Poverty and Place across the United States: Do County Governments Matter to the Distribution of Economic Disparities?

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Abstract
Many researchers advocate active local government responses to poverty and other economic disparities. In doing so, they raise a generally unexplored question: can local governments themselves influence poverty net of other determinants? This study extends past research in two ways by (1) analyzing the poverty-reducing role of county governments and (2) evaluating new relationships pertaining to the comparative influence of government capacity and specific policies. The authors assess the degree to which county government capacity and economic development policies relate to disparities in job growth, individual and child poverty, and household income. The empirical analysis is based on a unique set of primary and secondary data on county governments for the post-2000 period. County government capacity

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as measured by county centralization and autonomy from upper-level government is related to economic growth and poverty reduction. By contrast, policy variables have little consistent association with economic disparities.

Keywords
poverty, income distribution, income inequality, social and political issues, policy and applications, economic growth and development, urban and regional issues, regional econometric models, economic analysis, methods, other policy and applications, spatial dependence, generalized spatial two-stage least squares, generalized moments estimation (GMM)

Introduction
Social scientists have long been concerned with the determinants of poverty and other economic disparities across places. A large US multidisciplinary literature addresses poverty and place by focusing broadly across localities at the subnational scale. Reviews of this literature span regional economics (Blank 2005; Isserman, Feser, and Warren 2009; Partridge and Rickman 2006; Weber et al. 2005), geography (Chakravorty 2006; Glasmeier 2002), and sociology (Lobao, Hooks, Tickamyer 2008). Gaps remain in determining why some localities prosper but others are impoverished. Researchers have called for place-sensitive policies and active local government responses (Blank 2005; Nizalov and Schmid 2008; Partridge and Rickman 2005, 2006; Weber et al. 2005). In doing so, they raise a fundamental question: Do local governments themselves have the capacity to influence poverty, given market forces and other major determinants of socioeconomic conditions?

Although social scientists often invoke a role for US local governments, little is known about whether they affect the spatial distribution of poverty. Some analysts point out that past research treats government in a simplistic manner, ignoring its spatially variegated activities (Lobao and Hooks 2003; Rupasingha and Goetz 2007; Volscho and Fullerton 2005). Even when studies include government-related measures, they typically focus on federal or state government, and the administrative level rarely corresponds to the places most studied by poverty researchers—the county.

The purpose of this study is to address a gap in the literature on poverty and place. We focus on county government capacity and policies, which have been unexplored in previous research. We examine whether county governments influence US economic disparities, focusing on poverty, household income, and job growth, and evaluating the degree to which counties’ institutional capacity and policy make a difference.

To evaluate the performance of counties, we contrast two social science positions. The first builds from much of the poverty and place literature that argues local governments can promote growth and reduce poverty when they have strong institutional capacity and deploy specific policies. The second position challenges this view. It posits that net of market and other forces, local government has, at best, a negligible community impact. In addition to assessing whether county governments
matter at all, we test which matters more, institutional capacity or specific policy. Is poverty alleviation related more to general capacity to govern effectively (regardless of policy) versus the alternative of employing specific policies designed to improve local economic conditions? To our knowledge, this is the first study of county government to compare the effectiveness of general governing capacity with the effectiveness of particular policies and to empirically examine the role of county governments in poverty alleviation.

The article is organized in four sections. First, we explain the importance of counties in the poverty and place literature. Second, we outline opposing perspectives about whether local governments can alleviate poverty, focusing on institutional capacity and economic development policies. Third, we summarize findings from past research. Fourth, using unique data on county governments in the post-2000 period, we examine county capacity and policy and their relationship with key economic indicators—job growth, poverty rates, and household income.

The Poverty and Place Literature and Counties

Research on poverty and place forms a decades-long, interdisciplinary literature, with many recent reviews (Blank 2005; Chakravorty 2006; Glasmeier 2002; Isserman, Feser, and Warren 2009; Lobao, Hooks, and Tickamyer 2008; Partridge and Rickman 2006; Weber et al. 2005; Voss et al. 2006). Thematically, this literature centers on identifying factors that affect subnational disparities, typically using poverty rates, income levels, income inequality, or job growth as dependent variables. The explanatory variables are also similar across studies, with the following three variable groupings: (1) economic structure, such as job growth; (2) demographic attributes such as age, education, ethnicity, and family structure that reflect residents’ vulnerability to poverty; and (3) agglomeration-geography factors such as urban–rural location. Studies typically involve modeling relationships with county-level data from the US Census and other secondary sources.

The poverty and place literature is plagued by several limitations. Research varies in the degree to which spatial variables and processes are incorporated. Issues of endogeneity, while recognized in principle, are still not often addressed (Weber et al. 2005). Although some studies include government-related independent variables, they provide an aggregated, limited view of government. Past studies rely mainly on measures of public employment but rarely separate local government from higher-level governments. Whether county government policies and attributes influence poverty remains unexplored. Yet, counties are the place units most frequently employed in geographically disaggregated studies of US poverty (Isserman, Feser, and Warren 2009; Peters 2009). County government capacity and policies are potentially important explanatory variables, without which, studies of the determinants of disaggregated poverty rates are likely to be biased.

Numerous researchers explain why the county is a preferred place unit for social science research. While all geographies have their trade-offs as units of study,
relative to states and cities, counties are better units for capturing labor market processes of representing place of residence and place of work (Partridge and Rickman 2006, 128). Their geographic boundaries are relatively fixed over time and extensive secondary data are available at the county level (Isserman, Feser, and Warren 2009; Peters 2009). Counties cover both urban and rural areas, allowing a complete national view of fast- and slow-growing places (Desmet and Fafchamps 2005). Labor market areas that reflect entire commuting sheds are sometimes used as units of analysis. However, policy is rarely, if ever, implemented at the labor market area level while counties are policy-making units, directly fitting the purpose of studies emphasizing local policy. Moreover, Partridge and Rickman (2006) find that poverty responses to standard economic variables are similar when evaluated across metropolitan areas (which are labor market areas by definition) and individual metropolitan counties.

Counties are local governments in most states, not merely population aggregates. They contain more residents than do municipalities and they are the fastest growing general purpose governments, in part due to devolution (Lobao and Kraybill 2005). Counties provide more redistributive services such as welfare, health, housing, and community development than do municipalities and raise more of these funds locally (Benton 2002; Craw 2006). Many federal, state, and intergovernmental programs are administered through county government. Local availability of federal and state programs also depends upon whether counties apply for grants from these higher levels of government (Craw 2006). One example is the $787 billion federal stimulus package for which counties competed for funding after the 2008 national economic crisis. Research has also found that county economic development and service policies vary considerably across county governments, even within the same state (Benton 2002; Jeong 2007; Lobao and Kraybill 2005; Minkoff 2009).

Social scientists have produced independent literatures on states, counties, and cities as distinct governmental units. To assess policy, the unit of government should correspond with the territorial unit of outcome. Attention to county governments offers a unique contribution because their structure and policies are less explored than are those of municipalities and states (Craw 2006).

If county governments are important, why have researchers neglected them? First, the poverty and place literature focuses on private sector, demographic, and geographical determinants. When government is considered, the federal government is emphasized. Sheingate (2010) identifies this as an issue of the invisibility of US local government. Scholars as well as the public see the “state” as the “federal state” particularly when it intervenes in poverty processes. Indeed, local governments are often seen as inhibiting poverty alleviation due to a potential for “race to the bottom” development strategies (Peterson 1981).

Scarce data are a key reason why studies of poverty and place neglect county government. The vast majority of studies draw from the Census of Population, which contains no institutional information about county government. The US Census of Governments is limited in the quality and detail of county data (Lobao and Kraybill 2005). Weber et al. (2005) point out that existing secondary data poorly captures
government attributes that theory suggests would affect poverty. These include institutional capacity, administrative practices, and service provision. While such determinants can be explored by small sample studies, the lack of detailed capacity and program data for county governments has made this impossible. Thus, for conceptual and empirical reasons, county governments remain relatively invisible.

Contrasting Positions about Local Governments

Empirical evidence about whether counties or any local governments influence the distribution of poverty is scant. Rather, analysts have long debated whether local government intervention into poverty processes is effective and warranted. We briefly summarize this debate.

The Case for Local Governments' Influence in Poverty Alleviation

For local businesses, infrastructure and general public services serve as inputs into production and can reduce the cost of doing business; public services can also improve the quality and supply of local labor (Bartik 1991). Government thus offers a source of local competitive advantage and can improve resident’s economic well-being. The poverty and place literature suggests two paths by which local government can improve well-being: (1) through its capacity to act diffusely as an efficiency-enhancing institution, as indicated by its size, structure, and autonomy and (2) through specific policies and programs. In other words, to alleviate poverty, localities must have the capacity to act and the ability to turn action into appropriate policies benefitting the poor by improving their livelihoods and their access to public services.

The poverty and place literature generally treats government as a diffuse institution with broad community effects (Blank 2005; Isserman, Feser, and Warren 2009; Lobao, Rulli, and Brown 1999; Lobao and Hooks 2003; Mencken and Singelmann 1998; Volscho and Fullerton 2005). These studies mainly use measures of public sector employment as indicators of the scope of local intervention. Analysts refer to two overlapping government functions: an economic growth function that can occur through job creation and bolstering human capital (Partridge and Rickman 2005, 2006); and a social equity function that strengthens the social safety net (Lobao and Hooks 2003; Volscho and Fullerton 2005). Some researchers expect that larger governments with more institutional capacity are better able to fulfill growth and equity functions (Lobao and Hooks 2003; Volscho and Fullerton 2005). Thus, where counties are stronger fiscally and bureaucratically, they should have greater capacity to ensure well-being. Defenders of decentralized governance also suggest this relationship. Rodriguez-Pose and Kroijer (2009) list the benefits of localized government cited by recent proponents of decentralization that extend beyond those classically recognized by Tiebout (1956).

A second path of government influence is through specific policies and programs that serve economic growth and social equity functions. Successful economic
development programs create jobs that raise family incomes and reduce poverty. Social and other public services can build human capital or workforce capacity, promote family well-being, increase community cohesion, and reduce poverty rates. The poverty and place literature examines policy largely through federal or regional programs aimed at creating growth (Isserman and Rephann 1995; Mencken and Singelmann 1998) or enhancing the social safety net (Lobao and Hooks 2003).

The case for local intervention is made mainly by analysts arguing for place-based policies that seek to reduce poverty by altering area conditions such as labor demand, workforce capacity, or local amenities. These policies include economic development programs that increase employers’ labor demand and provide workforce services such as transportation and child care that increase labor market efficiency (Bartik 2001; Partridge and Rickman 2006, 2008).3 Research identifies considerable variation in the services and programs that counties provide to businesses and residents (Benton 2002; Jeong 2007; Lobao and Kraybill 2005; Minkoff 2009; Warner 2001). Insofar as some counties are better poised to address growth and equity functions via services or programs, economic well-being may be greater. Finally, recent research suggests government can be a useful tool for creating jobs that alleviate poverty (Bartik 2001).

Challenging the Benefits of Local Government

The position that local governments have no or even a negative effect on economic well-being is shared by two different frameworks. The first is the limited government view, often referred to as the neoliberal framework (Pratt 1997). It sees government at all levels as distorting market processes. Government interventions are, at best, ineffective or even counterproductive. When governments grow larger and more powerful, market regulation increases, reducing economic efficiency (Okun 1975; Buchanan 1986). Public employees function as rent-seeking bureaucrats, as outlined in the public choice literature (Buchanan 1986; Mitchell and Simmons 1994). Public agencies and programs are viewed as monopolistic and inefficient, and services for the poor particularly undercut long-term growth (Mitchell and Simmons 1994).

The second position builds on the political economy literature: it sees the state as important for alleviating poverty but stresses the inadequacies of local governments. First, local governments are alleged to pursue growth over equity (Peterson 1981). They compete relentlessly to attract business and high-income residents, directing policy efforts toward these groups rather than toward the disadvantaged. Competition and political fragmentation among localities also diminish the incentive for local governments to target low-income groups (Oates 1972). Finally, this position stresses the limited, if not detrimental, impacts of locally created or administered policy. For example, economic development programs centered on tax incentives to favored firms may be a form of tax evasion and ineffective in creating jobs (LeRoy 2005), while creating an incentive for rent-seeking.
Empirical Research on Government and Poverty across Counties

Research informing the debate about county government and poverty alleviation is limited by the scope of governmental variables examined in nationwide studies and by the lack of generalizability of small-area studies. Here, we summarize past research pertaining to our indicators of institutional capacity and specific policies. While we focus on county-level studies, for the vast majority of studies, government variables (for all local and/or other government entities) are aggregated up to the county level rather than pertaining to only county government.

The Capacity of Government as a Local Institution: Size, Resources, and Decentralization

We focus on three indicators of counties’ institutional capacity: size, fiscal and administrative resources, and decentralization/centralization. Capacity is usually conceptualized in terms of administrative and fiscal attributes that enable governments to formulate policy and deliver services (Jeong 2007; Reese and Rosenfeld 2002).

**Government size.** Studies from the poverty and place literature treat government as a diffuse institution. Their interest lies mainly in government involvement in local socioeconomic processes, which many researchers measure by government employment (Higgins, Levy, and Young 2006; Isserman, Feser, and Warren 2009; Lobao and Hooks 2003; Lobao, Rulli, and Brown 1999; Volscho and Fullerton 2005). Higgins, Levy, and Young (2006) explain that for counties, employment best captures the scope of government in providing services and influencing labor markets. Most studies treat government employment as a single sector, though a few use measures from Regional Economic Information Systems (REIS) that pertain to federal, state, and (total) local government employment (Higgins, Levy, and Young 2006; Lobao and Hooks 2003; Volscho and Fullerton 2005).

Extant research tends to dispute a view of the null effects of government, finding that its size matters. A relatively large public employment sector tends to have a favorable impact on distributional indicators but mixed effects on growth or prosperity. Researchers have found a larger public sector related to lower income inequality across counties (Lobao and Hooks 2003; Levernier, Partridge, and Rickman 1998; Lobao, Rulli, and Brown 1999; Moller, Alderson, and Nielsen 2009) and metropolitan areas (Cloutier 1997; Volscho and Fullerton 2005). Some studies also report the same relationship for poverty. Partridge and Rickman (2006) found a larger public sector related to lower poverty rates for nonmetropolitan counties for both 1990 and 2000, while Kodras and Jones (1991) found the same relationship for metropolitan counties for 1980. By contrast, Higgins, Levy, and Young (2006) found government employment depressed per capita income growth across all US counties over the
1970–1998 period. Isserman, Feser, and Warren (2009) found no relationship between government employment and a composite index of economic prosperity for nonmetropolitan counties. Within the public sector, federal as compared to state and local employment is usually found to have better growth and distributional effects (Lobao and Hooks 2003; Volscho and Fullerton 2005).

**Administrative and fiscal resources.** County administrative and fiscal resources may impact local well-being. Counties and cities with more professionalized staff and greater own-source fiscal resources are found to provide a greater number of public services, including workforce development (Benton 2002; Jeong 2007; Reese and Rosenfeld 2002) and these services tend to be higher quality (Folz and Abdelrazek 2007). Administrative capacity provides greater ability to monitor policies and programs and undertake regulatory functions (Jeong 2007), staff to write grants and develop new programs (Clingermayer and Feiock (2001), and expertise in balancing budgets (Deller 1998).

Generalizable data on administrative attributes reflecting the quality of county bureaucracy are unavailable from secondary sources. Fiscal indicators from the Census of Governments that pertain broadly to bureaucratic resource capacity are used in some studies but they produce few significant or consistent results. Using per capita property taxes for 1992, Gebremariam, Gebremedhin, and Schaeffer (2011) report no effect on employment in Appalachian counties. For counties in three Great Lakes states, Kim, Marcouiller, and Deller (2005) found no relationship between property tax levels and growth in population, employment, and per capita income. In sum, analysts often hypothesize that fiscal and administrative capacity improves local performance in alleviating poverty but evidence is weak.

**Decentralization and counties.** Processes of decentralization/centralization may alter the capacity of local governments, and this may affect local economic well-being. Decentralization refers to the allocation of resources, responsibilities, and authority to subnational governments (Falleti 2004, 328). We examine two attributes of decentralization associated with county well-being. The first is county fiscal autonomy relative to state and federal government, which has been measured as dependence on own-source funds relative to external funds (Lobao and Kraybill 2009; Salvino 2007). Fiscal autonomy, by permitting greater local control, may enable counties to better adapt their policies and programs to local conditions. County dependence on own-source funds has been found to be related to greater use of innovative economic development programs (Lobao and Kraybill 2009) and greater grant-seeking (Hall 2008).

Second, the degree of county centralization, typically measured by the number of local governments operating in a county, may affect economic well-being. However, the direction of effects is debated. On one hand, centralized counties should have greater power to improve local conditions and also minimize spillovers; on the other, Tiebout’s (1956) thesis suggests matching of residents’ preferences to government
responses is reduced when there are fewer jurisdictions. Researchers reviewing past studies conclude the effects of county centralization are mixed (Craw 2006; Hammond and Tosun 2011; Nelson and Foster 1999), a view echoed in recent empirical work. Centralization (fewer general purpose governments in a county in 1972) had a positive effect on employment growth from 1970 to 2000 for nonmetro counties, but no effect for metro counties (Hammond and Tosun 2011). By contrast, for Pennsylvania counties, Grassmueck, Goetz, and Shields (2008) found centralization in 1992 related to greater youth out migration from 1992 to 1995. They conclude county centralization fails to improve well-being.

**County Governments and Economic Development-Related Policies and Programs**

Analysts have long questioned whether local economic development programs work in practice to stimulate growth and alleviate poverty (Bartik 1991, 2005; Wolman 1996). We briefly summarize the implications of this research for counties. Far more is known about policy adoption than outcomes. Most studies focus on specific localities or programs. Generalizable research on the outcomes of the range of programs that localities employ is limited.

Researchers are divided as to whether broadly-defined economic development programs improve well-being. Bartik (1991, 2005, 2009), offering a rigorous evaluation, concludes that they may, but benefits are modest and depend on the type of policy. He also notes the pitfalls in providing individual incentives that are costly per job created or attract low-paying jobs (Bartik 2005). Other analysts conclude there is no evidence for the effectiveness of these programs (Bradbury and Kodrzycki 1997; Fisher and Peters 1998; Schwartz, Pelzman, and Keren 2008; Wolman 1996) or that economic development programs are damaging to communities (LeRoy 2005).

Criticism of economic development policy often centers on external business attraction, such as use of tax abatements and other firm-specific incentives that require governments to pick favored businesses. Localities also provide numerous programs to support local entrepreneurship and small businesses (i.e., new-wave policies) and workforce services such as training, transportation, health, and social services that can raise labor productivity and family income (Fisher and Peters 1998; Reese and Rosenfeld 2002). Researchers share more agreement that programs directed to upgrading existing local business and the labor force will benefit communities (Bartik 2005, 2009; Basolo and Huang 2001; Fisher and Peters 1998; Reese 2006; Reese and Rosenfeld 2002). Recent studies find that poverty does not inhibit the pursuit of innovative policies and that poorer localities are not any more likely than better-off localities to adopt business attraction policies (Lobao and Kraybill 2009; Reese and Rosenfeld 2002). But whether counties realize any gains from workforce or new-wave policies is unclear. A recent survey of 170 public officials
found that for ten types of programs, only training for specific local industries was linked with reported increases in local employment (Harper-Anderson 2008).

**Expected Relationships and Analytical Approach**

Two contrasting positions can be derived from the literature review. The first anticipates that greater county government capacity and use of economic development programs, particularly new-wave and workforce programs, will be related to improved well-being, while the second position anticipates negative or null effects of county government.

Our approach to testing these relationships is to first include an extended set of control economic, demographic, and agglomeration/geography variables derived from the poverty and place literature. We then add previously unstudied measures of county government. Second, we capture spatial dependency in the poverty-and-place relationship. Finally, we account for the importance of contemporaneous job creation in poverty alleviation (Bartik 1991, 2005, 2009; Partridge and Rickman 2005, 2006, 2008), but we also allow for unobservable community shocks that may create endogeneity.

Relationships for county government variables are examined across a range of outcomes, job growth, individual poverty, child poverty, and household income. Focus on the post-2000 period provides a needed update to most research which draws from the Census of Population for 2000 or earlier years.

**Data and Measures**

This study employs data for a national sample of county governments. Primary data are used for policy-related variables unavailable from secondary sources. These data were collected in 2001 from a (300 question) survey of county governments conducted under the auspices of the National Association of Counties (NACo). Details are described in Lobao and Kraybill (2005). NACo identified a list of officials composed of county commissioners, managers, and other executives who are established informants for NACo.

The methodology of collecting otherwise unavailable data through surveys of officials is routinely used by organizations (e.g., International City-County Management Association [ICMA], NACo, and the US Conference of Mayors) and academic researchers (e.g., Clingermayer and Feiock 2001; Reese and Rosenfeld 2002). In our case, surveys were mailed to approximately 3,000 county governments (including Louisiana parishes) in all forty-six contiguous states with these governments. Connecticut and Rhode Island were excluded because their counties are not governmental units. The response rate was 62 percent (1,678 counties), high for local government surveys. To our knowledge, no other data set provides comparable, generalizable nationwide information on the capacity and programs of county governments, especially one with such a high response rate. Descriptive statistics for
counties in the sample and the total (forty-six state) universe of counties are approximately the same for key economic and demographic variables (Lobao and Kraybill 2005, 2009). For example, the share of metropolitan/nonmetropolitan counties is almost identical (i.e., the metro county share in our sample is 28 percent vs. 27 percent for total universe of counties). Figure 1 shows the map of our sampled counties.

Government surveys have limitations (Wolman 1996). Data from these surveys typically allow construction of dichotomous variables such as use or nonuse of particular policy tools. Another limitation is potential response bias. We test for two types: bias due to nonresponse and bias due to responding officials’ characteristics. The tests yield no evidence of systematic bias. Secondary data obtained from the Census Bureau’s Small Area Income Poverty Estimates (SAIPE), REIS, Census of Governments, and Census of Population are used to measure control and dependent variables (see Table 1). Complete secondary data are not available for 164 of the 1,678 responding counties. Descriptive statistics and variable definitions are in Table 1. Note that our results regarding the county government variables pertain to county governments’ capacity and policy; they do not imply anything for municipalities. Future studies might pursue similar research questions at the municipal level.

Figure 1. Map of the sampled counties.
Table 1. Descriptive Statistics and Variable Definitions

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<th>Definitions</th>
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<th>SD</th>
<th>Data Sources</th>
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<tbody>
<tr>
<td><strong>Dependent variables</strong></td>
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<tr>
<td>Employment growth</td>
<td>Employment growth 2001–2007 (%)</td>
<td>7.53</td>
<td>11.10</td>
<td>REIS-BEA</td>
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<td>Poverty rate</td>
<td>Individual poverty rate (%), 2007</td>
<td>14.45</td>
<td>5.41</td>
<td>SAIPE</td>
</tr>
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<td>Child poverty rate</td>
<td>Population &lt;18 poverty rate (%), 2007</td>
<td>20.18</td>
<td>7.94</td>
<td>SAIPE</td>
</tr>
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<td>Median hh. income</td>
<td>Median household income (1,000's), 2007</td>
<td>43.25</td>
<td>10.52</td>
<td>SAIPE</td>
</tr>
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<td><strong>County Government capacity</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size</td>
<td>Full-time employment size of county government</td>
<td>905.5</td>
<td>3,396.6</td>
<td>Census of Governments</td>
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<tr>
<td>Grant writer</td>
<td>Dummy = 1 if county has grant writer on staff</td>
<td>0.34</td>
<td>0.47</td>
<td>County government survey</td>
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<tr>
<td>Development staff</td>
<td>Dummy = 1 if county has economic development professional on staff</td>
<td>0.40</td>
<td>0.49</td>
<td>County government survey</td>
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<tr>
<td>Number of governments</td>
<td>Number of governments operating in the county per 1000 population</td>
<td>1.62</td>
<td>2.30</td>
<td>Census of Governments</td>
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<td>Revenue per capita</td>
<td>County general revenue per capita, 1997 (1,000s)</td>
<td>0.73</td>
<td>0.58</td>
<td>Census of Governments</td>
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<td>Federal + state/county revenue</td>
<td>Federal + state revenue/county-own source revenue, 1997</td>
<td>0.30</td>
<td>0.19</td>
<td>Census of Governments</td>
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<td><strong>County Government Policy</strong></td>
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<tr>
<td>Traditional activities</td>
<td>Total of traditional econ dev. activities in use</td>
<td>2.30</td>
<td>2.12</td>
<td>County government survey</td>
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<td>New-wave activities</td>
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<td>3.67</td>
<td>2.10</td>
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<td>Workforce support</td>
<td>Total of workforce dev. activities in use</td>
<td>4.03</td>
<td>2.93</td>
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<td>Business incentives</td>
<td>Number of business incentives offered</td>
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<td>2.54</td>
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<td>Small business</td>
<td>Econ. dev. budget for small business (%)</td>
<td>8.50</td>
<td>14.15</td>
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<td>Industrial park</td>
<td>Dummy = 1 if county has developed new or expanded existing park</td>
<td>0.38</td>
<td>0.48</td>
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<td><strong>Economic Structure (1990s)</strong></td>
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<td>% Manufacturing</td>
<td>Manufacturing Employment (%), 1990</td>
<td>14.62</td>
<td>10.21</td>
<td>REIS-BEA</td>
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<td>Median hh. income, 1989</td>
<td>Median household income (1000's), 1989</td>
<td>24.17</td>
<td>6.18</td>
<td>REIS-BEA</td>
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<td>% Federal government</td>
<td>Federal government employment (%), 1990</td>
<td>3.08</td>
<td>4.20</td>
<td>REIS-BEA</td>
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<tr>
<td>% State government</td>
<td>State government employment (%), 1990</td>
<td>10.24</td>
<td>3.26</td>
<td>REIS-BEA</td>
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<td>% Local government</td>
<td>Local government employment (%), 1990</td>
<td>14.45</td>
<td>5.41</td>
<td>REIS-BEA</td>
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<td>Demographic Attributes (1990s)</td>
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<td></td>
</tr>
<tr>
<td>% Children</td>
<td>Population under 18 years of age (%), 1990</td>
<td>26.80</td>
<td>3.32</td>
<td>US Census of Pop.</td>
</tr>
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<td>% Age 65+</td>
<td>Population 65 years or plus (%), 1990</td>
<td>14.98</td>
<td>4.45</td>
<td>US Census of Pop.</td>
</tr>
<tr>
<td>% Black</td>
<td>Black population (%), 1990</td>
<td>7.24</td>
<td>12.26</td>
<td>US Census of Pop.</td>
</tr>
<tr>
<td>% Latino</td>
<td>Latino population (%), 1990</td>
<td>4.35</td>
<td>10.19</td>
<td>US Census of Pop.</td>
</tr>
<tr>
<td>% College, 1990</td>
<td>Population 25+ years with a college degree or plus (%), 1990</td>
<td>13.56</td>
<td>6.33</td>
<td>US Census of Pop.</td>
</tr>
<tr>
<td>% Female-headed, 1990</td>
<td>Female-headed family households with children &lt;18 years (%), 1990</td>
<td>16.77</td>
<td>5.79</td>
<td>US Census of Pop.</td>
</tr>
<tr>
<td>Population Agglomeration a</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>County population, 2000</td>
<td>Log of county 2000 population</td>
<td>10.33</td>
<td>1.31</td>
<td>US Census of Pop.</td>
</tr>
<tr>
<td>MSA pop., 2000</td>
<td>Log of 2000 county population if metro county and zero otherwise</td>
<td>3.26</td>
<td>5.32</td>
<td>US Census of Pop.</td>
</tr>
<tr>
<td>Distance, nearest MSA</td>
<td>Distance (in km) to the nearest MSA as defined in 2000</td>
<td>77.98</td>
<td>58.35</td>
<td>US Census of Pop.</td>
</tr>
<tr>
<td>Neighboring poverty</td>
<td>Percent of the eight contiguous counties with a 1997 poverty rate at least 20%</td>
<td>16.67</td>
<td>24.73</td>
<td>US Census of Pop.</td>
</tr>
<tr>
<td>Distance, large MSA</td>
<td>Incremental distance (km) to reach an MSA of at least 250000 people</td>
<td>57.78</td>
<td>107.60</td>
<td>US Census of Pop.</td>
</tr>
<tr>
<td>MSA dummy, 2000</td>
<td>1 if county in a metro area as defined in 1999–2000, zero otherwise</td>
<td>0.30</td>
<td>0.45</td>
<td>US Census Bureau</td>
</tr>
</tbody>
</table>

State fixed-effects included

Note. *All population agglomeration variables except metropolitan statistical area (MSA) dummy and county and MSA population were calculated using the user-written Stata command -nearstat- (Jeanty 2010)*
Our selection of variables for the analyses was guided by several concerns. Correlation between the residual and the explanatory variables creates endogeneity and omitted-variable bias. To address this concern, we include a broad array of demographic, geographic, economic, and policy controls, including state fixed effects. Using deep lags as control variables helps minimize endogeneity because they are more likely to be predetermined. Hence, we lag most of the control variables an additional ten years, employing data from 1990—that is, we are trying to measure persistent economic and demographic effects without introducing simultaneous relationships with poverty and other economic outcomes. There are some exceptions with variables that are not as deeply lagged. For example, in the poverty model, we include more contemporaneous 2001–2007 job growth, but we model it as endogenous using instrumental variables (IV). We also lag the county capacity and policy variables to 2001, which also mitigates endogeneity with economic outcomes in 2007 and it provides time for policies to work.

The lagged capacity and policy variables still could be correlated with the residuals (conditional on the other control variables) if especially persistent economic conditions influence initial policy/capacity, and in turn, influence subsequent economic outcomes (e.g., poor counties may be more likely to receive state and federal aid and to have high poverty rates). To minimize this possible correlation, we include a host of economic controls including lagged median household income, lagged job growth, and conditions in surrounding counties. Finally, as described below, we also directly consider endogeneity of some of the other capacity variables such as county government employment. Hence, endogeneity bias due to economic conditions should be greatly mitigated. Nonetheless, we caution that omitted variables could still affect the results.

**Dependent variables.** Four measures are employed: 2001–2007 job growth calculated from REIS; and from SAIPE, the 2007 individual poverty rate, the poverty rate for children under age eighteen, and 2007 median household income. The 2001–2007 time points correspond roughly to the business cycle peaks according to official dates from the National Bureau of Economic Research. Thus, the effects of the Great Recession do not confound our results.

**County government capacity and policy.** Capacity is measured by size, administrative and fiscal resources, and decentralization. We describe some possible issues of endogeneity below. Drawing on the poverty and place literature’s progovernment view, we hypothesize that these variables are positively linked to county well-being, unless noted otherwise. Size is measured by the log of full-time employees; administrative capacity is measured by the presence of an *economic development professional* and a *grant writer* on staff. The latter two variables are from our 2001 county government survey. Regarding the county size measure, note that with controls for total county population and economic conditions, this variable captures capacity effects aside from agglomeration and economic effects.
Data from the 1997 Census of Governments are used to construct a fiscal capacity measure, *general revenue* per capita (Reese and Rosenfeld 2002). While it should be associated with lower poverty, it may depress job growth if tax rates are high. Decentralization processes are measured by fiscal autonomy, expressed as the *ratio of state/federal to own-source revenue* and by the *number of general purpose governments* in the county. From the “progovernment” view, fiscal autonomy and fewer internal governments should be related to better well-being.

County economic development *policy* variables are constructed from our 2001 survey data. As discussed, analysts distinguish among three types of economic development activities: traditional business attraction, new-wave development programs, and workforce support programs. We create a count index for each type of activity using items that indicate the number of policy tools provided by the county government over the past five years. The index of *traditional economic development activities* is composed of seven business attraction policy tools (e.g., tax abatements, tax increment financing of infrastructure, and other forms of external business recruitment). *New-wave activities* (Reese and Rosenfeld 2002) are measured with a count index of eight policy tools aimed at local entrepreneurship and small businesses (e.g., business incubators, local business retention, and expansion programs). Workforce development policy (*workforce support*) includes ten support services (e.g., county programs for low-income workers, child care services, and transportation, health, housing, and nutrition programs).

In addition to the sets of policies above, we employ three measures of economic development activity by county governments. A count index of *business incentives* is composed of thirteen specialized incentives (e.g., free land or land-write downs, industrial revenue bonds, infrastructure improvements, loans, and utility rate reductions). We also include the proportion of the county economic development budget devoted to *small business development* and whether the county government has established an *industrial park*. Finally, we considered using change measures of the policy/capacity variables over the 2001–2007 time span. However, this reduces the sample size by one-third since some counties responding to the 2001 survey did not respond to the 2007 survey; moreover, 2001–2007 changes in policy/capacity are more likely to be endogenously determined with 2007 economic outcomes.

**Control variables.** As discussed, we use control variables lagged in time, where relevant, to minimize endogeneity. Persistent economic structure is first measured by past job 1990–1999 job growth of the county and its contiguous counties, and by past median household income (1989 value from the 1990 Census). In addition, we included the 1990 proportion of county employment in manufacturing and in state, federal, and all local government. As employment growth is controlled in all models, we added the latter four sectoral employment shares due to their specific relevance to the study. Past government employment allows us to control for the baseline mix of different types of government operating in a county. In the private sector, manufacturing-intensive counties are more vulnerable to deindustrialization processes (Partridge and Rickman 2006).
Demographic attributes of race/ethnicity, age, education, and family structure are included. We use a detailed mix of population agglomeration variables (Partridge and Rickman 2006, 2008). The model controls for metropolitan area status, county population, population of actual of nearest/actual metropolitan area, distance to the nearest metropolitan area (or to the metropolitan centroid if in a metropolitan area), and distance to a metropolitan area over 250,000 if the nearest/actual metropolitan area is under 250,000 population. Hence, we account for economic outcomes unrelated to policy but related to whether the county was urban or in a metropolitan area. For example, past research finds that poverty rates are positively associated with distance from metropolitan areas (all else equal).9 Finally, we also control for whether the county is located in a poverty pocket measured by the percentage of contiguous counties with poverty rates over 20 percent (Crandall and Weber 2004).

Because counties are nested in states, we include a set of state fixed effects to account for differing state practices regarding counties as well as to account for state policies that affect economic outcomes. For example, state fixed effects would account for state welfare policy that has a common influence across all the counties within a state. With state fixed effects included, our regression coefficients for the various explanatory variables are derived from their within-state variation.

**Empirical Models and Estimation Procedures**

With the above variables, we estimate the following empirical models:

\[
y_1 = X_1 \beta_1 + \eta_1,
\]

\[
y_j = \gamma_j y_1 + X_2 \beta_j + \eta_j, \text{ for } j = 2, 3, 4
\]

where \( y_1 \) denotes employment growth from 2001 to 2007, \( y_2 \) the overall poverty rate, \( y_3 \) the child poverty rate, \( y_4 \) 2007 median household income, \( X_1 \) is a matrix of explanatory variables in the employment growth equation, \( X_2 \) is a matrix of explanatory variables in equation \( j \) (\( j = 2, 3, 4 \)), \( \gamma_j \) is the parameter associated with employment growth in equation \( j \), and \( \beta_i \) and \( \eta_i \) are a vector of parameters for the predetermined variables and a vector of disturbance terms in equation \( i \) (\( i = 1, 2, 3, 4 \)). Exclusion restrictions are imposed on the model in equations (1) and (2) so that only \( X_1 \) includes the variable employment growth from 1990 to 1999, while only \( X_2 \) contains the variable measuring neighboring employment growth from 1990 to 1999.

Our econometric identification strategy is designed to address problems of endogeneity that plague policy impact studies. Equation (2) seeks to explain poverty or income outcomes as a function of employment growth and other variables. Recent employment growth, however, might be endogenous in these models. We account for the endogenous component of employment growth using an exogenous instrumental variable, the industry mix growth rate, measured as the county’s 2000 industry employment shares multiplied by the corresponding national industry growth rates over the 1996–2006 period (Partridge and Rickman 2008). The \( F \) statistic
regarding the statistical significance of the industry mix variable was over 10, suggesting it is a strong instrument. Using the Hausman–Wu test, the null hypothesis of exogeneity is rejected at the 1 percent significance level. Thus, we treat contemporaneous employment growth as endogenous.

We also examined endogeneity of size of county government to job growth, poverty, and income since counties with low economic well-being might need more government services. To carry out an endogeneity test, we instrument the size of county government variable with the 1972 share of local government jobs that are in county government. However, while the $F$ tests of the first-stage models suggested that the instrument was strong, the Hausman–Wu endogeneity test results fail to reject the null hypothesis that the size of county government variable can be treated as exogenous in all equations (at even the 10 percent level) except for the child poverty equation. For consistency, we will treat the size of county government as exogenous in all equations, but we will point out any differences for IV estimation in the child poverty model.

Our model estimation procedure takes into account potential bias and efficiency loss due to spatial effects. For example, the disturbance terms $\eta_i$ may be spatially correlated in the presence of omitted unobservable variables that are themselves spatially correlated (Rey and Montouri 1999). To account for spatial effects, the disturbance terms $\eta_i$ are assumed to follow a spatial autoregressive process:

$$\eta_i = \lambda_i W \eta_i + \epsilon_i, \quad i = 1, 2, 3, 4$$

where, in equation $i$, $\lambda_i$ is the spatial autocorrelation coefficient to be estimated, $W$ is a $N \times N$ queen contiguity spatial weights matrix (queen contiguity produced higher Moran’s $I$ statistics than other contiguity criteria), $\epsilon_i$ an $n \times 1$ vector of innovations with mean zero and variance $\sigma_i^2$.

To estimate the model, we use the stepwise generalized spatial two-stage least squares (2SLS) estimator developed by Kelejian and Prucha (2004) as employed by Jeanty, Partridge, and Irwin (2010). Let each $i$th equation be expressed as follows:

$$y_i = Z_i \delta_i + \eta_i,$$  (4)

with $Z_i = (X_1)$ and the corresponding vector of parameter estimates $\delta_i = (\beta_i')$, for $i = 1$ and $Z_i = (y_1, X_2)$ and the corresponding parameter estimates $\delta_i = (\gamma_i', \beta_i')$, for $i = 2, 3, 4$. The first step consists in estimating the parameter vector $\delta_i$ by ordinary least squares (OLS) in the employment equation containing only predetermined variables and by 2SLS in the remaining three equations to account for endogeneity of job growth.

In the second step, the spatial autoregressive parameter $\lambda_i$ and the variance $\sigma_i^2$ are estimated by the generalized moments estimator based on the OLS and 2SLS disturbances. In the third step, using the estimate for $\lambda_i$, a spatial Cochran–Orcutt transformation is performed on equation (4) to account for spatial autocorrelation in the disturbances $\eta_i$: 
\[ y'_{i}(\lambda_{i}) = Z'_{i}(\lambda_{i})\delta_{i} + \varepsilon_{i}, \]  

where \( y'_{i}(\lambda_{i}) = y_{i} - \lambda_{i}W_{y_{i}}, \) 

\[ Z'_{i}(\lambda_{i}) = Z_{i} - \lambda_{i}W_{Z_{i}}, \quad i = 1, 2, 3, 4. \]

Finally, using the transformed model in equation (5), the employment growth equation is estimated by OLS, whereas the poverty and income equations are estimated by the generalized spatial 2SLS using the industry mix variable as instrument for employment growth.\(^{11}\)

For each dependent variable, we first analyzed base models following the statistical procedures above. Here, we used only the economic structure, demographic, and agglomeration variables and state-level fixed effects. We then added separately each set of county variables, capacity, followed by policies. For all the dependent variables, the base-model independent variable coefficients remain stable in sign and significance with the addition of the full set of county government variables (not shown). Further, we examined: (1) models estimating the effects of county policy first, then adding capacity variables and (2) models estimating the effects of capacity first, then adding policy. Here, too, the coefficients for county policy and county capacity, respectively, remain stable in sign and significance, indicating that capacity and policy operate independently in influencing county well-being. These different variants of models also illustrate that multicollinearity or omitted variable bias is not affecting the results reported. Since the results remain stable across models, we report the complete models.\(^{12}\) It should also be noted that addition of state fixed effects should provide a conservative test of the effects of county governments and may even overcontrol for some processes. For example, since welfare devolution to counties varies by state, controlling for state effects reduces the range of county response variables that might influence poverty.\(^{13}\)

**Job Growth 2001–2007**

The model for job growth is shown in column 1 of Table 2. After controlling for a host of economic and other variables, the county government capacity variables show that job growth is associated with more centralized (less fragmented by many local governments) and autonomous (less dependence on state and federal revenue) governments. These findings support the hypothesis derived from the poverty-and-place literature that stronger, independent local governments have beneficial effects. By contrast, results for the policy variables suggest economic development policy is ineffective in practice. Job growth is statistically unrelated to the number of business attraction programs, industrial incentives, and the presence of an industrial park, suggesting conventional policies offer no advantages. The share of county economic development budget devoted to small business also has no statistical link to job growth. Counties providing fewer workforce services had greater job growth, a
Table 2. Results from Ordinary Least Squares (OLS) and Generalized Spatial Two-Stage Least Squares (2SLS) with State and Metro Dummies

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Size</td>
<td>-0.768 (0.669)</td>
<td>-0.211 (0.189)</td>
<td>0.184 (0.272)</td>
<td>0.022 (0.234)</td>
</tr>
<tr>
<td>Grant Writer</td>
<td>0.571 (0.508)</td>
<td>0.180 (0.154)</td>
<td>0.044 (0.218)</td>
<td>0.193 (0.195)</td>
</tr>
<tr>
<td>Development staff</td>
<td>-0.613 (0.569)</td>
<td>-0.160 (0.169)</td>
<td>-0.377 (0.239)</td>
<td>0.203 (0.223)</td>
</tr>
<tr>
<td>Number of governments, 1997</td>
<td>-0.355*** (0.152)</td>
<td>-0.007 (0.063)</td>
<td>0.040 (0.099)</td>
<td>-0.121 (0.075)</td>
</tr>
<tr>
<td>Revenue per capita, 1997</td>
<td>-0.696 (0.962)</td>
<td>-0.239 (0.242)</td>
<td>-0.475 (0.359)</td>
<td>0.157 (0.328)</td>
</tr>
<tr>
<td>Federal + state/own county revenue, 1997</td>
<td>-4.691* (2.544)</td>
<td>1.945*** (0.758)</td>
<td>2.885*** (1.091)</td>
<td>-0.707 (0.920)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>County Government Policies</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional activities</td>
<td>-0.006 (0.147)</td>
<td>-0.046 (0.041)</td>
<td>-0.054 (0.058)</td>
<td>0.005 (0.050)</td>
</tr>
<tr>
<td>New-wave activities</td>
<td>0.245 (0.178)</td>
<td>0.123*** (0.053)</td>
<td>0.179*** (0.067)</td>
<td>-0.191*** (0.066)</td>
</tr>
<tr>
<td>Workforce support</td>
<td>-0.187*** (0.089)</td>
<td>0.000 (0.030)</td>
<td>0.023 (0.041)</td>
<td>0.090** (0.035)</td>
</tr>
<tr>
<td>Business incentives</td>
<td>-0.175 (0.125)</td>
<td>-0.056 (0.039)</td>
<td>-0.078 (0.051)</td>
<td>0.052 (0.048)</td>
</tr>
<tr>
<td>Small business</td>
<td>0.040 (0.259)</td>
<td>0.022 (0.076)</td>
<td>0.050 (0.112)</td>
<td>-0.023 (0.093)</td>
</tr>
<tr>
<td>Industrial Park</td>
<td>0.758 (0.562)</td>
<td>-0.335*** (0.151)</td>
<td>-0.321 (0.213)</td>
<td>-0.178 (0.216)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Economic Structure</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment growth, 1990–1999</td>
<td>0.085** (0.041)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employment growth, 2001–2007</td>
<td></td>
<td>-0.163*** (0.039)</td>
<td>-0.195*** (0.057)</td>
<td>0.256*** (0.043)</td>
</tr>
<tr>
<td>Neighboring employment growth, 1990–1999</td>
<td></td>
<td>-0.005 (0.009)</td>
<td>0.029** (0.012)</td>
<td>0.004 (0.010)</td>
</tr>
<tr>
<td>% Manufacturing, 1990</td>
<td>-0.217*** (0.035)</td>
<td>-0.008 (0.014)</td>
<td>-0.031 (0.019)</td>
<td>-0.012 (0.016)</td>
</tr>
<tr>
<td>Median hh. income, 1989</td>
<td>0.333*** (0.104)</td>
<td>-0.468*** (0.038)</td>
<td>-0.564*** (0.050)</td>
<td>1.348*** (0.042)</td>
</tr>
<tr>
<td>% Federal government, 1990</td>
<td>-0.025 (0.081)</td>
<td>0.019 (0.029)</td>
<td>0.061 (0.039)</td>
<td>0.048 (0.040)</td>
</tr>
<tr>
<td>% State government, 1990</td>
<td>0.038 (0.070)</td>
<td>0.148*** (0.033)</td>
<td>-0.005 (0.029)</td>
<td>-0.091*** (0.029)</td>
</tr>
<tr>
<td>% Local government, 1990</td>
<td>0.139 (0.116)</td>
<td>0.212*** (0.033)</td>
<td>0.173*** (0.045)</td>
<td>-0.004 (0.036)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Demographic Attributes</th>
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</tr>
</thead>
<tbody>
<tr>
<td>% Children, 1990</td>
<td>0.067 (0.174)</td>
<td>0.053 (0.056)</td>
<td>0.291*** (0.090)</td>
<td>0.046 (0.063)</td>
</tr>
</tbody>
</table>

(continued)
| % Age 65+, 1990 | -0.237* (0.125) | -0.193*** (0.041) | -0.006 (0.055) | 0.058 (0.046) |
| % Black, 1990 | -0.066 (0.056) | -0.015 (0.015) | -0.083*** (0.022) | 0.070*** (0.017) |
| % Latino, 1990 | -0.108** (0.047) | 0.053*** (0.015) | 0.054** (0.024) | -0.007 (0.018) |
| % College, 1990 | -0.088 (0.083) | 0.041 (0.030) | -0.028 (0.036) | 0.138*** (0.034) |
| % Female-headed, 1990 | -0.222*** (0.095) | 0.223*** (0.032) | 0.481*** (0.044) | -0.188*** (0.034) |

### Population Agglomeration

| County Population, 2000 | 1.069 (0.796) | 0.400* (0.222) | -0.240 (0.326) | -0.364 (0.276) |
| MSA population, 2000 | -0.922* (0.547) | 0.392*** (0.151) | 0.662*** (0.172) | -0.742*** (0.220) |
| Nearest MSA Population, 2000 | -0.216 (0.303) | 0.182** (0.086) | 0.451*** (0.129) | -0.132 (0.118) |
| Distance, nearest MSA | -0.004 (0.006) | 0.001 (0.002) | 0.003 (0.003) | -0.002 (0.002) |
| Neighboring poverty, 1997 | -0.006 (0.15) | 0.032*** (0.005) | 0.046*** (0.008) | -0.006 (0.005) |
| Distance, large MSA | -0.013*** (0.005) | -0.002 (0.001) | -0.002 (0.002) | -0.004*** (0.002) |
| MSA dummy, 2000 | 8.965 (6.428) | -2.470 (1.661) | -1.994 (1.512) | 6.489*** (2.447) |

### State fixed effects

- Yes
- Yes
- Yes

### Spatial error coefficient

- 0.103
- 0.109
- 0.200
- 0.092

### N

- 1,514
- 1,514
- 1,514
- 1,514

**Note:** Standard errors in parentheses.

*p < .10, ***p < .05, ****p < .01. See the text for more details of the estimation.
finding counter to the expectations of many of their advocates. As discussed earlier, prior analyses show capacity and policy operate independently in influencing growth. Our findings suggest that centralized, autonomous county governments are associated with more job growth and that their actual policies are secondary.

Relationships for the economic structure variables show that 2001–2007 job growth is negatively associated with past (1990) manufacturing employment and positively associated with past (1990–1999) county job growth and lagged median household income. The lagged shares of government employment do not significantly relate to 2001–2007 job growth. For the demographic variables, statistically significant relationships are in the expected directions: county job growth is inversely associated with larger elderly, ethnic (Latino), and female-headed populations. Job growth is also inversely associated with distance from large metropolitan statistical areas (MSAs) and with being located in a large metropolitan area (all else equal).

**Poverty, Total Population 2007**

Models of the share of the county population in poverty are shown in column 2, Table 2. Job growth over 2001–2007 is significantly related to lower 2007 poverty, illustrating the important link between local job creation and poverty reduction. Findings for the county government variables show that after controlling for economic conditions, poverty rates are inversely associated with counties’ fiscal autonomy (i.e., less dependence on external federal and state funds). For policy variables, the presence of an industrial park is also related to less poverty. Both findings lend support to the prolocal government position. By contrast, other variables have little association with poverty. One exception is poverty rates are inversely associated with the provision of new-wave programs in 2001 ($p < .10$). This finding suggests localities fare better in poverty rates by not overinvesting in these programs which, net of any job creation effects, do not improve economic well-being.

Net of job growth and household income (associated with lower poverty), the lagged 1990 state and local government employment shares are both linked to higher 2007 poverty. This may relate to their effects on overall income. For example, previous studies find greater dependence on public (relative to private) employment is associated with lower county income, and within the public sector, state/local employment tends to have a stronger negative effect on income relative to federal employment (Lobao and Hooks 2003).

For demographic variables, poverty rates are positively linked to the 1990 shares of Latino and female-headed populations. Poverty is statistically unrelated to the college graduate population share, which may reflect the fact that college graduates are so infrequently in poverty that a higher college graduate share has little marginal effect. For agglomeration/geography variables, poverty is positively related to county population, own/nearest metropolitan area population, and to neighboring counties’ poverty rates. Generally, the agglomeration/geography variables tend to produce the most statistically significant relationships. Of course, these factors are
after controlling for any indirect effects through job growth and median household income.

**Child Poverty, 2007**

Models for the proportion of children under age eighteen in poverty are shown in column 3. Job growth over 2001–2007 is negatively related to child poverty, highlighting the importance of local employment opportunities to child well-being. Results for capacity variables support the view of the benefits of county governments being autonomous from state/federal government. Note that this finding is after controlling for initial economic conditions that may influence federal and state transfers to the county. Policy variables continue to have little statistical relationship to poverty except for new-wave development policies which are related to higher child poverty.

With regard to economic structure, child poverty rates are inversely associated with job growth and with 1990 median household income. Results for local government employment, the Latino population share, neighbors’ poverty levels, and own/nearest metropolitan area population are similar to those found for the total populations’ poverty rate. A higher 1990 black population share is associated with lower child poverty after accounting for other demographic and economic features.

As indicated above, we performed a sensitivity analysis and reestimated the model treating the size of county government as endogenous. The magnitude of the coefficients was virtually identical and the relationships above for county autonomy and new-wave policy remained statistically significant. In this sensitivity run, the following four variables also became statistically significant (coefficient sign): having an economic development professional (−); size of county government (+); revenues per capita (−); and the share of employment by the federal government (+). Generally, these findings further support our conclusions about autonomous county governments.

**Median Household Income, 2007**

Models for median household income are shown in column 4. Contemporaneous job growth is statistically significant and positively related to median income. Other relationships for most demographic and agglomeration variables are similar to those found in the poverty models.

None of the county capacity variables are statistically associated with median income. Programs strengthening workforce capacity are related to higher median income, providing evidence of the benefits of human capital-oriented development approaches.

**Conclusions**

This study addresses a missing link in the large literature on poverty across places in the United States: the degree to which county governments are related to economic disparities. To conceptually evaluate counties’ performance, we contrasted two
interdisciplinary social science positions about local governments. The first position, derived from the poverty and place literature, suggests county governments can improve community economic well-being. We extend this position further by asking whether it is more important to have strong institutional capacity or specific policies in place to promote economic development. The second position posits that local governments have at best a negligible relationship with community well-being.

To empirically address this debate, we focus on counties’ institutional capacity and economic development policy and their relationship to key economic indicators, job growth, total and child poverty, and household income. Data are from a unique set of primary and secondary sources on county governments across the United States for the post-2000 period, allowing for the examination of previously unexplored capacity and policy variables. We employ models that control for detailed determinants of poverty, spatial influences, the endogenous effects of job growth, and state-level effects.

The findings indicate modestly greater support for the first position: county governments can influence job growth and poverty. But these results pertain mainly to government capacity variables, not to the specific county policies. Counties with greater institutional capacity, as indicated by centralization or lower fragmentation and greater fiscal autonomy tend to have more job growth and/or lower poverty rates. These findings contrast with some views positing the ineffectiveness of local government.

In contrast to the capacity variables, the policy variables have very limited and, in some cases, unanticipated effects on the outcome variables. Conventional business attraction policies have no statistical effect on well-being, lending support to critics of these programs. Other policies appear to work in opposing manner, such as “new-wave” economic development programs, which net of job growth, are associated with higher poverty and lower median income. Likewise, workforce support programs are related to lower job growth, although net of this, to higher household income. These findings provide some support for skepticism about local governments’ ability to analyze accurately the costs and benefits of economic development programs. Such programs also may be relatively ineffective because their ubiquity now erases the advantage they once gave communities before they were so widespread. The findings illustrate the possibility that social scientists have focused far too much on particular government policies and not enough on the overall structure and competence of local governments.

Our study has several implications for policy. First, the findings that more centralized, autonomous counties have better outcomes, suggest that greater consolidation among jurisdictions operating within counties could increase government efficiency. Government consolidation has long been advocated in the case of rural counties (Hammond and Tosun 2011) and our study suggests potential benefits for urban counties as well.

Second, this study should add caution to the wholesale adoption of economic development programs. If the goal is to create jobs, these programs appear
ineffective overall. If the goal is to increase household income, then only programs targeted directly to the local workforce have some beneficial effect that occurs net of a drag on job growth. By contrast, programs diverting resources to local entrepreneurs both fail to create growth and take away from poverty reduction efforts. For policy makers, these findings should demonstrate the trade-offs and limitations of economic development programs that must be reconciled if these programs are deemed desirable in the first place.

A final policy implication is that county governments across the United States might be better strengthened with regard to institutional capacity. Counties play important roles in the Federalist system and over time have gained greater autonomy from state government (Benton 2002). Still, the US population is stratified by county systems ranging from those providing high-quality, equitable, efficient government to those offering minimalist, low-capacity government. The top 10 percent of counties in our sample that perform most favorably across the four indicators of job growth, adult and child poverty, and household income are more centralized and have greater fiscal autonomy. Our study suggests that strengthening counties’ institutional capacity may improve public well-being and reduce subnational inequality.

To our knowledge, this is the first study to investigate the relationship between county government capacity and policy and economic disparities across the United States. In analyzing this relationship, we sought to sort out the effects of historical conditions from the effects of current policies through the use of lagged variables. We instrumented for job growth to address concerns about endogeneity and we accounted for spatial autocorrelation along with state-level fixed effects. Net of our analytical procedures, the effects of some county government variables persist. Two caveats, however, suggest the need for greater future research about the role of county government. First, our conclusions apply only to the time period studied, 2001–2007. Second, we caution that only a few of the county government variables produce consistent results. Future researchers might test for a greater range of variables that could help evaluate the two sides of the debate we have outlined here about the effectiveness of local government in poverty alleviation.

Finally, the importance of our study goes beyond the place and poverty literature. Counties are widely used in studies of demographic, political, and economic processes, but invariably treated only as population containers. Our findings demonstrate that county governments can have a measurable effect on economic well-being. Counties are important loci of government capacity and our findings suggest they play a more important role in economic growth and distribution than previously recognized by researchers.

Notes
1. A major shift occurred in 1996 when the nation’s poverty program, Temporary Assistance to Needy Families was devolved to the states. The most populous states devolved direct administration of welfare to counties, and in these and other states, counties took on new responsibilities for workforce services.
2. Research on substate governments typically treats counties and municipalities as similar in providing policies, programs, and functions (Benton 2002). While we include control variables for other governments within counties, our empirical interest is county-level government.

3. Place-based policy is often contrasted with people-based policy focusing on individuals or families such as education and income assistance programs. People-based policy allows more flexibility in migration decisions, facilitating national labor market adjustments. But it presents hazards for communities due to potential out migration of educated and skilled workers. While researchers conceptually distinguish between the two types of policies, some argue that they are not mutually exclusive in community impacts (Spencer 2004).

4. The response rate is approximately twice as high as that generated by ICMA surveys, the data set most commonly used in published studies on local policies. Counties responding to the survey do not differ significantly from other (nonresponding) counties on economic, agglomeration, and demographic variables, which is expected since the response rate is high. We also regressed each policy variable on county officials’ education, age, gender, employment length, elected/appointed status, and variables measuring officials’ own policy stance (e.g., views of county spending). Officials’ attributes were not statistically significant for any of the policy variables.

5. This is primarily due to REIS data withheld to avoid disclosure of information about local employers. We could have incorporated estimates of industry-level employment from County Business Patterns (CBP). CBP provides a midpoint range estimate for locations with a limited number of employers. We decided against that, however, when weighing the trade-off between sample size and variable measurement error that could introduce measurement error bias.

6. A recent study using this same data set found no significant relationship between past poverty rates and poverty rate change with subsequent county policies and capacity indicators (Lobao and Kraybill 2009). The authors note that these findings are consistent with some other studies that find poverty per se (net of other conditions) does not necessarily reduce capacity nor increase the use of business attraction policies.

7. The Census Bureau produces SAIPE poverty data with a statistical model, which may be subject to more error than the traditional decennial long-form Census estimates used up through 2000. However, the coefficient of correlation between the 1999 SAIPE county poverty rate estimates and the 1999 poverty rates from Census 2000 is 0.940 and that between the 1999 SAIPE median household income and the 2000 Census estimate is 0.991 illustrating that any measurement error is rather small. Of course, measurement error in the dependent variable does not bias the regression coefficient estimates but it does increase the standard error of the residual, reducing the $t$ statistics.

8. Each item has a response category of (1) county provided, (0) county did not provide the policy tool. To ensure that item components of each index are measuring the same policy domain, we used confirmatory factor analysis to test that each set of items loaded on a single factor indicating they can be combined into a reliable index.

9. We considered splitting the sample between metro and nonmetro counties, but initial regressions did not uncover any clear patterns in terms of capacity/policy variables
(though there are differences in some of the control variable results). For that reason and given our focus on county governments across the nation, we selected to report the results for our full sample of counties.

10. Diagnostic tests for spatial autocorrelation with and without endogenous regressors (Anselin 2001; Anselin and Kelejian 1997) confirm that the disturbances are spatially correlated.

11. Because of the block recursive nature of the model in equations (1) and (2), a limited information approach as opposed to a system one is more robust (Wooldridge 2002).

12. The complete set of regression results is available directly from the authors upon request.

13. The empirical results are shown in Table 2. At the bottom of the table are the estimated spatial autocorrelation coefficients, one for each equation. Assuming an approximate standard normal distribution, the $z$ statistics associated with the estimated spatial autocorrelation coefficients are 3.72, 3.52, 6.91, and 3.10, meaning that the null hypothesis of no spatial autocorrelation is rejected at any conventional significance level. The calculation of the asymptotic variance of the spatial autocorrelation coefficients follows Kelejian and Prucha (2005).

14. A referee pointed out that contemporaneous college enrollments may also be positively linked to measured poverty rates. As our models include past income-related conditions of county residents, we leave this interesting question to future research that could explore the specific sources of measured poverty rates more in depth.

References


