing business attracting policies provides the chance to avoid

blame and perhaps to take credit.

Despite the fact that communities engage in these activities and are likely to continue to do so, we are not fully aware of the range of things that communities do and how policies vary by types of communities or under what circumstances they are likely to employ them. There are a number of studies that have assessed the substance of local policy, but these most often do not probe deeply into the range of options that are available. In addition to a need for a better gauge of what communities are doing to stimulate economic growth, there are a number of reasons why there should be further examination of how explanatory variables and their influence on policy are operationalized. In this paper we:

1. Assess a broad range of localities within a single state and probe an array of economic development and redevelopment options in order to come up with measures that operationalize the concept of economic development policy in a rich and reliable manner.
2. Examine the complex way that the economic conditions of the city and its citizens influences local economic development policy output.

One of the objectives in this paper is to examine the differences in results that occur when using various policy measures. Wolman and Spitzley's (1996) analysis of 16 articles that examine local economic development shows the variety of methods employed by social scientists to measure the dependent variable (policy) and the independent variables (usually a number of city characteristics). What ties most of these studies together is the similar type of data used to measure these variables. Survey responses of city officials are used to measure policy and census data or some other government source is used to provide the city characteristics that make up the independent or explanatory variables. Although the studies use similar data the methods of operationalization and model specification are numerous. Policy is measured either in a dichotomous (Clingermayer and Feiock, 1990) or ordinal fashion (Bowman, 1988) and independent variables are taken straight from census data or often combined into factor scores (Goetz, 1991). Clearly, if we are to explore the relationship between policy and the socioeconomic characteristics of cities, we need to have as broad an empirical basis for defining local policy and social indicators as is possible. We also need to consider more systematically how differences in findings due to differing measures might illuminate differences in explaining policy variation.

Data and Method

The report here is based on aggregate data gathered on the municipalities located in a seven-county region of Southern California. This effort is part of the Community Affairs Project at the University of California, Riverside. Two major streams of data and analysis are involved here. First, there are the data describing each of the 202 municipalities, including standard socioeconomic and census data and political data, describing features of local elections and voting as well as government structure. The second set of data involves a survey that was implemented in 1994 and consisted of 156 responses from local officials. The survey was mailed in the winter of 1994 and a response rate of 77 percent was obtained.

The questionnaire results, which are based on a series of very specific queries about what each locality is doing to promote economic development, permit us to develop a more refined measure of local economic development/redevelopment policy than in previously studies. Additionally, the survey permits us to explore issues respecting local views regarding certain features of the local political process. In this report, then, the analysis is conducted at the municipal level. Each community's local economic development and redevelopment policies are then measured as responses to survey items completed by the respondents described above.

Community Overview

According to the California Department of Finance, the 202 communities that comprise the study sites here represent a population of over 11 million and involve the full range of community types, lower income communities and the very affluent, newer and older locales, and places that are fully developed and those currently undergoing rapid increases in population growth and new building projects. The distribution of municipalities across the seven counties in the study is as follows:

TABLE 1
Distribution by County of Project Cities-Excluding Los Angeles and San Diego

<u>COUNTY</u>	<u>NUMBER OF CITIES</u>	<u>PERCENT OF ALL CITIES</u>
<i>LOS ANGELES</i>	88	43.6
<i>ORANGE</i>	31	15.3
<i>RIVERSIDE</i>	24	11.9
<i>SAN BERNARDINO</i>	24	11.9
<i>SAN DIEGO</i>	18	8.9
<i>SANTA BARBARA</i>	7	3.5
<i>VENTURA</i>	10	4.9
TOTAL	202	100

Table 2 reports a number of summary indicators of community characteristics that provide a sense of the range of community types in the study. Table 2A reports these same characteristics for the 150 cities that have a population of 20,000 residents or greater.

TABLE 2
Selected City Characteristics

Community Characteristic	Mean	Maximum	Minimum	Standard Deviation
1. % Below Poverty	10.8	30.8	1.6	6.3
2. % Afro- American	4.6	55.1	0.0	7.2
3. % Hispanic	29.2	95.6	1.5	23.0
4. % 12 or More Years School	72.4	97.0	30.2	15.9
5. Population, 1992*	55692.4	442106	152	55460.2
6. % Owner- Occupied Housing	59.7	87.2	10.6	16.7
7. % Housing Growth 1981-1989	23.1	278.0	-5.0	32.7
8. Median Family Income, 1990	46369	133751	16250	20792.6
9. % Pop. Growth, 1990-1995	13.6	159.00	-46.0	20.7
10. % Working in City of Residence	25.3	77.0	3.5	14.9
11. People: Square Mile, 1990	5371.1	23208.3	31	4130.1
12. City Age	57.0	147	5	35.9
*Excludes cities of Los Angeles and San Diego.				

TABLE 2A
Selected City Characteristics [Cities Over 20,000
residents, N = 150]

Community Characteristic	Mean	Maximum	Minimum	Standard Deviation
1. % Below Poverty	10.7	27.5	1.9	5.8
2. % Afro- American	5.4	55.1	.003	8.0
3. % Hispanic	30.1	92.7	4.0	21.6
4. % 12 or More Years School	73.9	95.6	29.8	14.8
5. Population, 1992*	55695.4	442106.0	152	55460.2
6. % Owner- Occupied Housing	58.0	90.9	16.9	14.9
7. % Housing Growth 1981-1989	23.1	273.0	-5.0	33.9
8. Median Family Income, 1990	43696.0	87525	22245.0	13394.6
9. % Pop. Growth, 1990-1995	11.7	86.0	-30.0	15.2
10. % Working in City of Residence	25.1	71.5	7.3	13.6
11. People: Square Mile, 1990	6119.1	23208.3	528.7	4140.3
12. City Age	62.2	147	6	36.8

**Excludes cities of Los Angeles and San Diego.*

These data indicate that the study incorporates communities with a broad array of variation in city indicators, reflecting a wide variety of differing municipalities. The data set provides an opportunity to assess alternative hypotheses regarding local policy and its relationship to community characteristics.

The Policy Measures

As indicated earlier, a major data source in this study was a mailed questionnaire, sent to city officials in 202 cities in the seven counties of Southern California listed above. These were mailed during the summer of 1994, with 156 cities responding. Respondents were asked to rate on a scale from "1" (not at all important) to "5" (very important) the importance of thirty activities used in the effort to encourage economic activity in their community. They were advised to respond only in terms of what their city is authorized to do or is actually doing, regardless of whether they thought it would be a good or effective activity. Table 3 reports the percentage of individuals who indicated that a particular policy dealing with local economic development or redevelopment was either relatively important or very important.

The following are those policies where at least 50 percent of the communities' respondents indicated that the policies were relatively or very important:

- Streamlining the review and issuance of business licenses and permits (76.9%)
- Tax Increment financing through redevelopment agencies (66.7%)
- Assuring long-term consistency of development rules (59.7%)
- Providing a formal commitment by city or county to public/private cooperation through such entities as the Chamber of Commerce or an Economic Development Corporation (54.4%)
- Establishing a single public agency or department dedicated to economic development and redevelopment (54.2%)
- Develop formal procedures for contacting and networking with existing businesses to encourage business development (50.7%)

Apart from the classic form of redevelopment policy through tax

increment financing, communities are looking for procedural approaches to improving the local business and economic development climate, rather than directly granting incentives or subsidies to business. This is apparent when we examine those actions/policies that have fewer than 20 percent of the respondents indicating they are relatively or very important. These less important policies include the following: tax abatement, financial grants to business, increasing land use densities for business, discounts for utilities, subsidy of employee training, rebating sales tax or transient occupancy tax. What these have in common, with the exception of increasing land use densities, is an emphasis on direct transfers of public revenues into the coffers of a specific business.

TABLE 3
Percent Indicating Relatively or Very Important for
Particular Action or Policy
(Value in parentheses are for communities of population
20,000 or more)

ACTION/POLICY	PERCENT INDICATING RELATIVELY OR VERY IMPORTANT
1. Streamlining Licensing and Permits	76.9 (79.4)
2. Tax Increment Financing	66.7 (66.7)
3. Assuring Consistency of Develop't Rules	59.7 (57.9)
4. Public/Private Cooperation	54.4 (56.2)
5. Single Econ. Dev. Agency	54.2 (53.7)
6. Formal Procedures to Encourage Expansion/Retention	50.7 (49.6)
7. Construction of Public Improvements to Stimulate Business	46.1 (46.3)
8. Loans to Business	45.5 (43.8)
9. Subsidizing Infrastructure (off-site)	45.4 (41.6)
10. Ombudsman for Business	45.0 (41.3)
11. Comm. Dev. Block Grants	41.6 (39.7)
12. Gov. Assembly of Land	40.4 (38.7)
13. Relief from Site Improvements	40.0 (35.5)
14. Gov. Assisted Advertising	38.7 (30.6)
15. Acquisition of Smaller Parcels for Clearance	37.9 (29.8)
16. Joint Ventures with Other Cities	34.6 (28.9)
17. Promotion of Specific Industry	34.2 (28.1)
18. Encouraging Industrial Parks	30.3 (27.3)

19. Issuance of Tax Exempt or Taxable Bonds	27.6 (24.8)
20. Provide Land for Business	27.3 (24.0)
21. Subsidizing Infrastructure (on-site)	26.8 (22.3)
22. Subsidy or Support for Employ. Training	24.7 (21.5)
23. Local Enterprise Zones	22.9 (19.0)
24. Relief from Payment of Development fees	21.4 (18.8)
25. Financial Grant to Business	18.8 (18.2)
26. Rebate of Sales Tax or Transient Occupancy Tax	18.4 (19.0)
27. Tax Abatement	17.9 (18.2)
28. Increase Densities for Business.	12.9 (12.9)
29. Subsidy of Employee Training	5.3 (5.8)
30. Discounts for Utilities	5.1 (4.9)

Although we do not directly examine the issue, it is possible to speculate that direct grants to businesses pose a host of legal, political and equity issues that give decision makers pause in considering direct expenditures of public money apparently to benefit a particular business. Considerable amounts of attention are generated when localities offer highly visible, large grants of resources or tax breaks to businesses. The offer by the Mayor of Los Angeles to provide tens of millions of dollars of immediate tax benefits and other benefits in the long term produces headlines and controversy, as do other cash grants of one sort or another in this or that location. But it is unclear of how typical such direct grants are, and the results of the respondents here suggest that these instances are not as plentiful as media treatment or public suspicions might suggest, notwithstanding spectacular individual cases of a community lavishing incentives on a particular enterprise, such as the construction of a sports stadium.

Insofar as expenditures are concerned, we see the preeminence of the role of redevelopment policies, implemented through the mechanism of tax increment financing. Despite the occasional, highly publicized, example of a set of communities locked in an expensive auction for a K-Mart, Wal-

Mart, auto center, or a sports franchise these are not seen by respondents as a regular feature of local government efforts to nurture economic development in their communities. Indeed, such highly visible, unseemly supplications are likely to generate opposition from watchdog groups, citizen insurgents, and other local businesses resentful of having been left with no suitor or never having been invited to the bidding party at all.

Dimensions of local economic development and redevelopment policy

There are numerous empirical studies that examine and test different models of economic development policy formation. This literature provides a large range of methods on how to operationalize local economic development policy. Some scholars like Feiock and Clingermayer (1992) examine separate local economic development tools in a dichotomous fashion, others involve simple counts of different kinds of economic development policies, while others add the respondents' perceptions of how frequent or important the tool or policy is (Miranda, Rosail, and Yeh, 1992).

In assessing local economic/redevelopment policies we measure these in as rich a fashion as possible, as a consequence the study includes 30 such actions and policies. Each respondent then is indicating for each policy and action not only whether the city is doing the policy or action, but also how important the respondent judges the policy to be for the community's economic and redevelopment (1 = not at all important; 5 = very important). This method is deemed the preferable second-best method by Wolman and Spitzley if direct resource deployment figures are unattainable.

This study employs two methods of measuring policy. One of these focuses on the number and importance of things that a community does, with no assumptions concerning the differences among these policies. In this sense, the communities are characterized as engaging in more or fewer policies and how important the policies are. The other measurement approach focuses on the idea that the policies represent different, underlying dimensions of policy, and we employ both additive and factor analytic-derived scores to measure these. It should be noted that it was decided at this point to focus on the 150 study sites with 1990 populations over 20,000. This is done in order to avoid some of the extreme values associated with some of the demographic variables associated with many of the smaller locales, most notably, population growth, population size, and presence of minority populations. The distribution of responses reported in

Table 3 are not altered, and the rankings are identical. It should be noted that the results reported above are virtually the same, after removing communities from the analysis with populations of less than 20,000.

Our total additive measure of policy, labeled *Economic Development Policy*, is used as an indicator of how much a community is doing and how important the respondents feel about these policies. If a community was not engaging in a particular policy it received a "0" and it received either a 1,2,3,4, or 5 for a policy depending on how important the respondent said the policy was in his/her community. The policy measure could achieve a maximum score of 150 (30 questions X 5 point scale). The mean Policy score was 69.8 and ranged from 0 to 133 with a standard deviation of 26.8. The Cronbach's Alpha of the scale comprised of all thirty policy measures was a hefty .910. This suggests that it is also meaningful to think of each community in terms of this summated, total indicator of local effort and perceived importance.

But not all policies are the same and treating them as such may produce distorted results. Instead, economic development policies may be seen as having different dimensions. To account for this we develop several measures that can distinguish between the different strategies that a city may use to stimulate development. We do this in two ways. First, partly based on existing research (Miranda and Rosdil, 1995; Fleischmann and Gary Green, 1991; Green and Fleischmann, 1989) and for *prima facie* reasons we group the policies into four categories, *direct subsidies*, *indirect subsidies*, *institutional reform* and *classical development strategies* and create simple additive scores (See Table 4). Second, we empirically test these policy dimensions by using a factor analysis to confirm the specific factor loadings and identification. The results of the factor analysis are presented below (Table 5). Variables that are assumed to be important indicators of a particular factor are those with a rotated factor loading of .60 or greater (see Comrey and Lee, 1992).

TABLE 4
Intuitive Policy Dimensions

ACTION/POLICY	ACTION/POLICY
DIRECT SUBSIDIES	INDIRECT SUBSIDIES
1. Rebate of Sales Tax or Transient Occupancy Tax	8. Relief from Payment of Development fees
2. Subsidy of Employee Training	9. Tax Increment Financing through RDA
3. Discounts for Utilities	10. Subsidizing Infrastructure (on-site)
4. Local Enterprise Zones	11. Community Development Block Grants, UDA or EDA grants
5. Tax Abatement	12. Financial Grant to Business
6. Encouraging Industrial Parks	13. Issuance of Tax Exempt or Taxable Bonds to developers
7. Loans to Business	
CLASSIC REDEVELOPMENT	INSTITUTIONAL REFORM
14. Increase space for business through land policy to allow higher densities or building heights	19. Streamlining or facilitating Licensing and Permits
15. Providing land for business by rezoning for commercial use	20. Ombudsman for Business
16. Gov. Assembly of Land for Private Purchase	21. Public/Private Cooperation
17. Construction of Public Improvements to Stimulate Business	22. Formal Networking w/ Business to Encourage Expansion/Retention
18. Acquisition of Smaller Parcels for Clearance	24. Assuring Consistency of Develop't Rules

The factors derived from the factor analysis, which account for 60.8 percent of the variance in the data substantially replicate and confirm the four policy categories. In terms of distinguishing between communities, it is the first factor, *Institutional Reform*, which appears to be the most

important. This factor is comprised of indicators that key on the role of cities in fostering cooperation and the focusing of local economic development and redevelopment activity in one agency. In some sense the fact that these activities represent a push beyond the normal, core activities of redevelopment and economic development might account for why *Institutional Reform* is so important in accounting for differences among the localities. Establishing a single agency to manage economic activity and engaging in joint ventures with other cities, as well as catalyzing other private elements of the community might very well be the hallmarks of cutting-edge activities, including streamlining to reduce the time and burden of processing development proposals through the community. Efforts to avoid duplication and "unnecessary" regulation are the kinds of actions implied here.

The second most important factor in distinguishing among localities is *Classic Redevelopment*. This factor emphasizes the role of redevelopment agencies in acquiring, clearing, and otherwise preparing land for resale to private developers in the classic redevelopment process. These policies and actions represent among the most traditional of local methods of improving local economic conditions. Respondents' differing assessments respecting these actions are, then, not surprisingly important in differentiating among communities and accounting for intercommunity variation.

Finally, the third (*Indirect Subsidies*) and fourth (*Direct Subsidies*) factors are also straightforward, representing two strategies in supporting businesses and economic activity. As we reported in the listing of activities and their frequencies, these are activities that are seen as less important, in the main (See Table 3), than the policies in Factors I and II indistinguishing among the study communities.

Table 5
Factor Analysis of Local Economic Development
Actions and Policies

POLICY	FACTOR I INSTITUTIONAL REFORM	POLICY	FACTOR II CLASSIC REDEVELOPMENT
Ombudsman Services	.69	Government Assembly of Land	.71
Promotion of Specific Industry/Sector	.73	Acquisition of Multiple Parcels of Land for Sale	.84
Formal Procedures for Networking	.74	Construction of Public Improvements	.73
Advertising/Public Relations	.59	Tax Increment Financing	.76
Eigenvalue	5.30	Eigenvalue	2.22
% Variance Explained	31.2	% Variance Explained	13.1
POLICY	FACTOR III INDIRECT SUBSIDIES	POLICY	FACTOR IV DIRECT SUBSIDIES
Relief from Site Improvements	.70	Subsidized Job Training	.81
Subsidizing On-Site Infrastructure	.67	Local Enterprise Zones	.70
Subsidizing Off-Site Infrastructures	.79	Discounts for Water and Electricity	.80
Relief from Development Fees	.64		
Eigenvalue	1.56	Eigenvalue	1.24
% Variance Explained	9.2	% Variance Explained	7.3

Our empirically derived policy measures are similar to other factor analytically derived classifications, although our structure seems somewhat less complex (Wolman and Spitzley, 1996). For example, our *Institutional*

Reform factor is similar to Reese's Marketing and Governance/Infrastructure factors (e.g., advertising, soliciting business, reducing red tape). Our subsidy factors are similar to her financial factors (e.g., tax abatements, loan incentives, shared equity in projects). Despite the differences that result from various empirically derived classifications of local economic and redevelopment policies, there are some overriding commonalities. The differences among the results seem to derive more from the range of policies included in the various studies and perhaps differences in state institutional environments. The most salient thing is that our results and those of others seem to key in on the importance of actions and policies quite similar to those encompassed by the factor analysis reported here.

Our strategy thus far has been to develop several measures of policy to account for theoretical and methodological problems that have troubled the local economic development literature. The purpose of the dependent variables is to measure the subtle variation in policy output between cities. Which measure best operationalizes policy variation is difficult to address. We feel that our simple total additive score that measures the total number of policies used by a city (weighted by importance) may be too simplistic and may not distinguish between different strategies of development. Our categorical or dimension measures of policy seem more theoretically and empirically grounded. Tabachnick and Fidell point out that "factor scores suffer from indeterminacy because there is an infinite number of possible factor scores that all have the same mathematical characteristics." In order to solve for this we simply use an additive score of the identified items for each dimension, a procedure similar to that employed by Fleischmann, Green, and Kwong (1992) and Green and Fleischmann (1991).

Explaining Policy Variation

Besides knowing that local policies might cluster about different underlying policy dimensions, do such distinctions reflect different community features? We explore this with a set of socioeconomic indicators that we believe might affect local economic development. For our exploratory purpose of assessing whether different policies are associated with alternative clusters of social characteristics, we use a number of indicators that reflect current research on the causes of local variation in policy. Specifically, the measures we use are:

- City population Change from 1990 to 1995
- Percent housing unit change from 1980 to 1990

- Proportion of local population in poverty (1990)
- Median family income (1990)
- Percent of population that is Black (1990)
- Percent of housing that is owner-occupied (1990)
- Locus of development decision-making housed in Economic Development Agency (EDA) or Redevelopment Agency (RDA)

Several of these measures of local social status -- poverty level, percent Black, and family income -- are incorporated as reflecting an explanation of local policy based on social differences. The indicators used are standard and reflect a fairly substantial, if confusing, literature (Rubin and Rubin, 1987; Clingermayer and Feiock, 1990; Donovan, 1993; Wolman and Spitzley, 1996). Fleischmann, Green and Kwong (1991) found statistical evidence to support that poverty levels are positively correlated with overall economic development efforts. From this we predict that lower strata communities will tend to do more to attract commerce, in order to reverse the effects of declining local resources.

Other indicators involve measures of rapid community growth in residential housing. The view is that rapid growth in residential units poses a strain on the local service level and dilutes the local tax base by generating higher service levels without commensurate increases in revenue. The view is that greater business development will reduce the burden of supporting local services (Donovan, 1993; Green and Fleischmann, 1991). An institutional measure that assess whether or not a city has an economic development agency or redevelopment agency is also included in our regression model. It is predicted that the presence of such agency will be associated with higher policy score for all of our policy measures. A city with an economic development agency or redevelopment agency is more likely to do more to promote development and also more likely to pass institutional reforms, push for direct and indirect subsidies while still supporting classic development strategies.

Table 6 reports the results of a multiple regression analysis of our independent measures and their relationship to local economic development/redevelopment policies. It should be noted that the policy measures, the dependent variables, are measured as the summated score for the items loading on each of the policy factors at a value of .55 or greater, rather than factor scores.

TABLE 6
Relationship Between Community Socioeconomic
Variables and Policy Measures: Unstandardized
Coefficients and Standard Errors

	Institution al <u>Reform</u>	Classic Redevelo p. <u>es</u>	Indirec t Subsidi es <u>es</u>	Direct Subsidi es <u>es</u>	TOTAL POLICIE S <u>S</u>
Constant	25.3 (7.1)	29.7 (6.3)	23.9 (6.4)	25.2 (8.1)	127.8 (24.6)
Poverty Level	-.39 (.21)	-.55 (.18)	-.38 (.19)	-.43 (.24)	-2.1 (.72)
Median Family Income	-.0001 (.000)	-.0003 (.0000)	-.0003 (.0000)	-.0002 (.0000)	-.001 (.000)
Housing Unit Change (80-90)	.054 (.02)	-.01 (.02)	.02 (.02)	.04 (.03)	.14 (.08)
Pop. Change 1990-95	-7.8 (6.8)	1.86 (5.6)	3.6 (6.0)	-10.8 (7.7)	-19.4 (23.3)
Black Population %	.018 (.08)	.143 (.07)	.17 (.07)	.25 (.09)	.61 (.27)
EDA or RDA present	4.7 (1.3)	3.2 (1.1)	1.8 (1.1)	2.8 (1.4)	15.1 (4.3)
Owner Occupy Housing	-.019 (.06)	-.003 (.05)	.07 (.06)	.004 (.07)	.088 (.212)
R ²	.226	.278	.292	.219	.331
Adjusted R ²	.170	.226	.241	.163	.283

Contrary to our prediction we find that our summed, total measure of policy has the best fit with the explanatory measures used. Over 33 percent of the variance is explained by the measures, and only the rate of housing growth fails to be significantly related to the increase in the number and importance of local economic development actions.

All in all, the patterns of the findings do not vary dramatically by policy category, at least in the sense of variables affecting policy in the same manner. It appears that communities experiencing more housing growth in the 1980-1990 adopt more reforms in processing economic development, which seems fairly expected. As communities grow and the size and number of projects increase, the need to manage them more efficiently might also increase. Perhaps as communities grow, they find that the institutional framework for economic development less effective in

managing the higher rates of development. . But this variable does not seem to be correlated with other policy measures, such as direct and indirect subsidies.

Our institutional variable which assess whether or not a city has a EDA or RDA was found to be correlated with all but one of our policy measures. The presence of an economic development agency or redevelopment agency did not seem to promote indirect subsidy activity. Population change from 1990 to 1995 was surprisingly uncorrelated with any of our policy measures. Even when we took out the housing change variable, population change remained statistically insignificant.

Higher poverty levels and higher income levels have the same depressive impact on local economic development policy; the higher the poverty rate and the higher the family income, the lower the level of institutional reform, classic redevelopment, indirect subsidies, or total policies. Higher median family incomes and poverty levels seem to be associated with lower effort levels in nearly all the policy categories. In no case does the sign of the relationship change across policy types. In general, then, in the study site here, there seem to be subtle differences in the manner by which explanatory variables are related to the various policy types. Perhaps most notable, we find that the explanatory variables do the best job in predicting the total additive policy measure.

The most salient of the findings is that poverty levels and family income level are negatively associated, both variables have coefficients in the same direction (negative). Our analysis uses income and poverty levels as the main measures of a city's economic condition. The literature suggests that city officials would want to increase a city's average income and decrease poverty because both activities would increase tax revenue to the city and increase favorable public opinion toward the city officials by responding to a demand or need. From this logic we predicted that lower strata communities, i.e. cities with low average personal incomes and high poverty levels, should have more of an incentive to invest in more and diverse policies in order to attract commerce, in order to reverse the effects of declining local resources. Previous studies have provided empirical support for such logic. Fleischmann, Green and Kwong (1991) found statistical evidence to support that poverty levels are positively correlated with overall economic development efforts and Clingermayer and Feiock (1990) and Rubin and Rubin found income negatively correlated with policy output.

Our regression analysis results seem to contradict this tradition

school of thought. The data suggest that the number and importance of local economic development policies is higher, the *lower* the local poverty level; while at the same time the higher the median family income of a locality, the lower the number and importance of local economic development policies. The regression diagnostics, such as variance inflation factors and residual plots, were run in order to see if problems of multicollinearity could be causing such findings (known as tipping), but no evidence of such statistical problems was noted. Instead these findings could suggest that communities with lower rates of poverty are better able to initiate policies and more affluent localities have less need for economic development policies.

Although our data are inconsistent with some of the existing research, Goetz (1993) found that poverty and income levels were both positively associated with an increased use of alternative economic development policies. Goetz concludes that high per capita income levels along with high levels of poverty can be understood as “uneven development” and that such communities are associated with the adoption of alternative economic development policies. Our results may be reflecting a similar relationship between uneven development and policy response.

TABLE 7
Groupings of Income and Poverty Levels

<u>Poverty</u>	<u>Income</u>	<u>epolicy</u>	# of Cities
highest 25%	highest 25%	N/A	0
highest 50%	highest 25%	59.00	1
lowest 50%	highest 25%	56.13	32
lowest 25%	highest 25%	56.00	21
highest 25%	highest 50%	N/A	0
highest 50%	highest 50%	69.00	6
lowest 50%	highest 50%	63.90	68
lowest 25%	highest 50%	59.58	33
highest 25%	lowest 50%	72.08	36
highest 50%	lowest 50%	76.78	68
lowest 50%	lowest 50%	65.07	14
lowest 25%	lowest 50%	69.90	10
highest 25%	lowest 25%	74.43	28
highest 50%	lowest 25%	74.59	37
lowest 50%	lowest 25%	69.90	10
lowest 25%	lowest 25%	69.90	10

To explore the hypothesis of "uneven development" we deploy two measures of uneven development. The first measure groups cities by both income and poverty. By using quartiles, cities with high or low levels of both poverty and median income (highest or lowest 25 or 50%) are grouped together. The weakness of this measure can easily be seen in table 7. There are few if no cities with both very high levels of poverty and very high levels of income. Difference of means tests with the above measure showed no differences between different groupings of cities. Our second measure of uneven development was simply a combination of both median family income and poverty level together into a factor score and then taking the absolute value of that score. This produces a variable ranging from .03 to 3.41 with a mean of .79 and a standard deviation of .61. A score closer to zero would represent those cities with uneven development, meaning they have higher than average poverty levels along with higher than average income levels. A score farther away from zero would represent those cities with even development, meaning low poverty and high income or visa versa. This variable is predicted to be negatively related to our policy

measures, that is, those cities with uneven development (closer to a score of zero) will have higher economic development policy scores. This score performs remarkable well. It explains almost as much variation as both income and poverty together (see Table 8) and is in the predicted direction, negative.

This measure of uneven development was placed in our original regression models in place of the traditional poverty measure and the results reported in table 9. The uneven development measure remains statistically significant and in the proper causal direction with all five types of policy measures. In fact the overall fit of the model improves for all five regressions. These findings show that Goetz's hypothesis of uneven development not only applies to alternative economic development policy strategies but also can help explain all types of economic development activities.

TABLE 8
Regression Analysis of Economic Development Policy and
Uneven Development

Independent Variable	Model 1 Econ. Policy	Model 2 Econ. Policy
Constant	158.8 (19.9)	84.4 (4.1)
Poverty	-2.2 (.69)	
Family Income	-.001 (.000)	
Uneven Develop.		-17.8 (5.2)
R^2	13.4	.10

TABLE 9
Regression Model with Uneven Development Measure:
Unstandardized Coefficients and Standard Errors

	Institutional <u>Reform</u>	Classic <u>Redevelop.</u>	Indirect <u>Subsidies</u>	Direct <u>Subsidies</u>	TOTAL <u>POLICIES</u>
Constant	16.7 (3.2)	16.4 (2.8)	15.3 (2.9)	15.3 (3.7)	79.9 (11.0)
Uneven Development	-3.5 (1.3)	-3.8 (1.2)	-3.3 (1.2)	-3.5 (1.5)	-16.1 (4.6)
Median Family Income	.00004 (.000)	-.0001 (.0000)	.0002 (.0000)	-.0001 (.000)	-.0005 (.0002)
Housing Unit Change (80-90)	.05 (.02)	-.02 (.02)	.01 (.02)	.04 (.03)	.10 (.07)
Pop. Change 1990-95	-6.1 (6.6)	4.2 (5.9)	5.1 (5.9)	-8.9 (7.6)	-10.7 (22.7)
Black Population %	.02 (.08)	.131 (.06)	.16 (.07)	.25 (.09)	.58 (.26)
EDA or RDA present	4.4 (1.2)	2.9 (1.1)	1.5 (1.1)	2.5 (1.4)	13.8 (4.2)
Owner Occupy Housing	.005 (.06)	.04 (.05)	.09 (.05)	.03 (.06)	.23 (.19)
R ²	.251	.286	.315	.233	.356
Adjusted R ²	.197	.235	.266	.178	.310

Conclusion

As in other studies, we have been able to establish in our data that there are a number of factors or dimensions that account for local policy variation. Even though the findings across the policy dimensions are not stark, they do reveal subtle differences across explanatory variables. On the other hand, the analysis here is a weak form of confirmatory factor analysis, in the sense that we still have much to do to develop the sort of theory that will anticipate in more consistent fashion. At this time, the results confirm, as other studies have, that an array of different, specific measures of policy can be summarized as a smaller number of dimensions of policy. As a practical matter this might be difficult so long as there are so many alternative measurement approaches to what localities are doing in terms of economic development. Assuming that problem is solved, then theory-development must advance to specify what the expectations are regarding the relationship between community characteristics and particular types of policy. At that point, a "stronger" version of

confirmatory analysis is more appropriate. Even while this study suggests a continued value for identifying different policy types and classificatory schemes, the data also suggest that it is still quite valuable to use a simple summed, additive index of local public policy. Our findings, though exploratory, also suggest that socioeconomic factors such as income and poverty have a far more complex relationship with policy. We must clearly consider how we measure the relationship between policy and our explanatory variables. It was somewhat surprising to find that both poverty levels and local prosperity diminish local policy efforts, but once our model specification took into account complex and interactive processes the statistical results seemed more appropriate. This paper has hopefully suggested a useful way to look at economic development policy and its dimensions and stimulate more advanced research on the conditions that drive such policies.

Although it is a long-accepted, perhaps self-serving, principle that analysis should not be driven by the desire to drive-up the level of "explained variance," the fact is that the models analyzed here clearly have room for additional "variables." It is not suggested that we willy-nilly throw additional measures into prediction equations. On the other hand, there are a host of socio-political processes that have not been adequately operationalized and incorporated into the analysis. For example, community conflict and controversy, participation, institutional variation, and legal differences among states, fiscal systems, and the like are important sources of explanatory power, and we and our colleagues should busy ourselves in developing appropriate concepts and measures to incorporate into our studies.

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