ABSTRACT Building from a framework that incorporates ideas from the civil society perspective into market-based sociological models of economic growth, this article examines the effects of three measures of civic engagement on measure of economic growth in Appalachian counties during the 1990–1995 period. The analysis shows that net of other market competition-based measures, civic engagement does have a net positive impact on economic growth (increases in private non-farm employment, private establishment, per capita income, earnings, etc.). The three measures of civic engagement are (1) percent of population in civically engaged denominations (1990), (2) number of national associations per capita (1990), (3) and number of third places per capita (1990). All three measures have significant positive effects in one or more models. Percent in civically engaged denominations has the most consistent effects. Implications are discussed.

Introduction

Over the last ten years, a new line of research in the sociology of economic development has emerged, which emphasizes civic engagement as an economic development tool at both the county and place levels (see Irwin, Tolbert, and Lyson 1999; Irwin et al. 2004; Lyson and Tolbert 1996, Tolbert, Lyson, and Irwin 1998; Tolbert et al. 2002). Building from a sustainable development paradigm, this civil society perspective is offered as an alternative to traditional market competition-based sociological models of economic growth (see review below). In developing an alternative paradigm, however, the civic

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society literature has largely neglected the concept of economic growth (increases in jobs, earning, and income). When the existing civic welfare literature discusses growth, it is typically in negative terms (Lyson and Tolbert 2003).

We believe that models of economic change over time are incomplete without the consideration of economic growth. Thus, this article tests as to what extent civic engagement measures lead to economic growth in Appalachian counties during the 1990s, with a model that includes both measures from the civil society perspective and from the traditional market competition-based models. Doing so develops an alternative conceptual model to examine the effects of civic engagement measures from the civil society perspective on employment and earnings growth in Appalachia in the 1990s.

This model is tested in the official 399 counties of Appalachia because it provides a unique case study.1 During the time period in question, there were over 20 million people living in Appalachia. The region comprises a good representation of old rustbelt communities that lost jobs in the 1970s and 1980s (Ohio, Pennsylvania, Northern West Virginia) and Sunbelt communities (Tennessee, North Carolina, North Georgia, North Mississippi, and North Alabama), which gained many of those jobs. Therefore, the analysis is grounded in the heart of a region that simultaneously benefited and suffered from deindustrialization. Also, the civil society perspective is primarily a rural, small-town theory (Lyson and Tolbert 2003). The rural nature of Appalachia makes for an appropriate case study in which to contrast the effects of the civil society perspective against measures of concepts important to market competition theories.

The article begins with an overview of existing sociological research and theory on economic development that generally arises from the social ecology, political economy, and labor market perspectives. It then summarizes the recent development of a civil society/civic welfare perspective, which proposes an alternative to development models driven by global capitalism. The discussion of economic growth and civic welfare is followed with a proposal for a new model that, despite their seeming opposition, combines the civic welfare and economic growth perspectives into a unified model of managed growth. Finally, following a discussion of the unique qualities of Appalachia, findings are presented as well as their implications and avenues for future research.

Three Sociological Perspectives on Economic Growth

Sociological analyses of local and regional developments have been grounded primarily in modernization approaches, in which local economic development is based on the competitive position of the local/regional economies. Three of the predominant sociological theories of local competitiveness are social ecology (i.e., human ecology), political economy (also referred to as the new urban/rural sociology), and labor market theories. Each of these perspectives has identified important characteristics of local economies that make them more or less competitive in regional, national, and global markets. From the structural social ecology school, factors such as the competitive advantages of natural resources and transportation and communication infrastructure, dependence on extractive industries, and access to agglomeration economies are important local characteristics that
CIVIL SOCIETY AND ECONOMIC GROWTH IN APPALACHIA


On the other end of the continuum, the political economy perspective emphasizes the importance of the agency of local elites for bringing growth to a region (Gottdiener 1994; Hooks and Getz 1998; Lobao and Hooks 2003; Smith 1995). The ability to attract government-subsidized development (defense contracts, military bases, government infrastructure projects, etc.) and create a pro-business climate (low local taxes, anti-union sentiment, etc.) are core factors that explain why some places attract more jobs than others. Perhaps Feagin’s (1988) work on the development of Houston, TX, is the exemplar of this approach.

Juxtaposed between social ecology and political economy perspectives, labor market theory proposes that local growth is a function of structural conditions in local labor markets, including local levels of human capital, wage structures, and demography (Cotter 2002; Lee, Harvey, and Neustrom 2002; Lichter and McLaughlin 1995; Nord, Luloff, and Jensen 1995). Places with labor markets conducive to growth (educated young workers, sunrise industries, etc.) will have a greater competitive advantage.

An established body of research in sociology has used what has been referred to as an “integrated model,” in which measures from all three perspectives are used to predict economic growth outcomes in a variety of time and place contexts (see for example Beck 2001; Hooks 1994, Kasarda and Irwin 1991; Lobao and Hooks 2003; Mencken 2004). What these studies often show is that the relative explanatory power of a given perspective (e.g., social ecology) depends on the time and place contexts of the research question (see Hooks 1994). However, whether it is the advantages of the built environment, well-connected politicians, or a high-quality local labor force, what these often disparate approaches have in common is an emphasis on local economic growth as a function of competition and market processes within the context of an expanding global economy.

The Civil Society/Civic Welfare Perspective

In a post-Fordist economy, a modern version of the civil society perspective emerges as an alternative to local development driven by market forces of global capitalism. The modern version of the civil society perspective builds from historical work on civil society by Goldschmidt (1947) and from modern approaches to civil society, particularly the work of Etzioni (1996) and Putnam (1993, 2000). The civil society perspective is grounded in four key assumptions (see for review Lyson and Tolbert 2003): (1) Small-to-medium-sized economic activities are preferable to large-scale, multi-national activities, (2) people and businesses are bound to local places through embeddedness in systems of institutional connections and organizational networks, (3) the local place is a source of social cohesion and personal identity, and (4) places that develop and maintain local production systems have more control over local economic growth and the long-term well-being of local communities.
The perspective proposes that there is an interconnection between civic engagement, or local institutions and organizations (mediating structures) that orient to the public good, such as businesses, churches, and voluntary associations (see Couto and Guthrie 1999; Putnam 1993; Tolbert et al. 2002; Tolbert, Lyson, and Irwin 1998), an orientation toward local capitalism (local systems of production), and civic welfare. According to Couto and Guthrie (1999: 72), “Community-based mediating structures ... sustain the hope and vision of human worth that exceeds market or labor value and the bonds of community that exceed market relations of exchange.” The presence of civic organizations with objective missions toward enhancing the public good (e.g., Lions Club, Young Men’s Christian Association, etc.) provides increased opportunities for interaction, networking, and consensus-building in a community (Couto and Guthrie 1999, Putnam 1993, 2000).

In a similar pattern, churches and faith-based organizations serve as sources of social capital (Ammerman 1997, Foley, McCarthy, and Chaves 2001; Greeley 1997; Iannacone 1998; Stolle 2001), and may help form connections between different social groups (Wuthnow 1998, 2002). Sociologists of religion have long noted the importance of networks in the transmission of religious messages, because people tend to join religious groups for the purpose of developing relationships rather than attraction to a specific doctrine (Stark and Bainbridge 1985; Stark and Finke 2000). Social networks fostered by church membership may bridge gaps between the church and other social groups, leading to higher levels of civic engagement (Greeley 1997; Wuthnow 1998, 2002).

In short, voluntary associations and church groups are mediating structures that create dense horizontal networks that help community members solve collective problems (Couto and Guthrie 1999: 51). Furthermore, Tolbert, Lyson, and Irwin (1998) argue that public places that promote interaction among citizens (e.g., coffee houses, grocery stores, barber shops, etc.)

3

enhance the sense of connectedness of the community, and help create a better sense of horizontal and vertical integrations. Communities with more of these “third places” have an advantage of forming the interconnectedness among citizens that is necessary to form a local culture of civic welfare (Lyson, Torres, and Welsh 2001; Tolbert et al. 2002).

The nature of local capitalism creates an “attachment to place.” Small business owners and managers are often leaders and active members of local civic organizations. This embeddedness connects and orients these local decision makers to local social problems and economic issues. Economic decisions with local impacts are not only made entirely for the financial self-interest of the actor, but also for the general welfare of the community in mind (Couto and Guthrie 1999, Lyson and Tolbert 2003).

This line of civil society research shows that these three measures of civic engagement have positive net effects on local socio-economic well-being. Whether at the county or the place level, communities with higher levels of civic engagement (more civic organizations, third places, civically engaged churches, etc.) consistently have lower levels of poverty, lower levels of income inequality, higher median family incomes, fewer crimes, and better indicators of public health (Lyson, Torres, and Welsh 2001; Tolbert, Lyson, and Irwin 1998; Tolbert et al. 2002).
Integrating Civic Welfare and Economic Growth

While we find this line of research in the civil society informative, two key omissions are troubling: the lack of a treatment of potential endogenous relationship issues, and the lack of discussion of economic growth. This analysis attempts to address the second issue with a case study of Appalachia.

The concept of growth is relatively absent from the civil society literature, except in places where it is treated as somewhat of an anathema (i.e., that linked to global, multinational corporation capitalism) (Lyson and Tolbert 2003). The conceptual model presented by Tolbert et al. (2002: 96) is one in which civic engagement and local capitalism orientation have simultaneous and independent effects on local socio-economic well-being (see Figure 1).

One could interpret the civil society model as proposing that growth in employment, earnings, and income are not necessary for socio-economic well-being. A carefully managed community could provide for sustained levels of well-being without new sources of jobs or income. However, research on regional differences in uneven development cited by the civil society literature indicates that those local economies that have been in a relative steady state for the last decade, including the coal communities in Appalachia, are those that have the lowest levels of well-being (i.e., high poverty, inequality) (see Billings and Blee 2000; Duncan 1999; Latimer and Mencken 2003). Our reading of the civil society literature reveals that there is a latent emphasis on local economic growth, as it is manifested through sustainable development, or growth generated and managed by social processes that maximize the social welfare of the local communities, or what we refer to as “managed growth.” It is proposed that the relationship between civic engagement and socio-economic well-being may also be indirect through its effects on the type of economic growth that it creates (see Figure 2).

The civil society perspective provides how civic engagement leads to higher levels of socio-economic well-being (see earlier discussion), but what is the connection between civic engagement and employment and earnings growth? First, civic engagement can lead to local employment and earnings growth because it can make one community more competitive, relative to another community. High levels of civic engagement lead to strong

![Figure 1. Conceptual Diagram of the Civic Welfare Perspective. Source: Tolbert et al. 2002.](image-url)
Communities—places with well-financed local governments, better schools, and community services (Dougherty, Klase, and Song 1999; Johnson et al. 1995; Warner 1999). Strong communities attract private capital investments at higher rates because places that are doing well have greater potential to maximize returns on private investments, to attract both reinvestments and new capital, and to create more employment opportunities (Seitz 2000). However, the literature on civic society is inconsistent with the proposition that civic engagement leads to more jobs and more competitive local economies. It is much more consistent with the idea that civic engagement leads to a local culture of civic welfare in which growth is managed in such a way as to maximize community welfare (managed growth), instead of the financial returns for local decision makers.

The second reason is the interconnection between civic engagement, local capitalism, information flow, and access to resources. Local economic decision-making processes can often be riddled with strife and conflict, pitting different community factions on different sides of an issue. Paxton (1999) argues that information flows more smoothly in communities where the members are better connected. This ease of information flow allows for consensus to be reached on critical issues. Furthermore, Paxton (1999: 103) argues that community interconnectedness “... causes an individual to develop an ‘enlightened self-interest,’ which moves beyond individual self interest to a consideration of the public good, the promotion of a common identity, and a sense of shared responsibility.” This serves to negate extremist positions on issues and focus individuals on the greater good. Such conditions are more conducive to garnering consensus on controversial actions regarding local economic growth, e.g., when to extend tax credits to attract new jobs, or when to mobilize to block a new employer from moving into the community. The types of trust and reciprocity embedded in these relationships are important to recruit the types of jobs that will maximize community welfare (Lyson and Tolbert 2003).

**Economic Growth and Development in Appalachia**

Until the development of the Delta Regional Authority in 2001, Appalachia was the only region in the country to have a federal agency (the Appalachian Regional Commission [ARC]) tasked with its economic growth and development. For over thirty-five years, ARC has sought to bring development to Appalachia within the context of making the region more competitive in regional, national, and global markets (see PARC 1964; Isserman and Rephann 1995). Scholars have identified Appalachia as a region suffering from uneven development because of a less-competitive market position for its natural resources and other declining industries (Lyson and Tolbert 2003, Couto 1994, Billings and Tickamyer 1993). However, other research on the region indicates that some ARC counties have and continue to perform better than others, with some counties at or above national norms (Couto 1994; Isserman and Rephann 1995). For all of these reasons, we argue that Appalachia serves as an interesting case study to pursue the role of civic engagement in economic growth.
Couto and Guthrie (1999: 103–105) document how the Appalachian Center for Economic Networks (ACEnet) developed an innovative economic development strategy to bring jobs to eight Appalachian counties in rural Ohio in order to reduce high poverty rates. The plan involved building on horizontal networks of trust among local businesses, governments, and non-profit skills development organizations (such as JTPA, JOBS) to support small, specialized niche-based manufacturing networks. A portion of the plan involved linking many small firms in the development of one product market. Couto and Guthrie (1999) report that one ACEnet enterprise was particularly successful at manufacturing accessibility products for the disabled.

Because of a lack of collateral, one of the key barriers to this plan was access to start-up funds and funds for new product research and development. Through much networking effort, ACEnet established a loan fund. After six years, 10 new start up businesses and 100 new jobs were created. ACEnet grew from an annual budget of $15,000 to one of $300,000. More importantly, the success of the program has made the existing ACEnet enterprises—as well as new potential ACEnet endorsed endeavors—less of a risk to local financial institutions.

We have identified two issues of concern in the civil society conceptual model. This analysis addresses one of these concerns by examining the effects of civic engagement on economic growth with a county-level model. If civic engagement leads to qualitatively different economic growth than the conventional market competition-based models in sociological research, as our interpretation of the civil society model indicates (Figure 2), then measures of civic engagement should have net effects on employment and earnings growth after controlling for the important indicators from the market-based models (i.e., social ecology, political economy, and labor market theory). The article now turns to a test of this path in the conceptual model (Figure 2).

**Data and Analysis**

The analysis uses a weighted least squares (WLS) spatial lag regression model to estimate the effects of civic engagement measures from the civil society perspective on four measures of economic growth in the 399 Appalachian counties during the early 1990s (see Figure 3). The analysis uses a WLS approach. Breusch–Pagan tests indicate problems with heteroskedasticity, therefore each model is weighted by 1990 county population.

![Figure 2. Civic Welfare and Managed Growth.](image-url)
Civil Society Civic Engagement Measures

Three county-level measures of civic engagement from the civil society perspective literature, churches, national civic organizations, and third places, are used in the analysis. These are all indicators of mediating structures that build dense horizontal networks throughout the community and orient individuals toward the public good. This measure of...
civic denominations was created using the same method used by Tolbert, Lyson, and Irwin (1998). Using data from the General Social Survey (1988–1991), Tolbert and his colleagues determined which denominations had members with above average participation in voluntary associations, including the Church of Christ, Latter-Day Saints, and ten others. We then determine the percent of county population who are adherents to these dozen denominations. These data are from Churches and Church Membership in the United States 1990 (Bradley et al. 1992), collected by the Association of Statisticians of American Religious Bodies (ASARB). The Church and Church Membership data includes detailed, county level data on 133 different church bodies, representing 255, 173 churches with 137,060,509 adherents (Bradley et al. 1992, p. ix).

Third places are retail firms such as food stores, coffee shops, drugstores, and barber shops, from the economic census. National Associations is the number of associations listed in the 1990 Encyclopedia of Associations (see Tolbert, Lyson, and Irwin 1998: 408). Third places and national associations are both used as per capita measures.

**Dependent Variables**

There are four measures of employment and earnings growth: (1) 1991–1995 private non-farm employment growth, (2) 1991–1995 private non-farm establishment growth, (3) 1991–1995 per capita income growth, and (4) 1991–1995 earnings growth from all industries. The growth rates are computed using the logarithmic first difference growth rates for the 1991–1995 period: \(\ln(T_2) - \ln(T_1)\). The natural log transformation of private non-farm employment (1990), private non-farm establishments (1990), per capita income (1990) and county earnings (1990) are included in each respective model. This is to control for regression toward the mean.

**Market Competition Measures**

The analysis includes several social ecology indicators. These include metropolitan status (binary variable), and percent of 1989 housing built before 1939. Initially, percent urban and population density were also included, but later dropped because of problems with multi-collinearity. The analysis controls for spatial effects (see succeeding discussion), which often indicate spatial diffusion (and economic integration) of economic processes across geographical units of analysis, an important construct in human ecology (Kasarda and Irwin 1991). The analysis also controls for percent of earnings in two contracting niches during the late 1980s and early 1990s—mining and agriculture.

Political economy perspective measures include manufacturing compensation in 1989—compensation per production employee (in dollars), which includes wages, pension, and other forms of compensation. Higher costs are expected to lower economic growth. The analysis employs three measures of federal spending: (1) Defense (salaries and wages to military and civilian personnel, but not including defense procurement), (2) defense procurement, and (3) federal salaries/wages (non-defense) and public investment spending. Each one of the federal spending measures is computed for 1989 on a per capita basis. These per capita measures are skewed right, and the natural log transformations are
used in the analysis. Data are from the *Consolidated Federal Funds Report*. The analysis also controls for the number of workers per manufacturing establishment. This provides a measure for the nature of the manufacturing sector (large scale vs. smaller scale; see Tolbert, Lyson, and Irwin 1998).

The analysis also controls for whether or not the county is located in Central Appalachia, a politically and economically disenfranchised region of Appalachia (Billings and Tickamyer 1993; Couto and Guthrie 1999; Duncan 1999; Haynes 1997). From labor market theory, the analysis includes percentage of adult population twenty-five years or older in 1990 with some education beyond high school, percent of county population black. It also controls for the age structure of the county population, percent age fifty-five and over in 1990, with a quadratic term. The non-federal spending data are from *USA Counties 1998*.

When politically constructed units of analysis (e.g., counties) are used in research of economic and social processes, there is potential for spatial autocorrelation among observations. Included is a spatial autoregressive correction (spatial lag) of the form $\Sigma w_{ij}x_j$. Anselin (1996) shows that this formula creates a spatial lag for variable $x$ at location $x_i$, which is the sum of the product of each county with its corresponding weight from the $i$th row of the spatial weights matrix ($w_{ij}$). It is the weighted average of values for all locations. It allows the dependent variable value in county $x$ to take into consideration the influence of nearby counties. The spatial weights matrix is a distance measure between each county in the analysis. A squared inverse distance matrix based on a gravity model is used. Each county’s longitude and latitude coordinates are used as the distance point of reference in the analysis.

**Findings**

Table 1 presents descriptive statistics for all variables in the analysis. These data show that for the Appalachian region, county private non-farm employment grew by 13 percent on average between 1991 and 1995. Private non-farm establishments grew by 8.5 percent. Per capita income and county earnings grew by 16 and 9 percent (in nominal dollars), respectively, between 1991 and 1995. However, the large standard deviations for all four measures show that there was wide variation throughout the Appalachian region. The data on civic engagement measures show that on average, 14 percent of the county population in Appalachia was in civically engaged denominations, slightly higher than the national average of 12 percent (Tolbert, Lyson, and Irwin 1998). On average, counties in Appalachia had 127 third places in 1990, and 10 national associations.

Table 2 presents the regression results. The primary focus of this article is on the relationship among the civic engagement measures from the civil society perspective and economic growth. We proposed previously that the extent to which these measures have net effects on economic growth shows support for the civil society perspective arguments that a civically engaged community can have a positive effect on socio-economic outcomes. It is proposed that these outcomes could also include economic growth.
The results in Table 2 indicate a general positive effect of civil society measures of civic engagement on economic growth. At least one measure of civic engagement has a positive effect in each model of economic growth. Percent in civically engaged religious denominations has the most consistent effect across models. Specifically, for every percent increase in civically engaged denominations, private non-farm employment growth between 1991 and 1995 increased by an estimated .238 percent. Every percent increase in
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<tbody>
<tr>
<td>Third places (ln) 1990</td>
<td>−1.1</td>
<td>−0.0729</td>
<td>0.325b</td>
<td>0.798b</td>
</tr>
<tr>
<td>National associations (1990)</td>
<td>0.023a</td>
<td>1.7b</td>
<td>0.0004</td>
<td>0.002</td>
</tr>
<tr>
<td>Percent in civic religious denominations (1990)</td>
<td>0.238b</td>
<td>0.192b</td>
<td>0.008</td>
<td>0.167b</td>
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</tbody>
</table>

Ecological measures

<table>
<thead>
<tr>
<th>Metropolitan county</th>
<th>1.87</th>
<th>2.1b</th>
<th>0.72a</th>
<th>1.24b</th>
</tr>
</thead>
</table>

| Percent earnings in farming/forestry 1989 (ln) | 0.264 | 0.003 | −0.195b | 0.33b |
| Percent earnings in mining 1989 (ln) | −0.716b | −0.35a | −0.102 | −0.229a |
| Percent of housing 1989 built before 1939 | −0.261b | −0.242b | −0.002 | −0.154b |

Political economy measures

| Per capita fed non-defense salary 1989 | −0.377 | −0.001 | 0.0003 | 0.2 |
| Per capita fed public investment 1989 (ln) | −0.818 | −0.007b | 0.112 | −0.001 |
| Per capita fed defense/procure spending 1989 | 0.114 | 0.003 | −0.473b | −0.676b |
| Manufacturing wages per workers 1989 | 0.014 | 0.00009 | −0.00004 | −0.0002b |
| Central Appalachia | −2.61 | −1.4 | −0.006 | −1.58b |
**Table 2. (Continued).**

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<tr>
<td><strong>Labor market measures</strong></td>
<td></td>
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<tr>
<td>Percent of county population black 1990</td>
<td>-0.901</td>
<td>-0.176&lt;sup&gt;b&lt;/sup&gt;</td>
<td>0.036&lt;sup&gt;a&lt;/sup&gt;</td>
<td>-0.164&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Percent of county population with greater than high school diploma 1990</td>
<td>-0.062</td>
<td>0.029</td>
<td>-0.043</td>
<td>-0.128&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Percent of population over age of 55 1990</td>
<td>-5.24&lt;sup&gt;b&lt;/sup&gt;</td>
<td>-3.8&lt;sup&gt;b&lt;/sup&gt;</td>
<td>-0.002</td>
<td>-3.6&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Percent of population over age of 55 1990&lt;sup&gt;2&lt;/sup&gt;</td>
<td>0.101</td>
<td>0.07&lt;sup&gt;b&lt;/sup&gt;</td>
<td>0.0004</td>
<td>0.068&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Workers per manufacturing establishment 1985</td>
<td>-0.001</td>
<td>-0.0041</td>
<td>-0.0001</td>
<td>-0.0002</td>
</tr>
<tr>
<td><strong>Other measures</strong></td>
<td></td>
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<tr>
<td>Time lag (ln) 1990</td>
<td>-2.674&lt;sup&gt;b&lt;/sup&gt;</td>
<td>-0.019&lt;sup&gt;b&lt;/sup&gt;</td>
<td>-0.02</td>
<td>0.0008</td>
</tr>
<tr>
<td>Spatial effect</td>
<td>4.667&lt;sup&gt;b&lt;/sup&gt;</td>
<td>0.034&lt;sup&gt;b&lt;/sup&gt;</td>
<td>0.037&lt;sup&gt;b&lt;/sup&gt;</td>
<td>0.051&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Constant</td>
<td>21.4</td>
<td>8.06&lt;sup&gt;a&lt;/sup&gt;</td>
<td>-2.87</td>
<td>-7.39&lt;sup&gt;b&lt;/sup&gt;</td>
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<tr>
<td>Adjusted R-square</td>
<td>0.368&lt;sup&gt;b&lt;/sup&gt;</td>
<td>0.4831&lt;sup&gt;b&lt;/sup&gt;</td>
<td>0.357&lt;sup&gt;b&lt;/sup&gt;</td>
<td>0.599&lt;sup&gt;b&lt;/sup&gt;</td>
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<sup>a</sup>p < 10; <sup>b</sup>p < 0.05.
Civically engaged denominations increased private non-farm establishments by a predicted .192 percent between 1991 and 1995. The results for Appalachian county earnings growth show that a 1 percent increase in civically engaged denominations increased earnings by an estimated .167 percent on average. Percent in civically engaged denominations has no net effect on per capita income growth, 1991–1995.

The results for third places show a net positive effect on both growths in per capita income and earnings. For each additional percent in per capita third places, growths in per capita income and earnings are estimated to have increased by 0.325 and 0.798 percent, respectively. The number of national associations per capita has only one significant effect \( (p < 0.05) \). For each additional national association per capita, non-farm establishments grew by an estimated 1.7 percent between 1991 and 1995.

While the primary focus of this analysis is on the effects of civic engagement, there are other effects that are consistent with theoretical expectations proposed by models of economic development. Among the social ecology measures in this model, age of housing has the most consistent effect on economic growth. Places with older housing stock also have older infrastructures—older water, sewer, and telecommunications systems, as well as older transportation systems (roads, overpasses, etc.). Older infrastructure often means higher costs for firms looking to locate into an area, and thus serves as a disadvantage in the county-level competition for jobs (Kasarda and Irwin 1991). Mining earnings have negative effects on non-farm employment growth, and marginally \( (p < .10) \) negative effects on growth in non-farm establishment and earnings. Metropolitan counties have net higher rates of earnings and non-farm establishment growth, and marginally higher levels of per capita income growth.

The political economy measures are inconsistent across models. Manufacturing wages per worker have predicted negative effects on earnings only. Defense spending has what would appear to be inconsistent negative effects on growth in per capita income and earnings. However, Appalachia is not part of the “Gunbelt,” so the vast majority of counties do not get much of such spending (Couto 1994). There was also a downturn in defense spending following the collapse of the former Soviet Union, which meant that those places that were used to getting this support in the 1980s no longer did in the 1990s (Mencken 2004).

Two labor market measures have consistent effects. First, percent of the county population that is black has a negative effect on growth in non-farm establishment growth and county earnings. It also has a large negative but not statistically significant effect on private non-farm employment growth. Percent of the population 55 and over has a curvilinear effect. From 0 to 26 percent, the percent of the population 55 and over has a negative effect on three measures of economic growth—non-farm employment, non-farm establishment, and earnings growth. However, at 26 percent of the population 55 and over, based on partial derivative analysis, the effects level and are relatively inelastic thereafter. From a labor market perspective, a higher concentration of older citizens generally represents a higher dependency ratio, which is not conducive to economic growth (Cotter 2002). However, a substantial concentration of older citizens may represent new market opportunities to provide services to this group. Also, a concentration of older population may indicate...
planned retirement communities in rural settings, which offer some job opportunities for local citizens.8

Discussion

An emerging literature has proposed a civil society perspective on local economic development as an alternative to the market-based competition models of development that have been the dominant paradigm in sociological research (Lyson and Tolbert 2003). In reviewing this literature, we were concerned about two issues from this perspective (endogenous relationships and inconspicuous role for economic growth). One of these limitations was addressed by proposing that the conceptual relationship between civic engagement and socio-economic well-being of counties and places could also be indirect through its effects on economic growth (Figure 2).

The path between civic engagement and economic growth (referred to as “managed growth” in this study) was tested by estimating the effects of civic engagement measures from the civil society perspective on measures of county economic growth for the first five years of the 1990s in Appalachia. In the only test of its kind in the literature, the effects of these civic engagement measures were juxtaposed with conventional measures from an array of market competition-based frameworks. The findings from this analysis show net positive effects of civic engagement on different measures of economic growth. The empirical findings support previous speculation that mediating structures that facilitate the development of horizontal networks among community members are important for new jobs, new businesses, and more earnings. In detailed case studies, Couto and Guthrie (1999) indicate some of the ways that this growth may be manifested in Appalachia (such as community networking to establish new business start-up funds).

We argue that these findings are important to the civil society perspective. Whereas past civil society research shows that civic engagement is important to socio-economic well-being (less poverty, more income, less crime) (Lee and Ousey 2001; Lyson and Tolbert 2003; Tolbert, Lyson, and Irwin 1998; Tolbert, et al. 2002), these findings show that with the net of the measures from more traditional market competition-based perspectives, civic engagement does appear to help create some economic growth. Moreover, these findings imply, but do not confirm, that the type of economic growth associated with civic engagement may be qualitatively different than that associated with market competition-based models, an argument proposed in the conceptual path model in Figure 2.

This is a first article in what is hoped will be a series of studies on this topic. While the findings show that civic engagement is related to economic growth, and we propose that civic engagement may lead to forms of economic growth (e.g., small-scale production for specialized niche markets) that qualitatively differ from market competition models (i.e., a new large retail locates in town), county-level public data are not adequate to assess qualitative differences in the types of jobs that are associated with civic engagement. More case study research on the exact types of jobs and growth associated with civic engagement (such as that documented by Couto and Guthrie 1999) is needed to confirm our suspicions.
In addition, the conceptual model proposed in Figure 2 indicates that civic engagement also has a positive effect on socio-economic well-being both directly and indirectly, through economic growth. A simultaneous test of all paths is the next logical step in this agenda. Moreover, the model needs to be expanded in its geographical scope.

These findings certainly do not discredit the market competition model of economic growth. Even in rural regions such as Appalachia, having a built-in environment and labor force conducive to competition and growth in global, national, and regional markets was necessary for economic growth during the early 1990s, and accounted for substantially more of the economic growth in the region during that period than did the civic engagement measures. In follow-up tests, the measures of civic engagement were removed from the models presented in Table 2, and the explanatory power of the models decreased by 2.5 percent on average. The exercise was repeated by excluding the market competition measures, and the explanatory power of the models decreased by 33 percent on average.

Moreover, percent in civically engaged religions denominations has the most consistent effects of all the civic engagement measures. However, recall that every 1 percent difference in civically engaged denominations means a net difference in private non-farm job growth of only .238 percent. Civic engagement may be important for local growth, but the growth comes in small increments, and these measures accounted for far less of the variation in economic growth than the market competition measures did. However, it may be this small, measured (managed) growth that is more beneficial for the welfare of communities in the long run. More tests with appropriate data are needed.

This study has several limitations in regarding the broader theoretical implications of civic engagement. First, it is acknowledged that the terms civic engagement, social capital, civil society, etc. are used inconsistently and confusingly in the greater literature (see Woolcock 1998), and at different levels of analysis (from individual to nation-states [Granato, Inglehart, and Leblang 1996; Jackman and Miller 1996; Swank 1996]). This article uses the civil society framework that is currently being used by other sociologists to examine civic engagement and related outcomes with census data in county level models. Therefore, its implications are applicable to that body of research, and less so to the broader field of research on civic engagement and social capital in the literature.

Second, the civic welfare perspective is a theory that is largely about the middle class—local civically engaged entrepreneurs working to create a local culture of civic welfare. Other research on community processes notes that the types of horizontal network building that the civil society perspective endorses is tough to achieve across other structural conditions such as social class and race (Bateman and Lyon 2000). Research on Appalachia reveals some small towns systems of clientilism in which the stigma of being from the bottom of the socio-economic strata is most difficult to overcome (Billings and Blee 2000; Duncan 1999). While we explored an interaction between civic engagement measures and percent black in the county and found no significant interaction, there may be other contexts of race and class, and possibly in other regions of the country, where these issues are more prominent. In short, this analysis cannot refute nor confirm critiques that the civil welfare perspective is a middle class model of development.
The second issue in the civil society perspective literature of concern to us was the potential for misspecification of causality. Civic engagement may be endogenous to socioeconomic well-being. Places that are doing well are more likely to contain the types of citizens who are active in community affairs (Becker and Dhingra 2001; Schlozman, Verba, and Brady 1999; Uslaner 2002). This study design could not directly address this issue. This analysis does show that civic engagement was important for some economic growth, and the effects were net of other important characteristics of the counties in the region. We speculate that if the relationships between civic engagement and socio-economic well-being were either spurious or misspecified, then no significant relationships would have been found in the models. However, the focus was on the economic growth path, and not the path between civic engagement and socio-economic well-being. Moreover, these results may still stand even if the relationship between civic engagement and socio-economic well-being is non-recursive. In short, this study is not designed to address this potential causality problem, but acknowledges that it needs to be addressed more systematically in future research.

Finally, these findings convey some interesting policy implications. The ARC, the federal agency tasked with bringing economic development to Appalachia, provides five primary areas of investments, including physical infrastructure, education, workforce training, and business development. It also claims civic capacity and community leadership as one of its five primary investment areas. The ultimate outcome is to facilitate economic growth and development. These five areas of investment are not independent of one another. As the civic welfare thesis indicates, civic capacity is a function of business development, and as this analysis indicates, business development is also a function of civic capacity. These findings indicate that active investments in establishing and improving what Couto and Guthrie (1999) label as mediating structures could prove useful in generating some economic growth in Appalachia. However, we also want to note that the neoliberal notion that civic engagement can replace the bricks and mortar approach to public investment spending is not warranted (see Broesamle 1990; Couto and Guthrie 1999). This analysis shows that, in spite of the positive effects of civic engagement measures on economic growth, the measures from the market competition models (age of infrastructure, industrial diversity, spatial integration of local economies) explain more of the variation in why some counties experienced greater economic growth than others.

NOTES
1. We note that the ARC official definition of Appalachia now includes 410 counties. However, during the time period in which this study is set (early 1990s), there were 399 official counties.
2. The term “public” here refers to space (public or private) to which the general public has regular access, and not exclusively to public places such as local parks.
3. There are a few exceptions to this statement. For example, Tolbert, Lyson, and Irwin (1998) find that third places has a positive effect on income inequality.

5. Tolbert, Lyson, and Irwin (1998) found the most civically engaged denominations to be African Methodist Episcopal Zion, American Baptist, Church of Christ, Congregational Christian, Disciples of Christ, Episcopal, Jewish, Latter-Day Saints, Lutheran, Methodist, Presbyterian, and Unitarian.

6. We thank Charles Tolbert for providing these county-level measures.

7. This last category of spending includes the following: (1) Research (basic science/engineering, agricultural, forestry, economic/social science, environmental, policy, energy, and university research), (2) infrastructure investment (development grants, airport aid, roads, water systems, loans for infrastructure, rural communication systems, electrification, transportation, and planning grants), and (3) related public goods investments (school funds, vocational education support, community development block grants, job training grants, trade promotion grants, business assistance/small business loans, and Appalachian Regional Commission funding).

8. We also explored the possibility of interactions among these measures, testing the idea that the civic engagement measures may have different effects in different contexts (such as in Central Appalachia, or in counties with higher levels of education), but found no statistically significant relationships.

REFERENCES


