

Southern Perspectives

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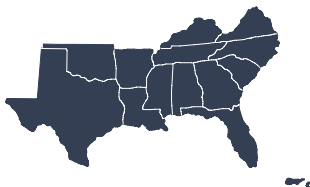
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Meeting the Challenges of
the Rural South through
Land-Grant Research and
Outreach Education

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Texas • Virgin Islands • Virginia

Education and Nonmetropolitan Income Growth in the South

MARK HENRY, DAVID BARKLEY
& HAIZHEN LI
Clemson University

Introduction

The role of education in local, state and national economic development has become a central public policy issue in recent years. Rural localities, in particular, which typically have lower education levels among the adult population than urban areas, view increased educational investments as an important component of an economic development strategy. At the same time, rural communities are sensitive to the “leakage” of human capital investments outside the community as rural residents move to urban areas with better job opportunities. However, investigations of the linkages between improved schools and local economic development are rare, thus communities have little guidance as to the returns to higher education levels for the adult population.

How Might Better Schools Affect Economic Growth?

Improved educational attainment in a rural county may translate into a higher quality local labor force that in turn stimulates local economic development through enhanced entrepreneurial activity and labor force productivity. In addition, school quality may be important as a signal to prospective employers that the local labor force has good basic academic/analytical skills and will be more adaptive to new technology, thus reducing the labor costs to prospective employers. Alternatively, a local pool of native talent may be relatively unimportant to rural development in the South. In this view, economic growth depends not on the size and quality of the labor force in a commuting area around the rural community but on the attractiveness of the local area, especially its natural and cultural amenities. Perceived school quality is just one of those ameni-

ties and may be critical only where natural amenities are insufficient to attract labor force from outside the region.

On this note, we summarize recent findings on the relationship between added human capital that is associated with better schooling and income growth in rural counties of the South. We estimate the determinants of county rates of real income growth from 1970 to 2000 and over the period 1980 to 2000 [a]. The selection of the 1980 to 2000 period permits us to test whether education's role in rural income growth differed in the time period sometimes thought of as the beginning of the “New” or “Global” economy.

The dominant economic base in a rural county also might affect the ability to translate added human capital into faster county income growth via an enhanced ability to adapt to new technology, improved learning by doing, etc. For example, rural counties dominated by farming with large shares of college educated residents might more readily adapt innovations in seed, chemicals and machinery to generate higher net farm income compared to farm counties with few residents with a college education. Thus, we estimate the human capital–county income growth relationship for the six nonmetro county types specified by ERS, USDA (farming, mining, manufacturing, government, services and nonspecific) [b].

We find that county per capita income growth rates from 1970 to 2000 across the South are affected by the initial stock of human capital (HK). The share of the “aged 25 plus” population in a county that has at least some college is our proxy for initial levels of HK. The growth regressions show that added 1970 levels of HK boost real per capita income growth from 1970 to 2000 and from 1980 to 2000. For example, Table 1 provides the estimated percentage change in county income growth rates that result from a 5 percentage point increase in county population (25 and older) with at least

From the Director

by Bo Beaulieu



The educational status of rural areas in the South has been long viewed as a major impediment to the social and economic progress in the region. However, as a product of innovative state policies, coupled with the increasing demand for better-educated workers in the South, the 1990s produced some meaningful improvements in the educational standing of many nonmetro residents in the South. Consider the following facts about the human capital endowments of Southerners:

- The number of persons 25 years of age and over with an associate's degree, four year college education, or a graduate degree increased from 23.6 percent to 27.8 percent in the region over the course of the 1990s (in this case, region represents the 13 states that are part of the SRDC designated region).
- The actual number of persons with a bachelor's degree or higher expanded by nearly 4.1 million persons between 1990 and 2000, a 45.6 percent increase.
- The number of African Americans with less than a high school education has dipped dramatically from 42.2 percent to 30.6 percent in 10 years.

At the same time, some serious challenges continue to confront the South in terms of advancing the education progress of all residents in the region, particularly those who reside in the nonmetropolitan areas of the region. The following facts serve as a reminder that the educational advancement

for all Southerners must remain an issue of high priority if there is any hope of pursuing a path of economic and social progress in the years ahead:

- Approximately 31 percent of metro-based Southerners (25 years of age and over) now have an associate's degree or better; in the nonmetro South, the figure is just over 18 percent.
- The percentage of African Americans with a bachelor's degree or higher is twice as large in metro than in nonmetro areas of the South (15.1 percent versus 6.9 percent).
- The proportion of Hispanics with less than a high school education is sizable in both metro and nonmetro areas of the South, but the figure is even more dramatic in the nonmetro South. As of 2000, nearly 58 percent of nonmetro Hispanics had no high school diploma (in contrast to 44.5 percent for Hispanics living in the metro areas of the South).

Certainly, the important gains realized by rural Southerners over the past decade deserve to be acknowledged and applauded. At the same time, efforts must continue to be made in strengthening the capacity of rural areas to keep pace with the educational advancements realized in the urban and suburban areas of the South. A key question is "What can be gleaned from the social science research literature regarding the value and importance of investing in the education and training of rural people?"

In an effort to bring greater focus to the innovative education-related research being undertaken by social scientists across the United States, the Southern Rural Development Center, in partnership with the Economic Research Service/USDA and the Rural School and Community Trust, organized an important conference earlier this year that attracted 35 researchers and education experts. The conference offered one of the rare opportunities to discuss and debate a host of issues related to rural education and training in this country.

What is captured in this issue of *Southern Perspectives* is an abbreviated version of four of the many research papers presented over the course of the conference. These articles are being highlighted because of their special focus on the South. More extensive versions of these papers, as well as a large share of the other research products presented at the conference, will be published in special issues of two professional journals in 2004. In addition, the SRDC is preparing an attractive document that will showcase the policy and programmatic implications associated with the research papers presented at that spring 2003 conference. Ultimately, it is the hope of the SRDC, as well as our two co-sponsoring organizations, that these published products will mobilize a larger share of rural social scientists, in the South and beyond, to actively take part in advancing the state of knowledge and application regarding rural education in the years ahead.

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Table 1. Impacts of Added Education on County Per Capita Income Growth Rates in the South

	Metro	Nonmetro	Farm	Mining	Manu.	Gov.	Service	Nonspec.
Mean percent county population 25+ with at least some college in 1970	17.18	12.09	12.53	12.43	11.02	13.24	13.66	11.83
Increase in percent county population 25+ with at least some college in 1970	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Percent increase in education from 1970 mean	29.10	41.37	39.91	40.22	45.38	37.77	36.61	42.27
Percent change in county per capita income growth rate (1970-2000)	5.16	3.84	0.48	-0.81*	4.44	6.76	8.88	1.52
Percent change in county per capita income growth rate (1980-2000)	10.15	9.01	6.37	11.47*	8.48	8.92	19.54	4.56*

* Not different from zero using commonly accepted levels of statistical significance.

some college [c]. While metro counties consistently get more of a growth “premium” from a given increment of HK, nonmetro counties also grow faster with more HK. Generally, rural growth impacts from added HK are about three-fourths of the metro growth premiums for the same percentage point increase in HK. Within the rural South, service-based counties generally fare best from added HK, while mining-based counties gained the least over the 1970 to 2000 period. However, note from Figure 1 below that the HK induced growth effects during the “new economy” era from 1980 to 2000 are typically more than twice the effect over the entire 30-year period. This supports the idea that improvements in HK are becoming increasingly important to income growth in the rural South.

The results generally confirm that HK in

rural areas is a factor in real per capita income growth across all types of rural counties, but more so in the service-based economies than in the traditional manufacturing, mining and farming-based rural counties. A 5 percentage point increase in beginning period (1970) HK, in the nonmetro counties of the South, yields a 4 percent (1970-2000) to 9 percent (1980-2000) faster real per capita income growth rate.

Controlling for the dominant economic base in the rural county, we find no effect from added HK on real per capita income growth from 1970 to 2000 in mining counties, but the impact is substantial over the 1980 to 2000 sub period (11 percent). Service-based counties expanded from 9 percent (1970-2000) to 20 percent (1980-2000) faster from a 5 percent addition to HK stock in 1970. A 5 percent increase in HK stock in 1970 boost-

ed real per capita income growth rates in farm counties from 0.5 percent to 6 percent, in manufacturing counties from 4 percent to 8 percent, in government counties from 7 percent to 9 percent, and in nonspecialized counties from 2 percent to 5 percent. These are significant returns to added education in the rural South, especially during the “new economy” period of 1980 to 2000.

Alternative measures of HK that reflect ‘quality’ need to be considered. Still, it is fair to speculate that added HK investment in the rural South is more than the usual political hyperbole; it looks like HK is, in fact, a key to success in the rural South.

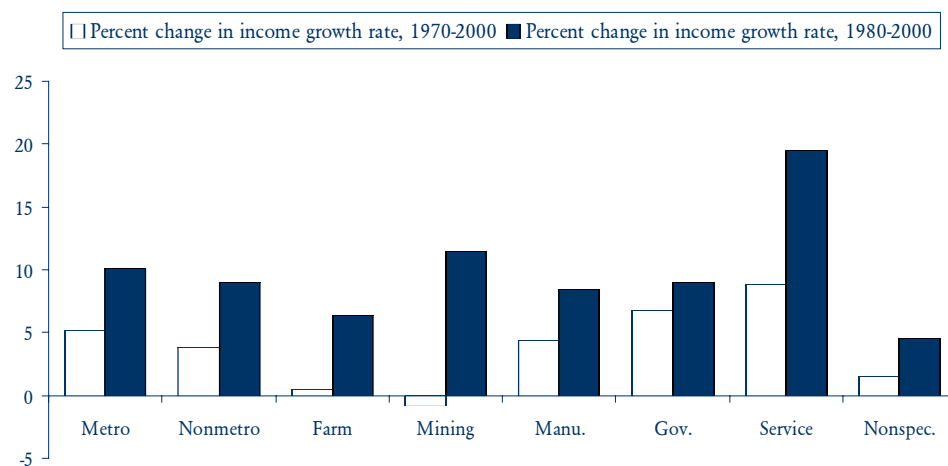
Endnotes

[a] Data are from Census years 1970, 1980 and 2000. Observations include all counties in 15 Southern states for each Census year. Data are from various Census files as compiled by the Inter-university Consortium for Political and Social Research (ICPSR), University of Michigan; from the Regional Economic Information System (REIS), Bureau of Economic Analysis, and U.S. Department of Commerce; and from the Economic Research Service (ERS), U.S. Department of Agriculture.

[b] See Cook and Mizer 1994 for definitions of county economic base types.

[c] A 5 percentage point increase in county population with some college results in different relative changes for metro and nonmetro counties. Specifically, for metro areas

Figure 1. Impacts of Added Education on County Per Capita Income Growth Rates in the South



Historically Black Colleges and Universities and Economic Well-Being in Racially Diverse Rural Counties

BRADFORD MILLS & ELTON MYKEREZI
Virginia Tech

Historically Black Colleges and Universities (HBCUs) were originally established to provide equal educational opportunities for students denied admission to their states' 1862 land-grant university system. In 1995, HBCUs matriculated 26 percent of all African American students enrolled in four-year colleges, awarded master's degrees and first-professional degrees to about one in six African American men and women, and awarded 27 percent of all baccalaureate degrees earned by African Americans nationwide [3].

HBCUs are mainly concentrated in rural areas of the South (Figure 1). This clustering in the rural South stems from two factors. First, African Americans' access to higher education was historically most limited in the rural South. Second, the overwhelming majority (89 percent) of rural African Americans live in the South. Even within the rural South the African American population is concentrated in 208 racially diverse rural counties (RDRCs) where they comprised one-third or more of the population in the 1990 U.S. Census [a]. In fact, while accounting for only 8.8 percent of the total rural population in 1990, these RDRCs contained 44 percent of the rural African American population.

Many RDRCs are consistently among the poorest counties in the United States [2]. This chronically high incidence of families with low levels of economic well-being creates serious barriers to economic development. Low income levels limit the tax base and the level of local public services that can be provided. Low public service levels in turn reduce investments in education. This is most apparent among African Americans,

who show significantly lower rates of secondary school completion in RDRCs than in other rural areas or in the nation as a whole. In 2000, 42 percent of African Americans 25 years of age or older in RDRCs had no high school diploma, and only 25 percent had some post-secondary education. Further, the negative correlation between local spending and the percent of adults with no high

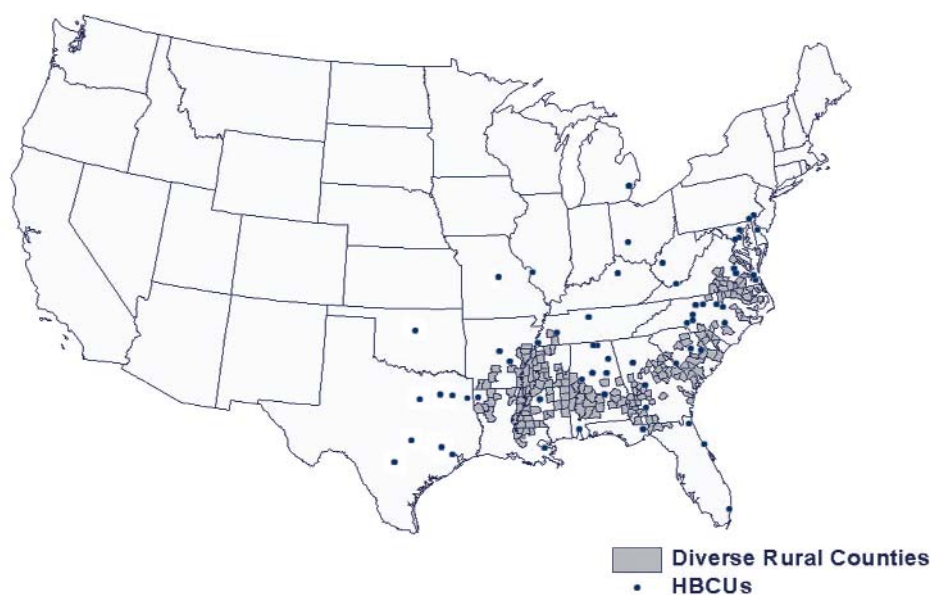
had some post-secondary education, but no college degree, and only 5 percent had a college degree. Given that HBCUs were created and supported in an effort to increase post-secondary education among mostly rural African Americans with historically restricted access to post-secondary education, observed low rates of post-secondary education call into question the efficacy of HBCUs. In

fact, some question if HBCUs still have an important role in promoting post-secondary education among African Americans, given the removal of formal barriers to the attendance of public post-secondary educational institutions.

Informal barriers to African American enrollment in college continue to exist, however. These barriers arise from financial constraints, social distance, and lack of

information on college enrollment requirements and financial aid opportunities. Physical proximity to HBCUs may reduce these barriers by providing nearby affordable education to African Americans in institutions where students with similar backgrounds are enrolled. Regression results show that, after controlling for presence of other postsecondary education institutions and real income differences in communities, HBCUs continue to play an important role in fostering post-secondary education among African Americans in RDRCs. The incidence of African Americans with college degrees increases by 1.7 percentage points for every 10 mile reduction in distance to the closest college or university. HBCUs then have an additional impact on the rate of African American obtainment of college degrees above and beyond that associated with the

Figure 1. Location of Racially Diverse Rural Counties and Historically Black Colleges and Universities



school is much stronger in RDRCs than in rural counties as a whole, suggesting that low resource levels for local education and educational attainment have a particularly strong link [2]. Low education levels in-turn limit potential earnings, employment opportunities, the local tax base, and constrain future local funding for public schools. Almost half of all firms surveyed in predominantly African American rural counties cited the poor quality of local schools as a major problem for their plant's ability to compete [1].

RDRCs also show low levels of post-secondary educational attainment. In 2000, 26 percent of rural Americans 25 years of age or older had some post-secondary education, but no college degree, and 10 percent had a college degree. For African Americans 25 years of age or older in RDRCs, 18 percent



African Americans' access to higher education was historically most limited in the rural South . . . the overwhelming majority of rural African Americans live in the South. Photo courtesy of Mississippi State University.

presence of any college or university. That additional impact is equivalent to a 0.8 percentage point increase in the incidence of college degrees for every 10 mile reduction in distance to the closest HBCU.

Looking at changes in the share of adults with college degrees between 1990 and 2000, African Americans saw a 0.1 percentage point faster rate of growth in the share with a college degree for every 10 mile reduction in distance to the closest HBCU. These educational gains in turn translate into real gains in economic well-being, with a 1 percentage point increase in the share of African American a college degree translating into a 0.1 percentage point faster rate of growth in per-capita income. Thus, investments in education, particularly in HBCUs, continue to provide an important pathway for the economic advancement of African Americans in the rural South.

Endnote

[a] Native Americans are the other racial group with significant concentration in rural counties. Predominantly Native American counties are not examined in this analysis as few counties with a third or more American Indians are located in the rural South [1].

Ethnically diverse counties with large concentrations of Hispanics are also not examined in this analysis.

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- [3] U.S. Department of Education. (1997). *Digest of Education Statistics 1997*, National Center for Education: Washington, DC.

About the Authors

Bradford Mills is an associate professor of agricultural and applied economics at Virginia Polytechnic Institute and State University. Elton Mykerezzi is a graduate research assistant in the department of agricultural and applied economics at Virginia Tech. This research project was funded by the National Research Initiative Award (USDA/CSREES Grant number 2003-35401-12915).

Want more information pertaining to Rural Education? Check out these websites:

Digest of Educational Statistics 2002

- <http://nces.ed.gov/pubs2003/digest02/>

National Assessment of Educational Progress: The Nation's Report Card

- <http://nces.ed.gov/nationsreportcard/>

Rural Schools Data

- <http://nces.ed.gov/surveys/ruraled/>

School District Demographics

- <http://nces.ed.gov/surveys/sdds/index.asp>

Quality Counts 2003

- <http://www.edweek.org/sreports/qc03/templates/article.cfm?slug=17exec.h22> (requires user registration to view)

Status and Trends in the Education of Hispanics

- <http://nces.ed.gov/pubs2003/hispanics>

EDUCATION CONTINUED FROM PAGE 3

the increase from 17.18 to 22.18 percent is a 29.10 percent change, while the change from 12.09 to 17.09 percent for nonmetro counties is an increase of 41.37 percent.

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- [2] Henry, M., D. Barkley and H. Li. 2003. "Education and Nonmetropolitan Development in the South." Working Paper WP 061203, Dept. of Applied Economic and Statistics. Clemson University, Clemson. SC. June.

About the Authors

Mark Henry and David Barkley are coordinators of the Regional Economic Development Research Laboratory and professors in the Department of Applied Economics and Statistics at Clemson University. Haizhen Li is a Ph.D. candidate in the Department of Applied Economics and Statistics at Clemson University.

**Promoting the Economic and Social
Vitality of Rural America:
The Role of Education**
<http://srdc.msstate.edu/ruraled/>

Work-Based Learning in Rural America

GARY PAUL GREEN
University of Wisconsin-Madison

Since the 1980s many states and communities have initiated institutional reforms designed to address perceived deficiencies in traditional schooling. One of the central components of these reforms is work-based learning. Among the most popular programs are cooperative education, youth apprenticeships and school-based enterprises. Work-based learning provides improved linkages between schools and work and offers a concrete context for learning. Yet, participation by employers and community colleges continues to be an obstacle. And, rural areas face unique problems in implementing these programs. This paper briefly discusses factors related to employer and community college involvement in work-based learning.

Why Do Employers Participate?

Approximately 40 percent of the employers in rural America report they are involved in a school-to-work program, and 32 percent currently offer an apprenticeship program. Most (about two-thirds) of these apprenticeships are in the areas of skilled trades or health care programs.

Several firm characteristics are related to work-based learning programs. Firm size is consistently one of the strongest influences; large firms are more likely to be involved in workplace education. Large firms have more resources to devote to these programs and greater need because they tend to have more vacancies. Educators turn to large firms because they offer more opportunities for students and are more likely to have the social ties with them. Manufacturing firms also are more likely to participate in apprenticeships than are service firms.

There are substantial regional differences in the participation of employers in work-based learning programs. Employers in the Midwest and West are most likely to be involved, while employers in the South are the least involved. It is unclear as to why these regional differences exist because they persist even when controlling for the level of skilled workers and other factors that influence work-based learning programs.

Finally, difficulty in recruiting qualified workers is strongly related to involvement in work-based learning programs. This finding probably means that employers consider

work-based learning programs as a mechanism for recruiting workers.

Community Colleges and Work-Based Learning

One-half (54 percent) of the community colleges serving rural areas participated in apprenticeship programs during the 2000-2001 academic year. An average of 29 businesses and 180 students were in these apprenticeship programs. The factors most strongly related to the number of students in these programs are population size, dependency on manufacturing and Midwest location. Community colleges in large counties dependent on manufacturing and located in the Midwest have more students in apprenticeships than other community colleges.

Many community colleges have turned to offering customized training programs as a means of promoting work-based learning. Community colleges report that 57 percent of their instruction is traditional classroom instruction, while 40 percent is now on-site, customized training. While many of these customized training programs are oriented toward entry-level workers, most focus on upgrading or retaining existing workers. Two factors are strongly related to the number of students in customized training programs — faculty size and contact with business and professional organizations. As one might expect, large community colleges are able to train more workers through customized training programs. These programs require additional resources and expertise that may not be available in the smaller institutions. Again, there are large regional differences in job training, with Midwest community colleges having more workers in their customized training programs.

Policy Issues

Work-based learning programs offer several advantages for employers, workers and training institutions. Employers prefer these programs because the training is focused on their specific needs. Research suggests that workers benefit because they learn better in the workplace, which may be reflected in increased productivity and higher wages. Finally, training institutions improve their relationships with the private sector, which improves their support in the region.

Rural areas face several obstacles in developing and implementing work-based learning

programs. Employers in rural areas tend to have less demand for skilled workers, which may be a disincentive to participation. Lack of a dense network of businesses in close proximity to a community college may make it more difficult to develop training programs in rural areas. Finally, the size (and resources) of community colleges in rural areas may limit their ability to develop a wide variety of new programs.

Research on work-based learning suggests several strategies for improving employer and institutional participation:

- promote greater employer collaboration through human resource associations on a regional basis;
- encourage cooperation among secondary schools and community colleges to reduce the costs of developing new work-based learning programs; and
- cultivate interactions between unions, temporary employment agencies, and other intermediaries and educational institutions as a means of improving the flow of information about training needs in the region.

About the Author

Gary Green is professor and chair of the department of rural sociology at the University of Wisconsin-Madison and a community development specialist with University of Wisconsin-Extension. His research and teaching focuses on community, economic and workforce development. He is currently studying the role of community-based organizations, employers and community colleges in providing training in rural America. Green also has been involved in development issues in international settings, such as Ukraine, New Zealand and South Korea. He is currently the editor of *Rural Sociology* and recipient of the 2003 Pound Extension Award from the College of Agricultural and Life Sciences at the University of Wisconsin-Madison.

Coming Soon to a Mailbox Near You

Watch for the new SRDC Policy Series, which is COMING SOON! This series replaces *The Rural South: Preparing for the Challenges of the 21st Century (Millennium) Series*. The first issue features an article on workforce development networks by Gary Green.

Examining the Returns to Education in Rural Areas

STEPHEN J. GOETZ
& ANIL RUPASINGHA
Pennsylvania State University

A basic conundrum for many rural communities is that local residents fail to invest in education because the expected returns to such an investment are low. The returns are low because there is an insufficient local pool of educated individuals who would be attractive to firms requiring higher levels of skills. A recent study by the authors on the returns to higher education in each of the contiguous states, as well as the rural areas of the Northeast, North Central, South and West, found notable differences in the economic returns to high school and college degrees in rural areas within these Census divisions. Concerns over a brain drain due to limited returns to education are not limited to rural areas, however. Policymakers in states ranging from Maine to Pennsylvania, Iowa and Idaho worry that educated individuals are increasingly leaving in pursuit of more profitable employment opportunities elsewhere. Finally, some authors have noted the relative degree of underinvestment in human capital throughout the rural South. This is unexpected to the extent that returns to education tend to be greatest for those who are most disadvantaged.

In a recent paper, we examined the effects of human capital (educational attainment), social capital and other forms of infrastructure or amenities, including school quality measured by pupil-teacher ratios, on per capita income across U.S. counties over the decade of the 1990s. We compared the returns to education in metropolitan and nonmetropolitan areas, allowing us to quantify some of the forces behind the brain drain afflicting many rural communities. In addition, we explored why and how the returns to education vary across rural counties by looking at so-called interaction effects between human capital and other variables. For example, we hypothesized that in communities with higher stocks of social capital the returns to a high school degree are greater.

Counties with a greater share of individuals who have at least a high school degree, more Interstate highway access, higher levels of social capital, private employment as a percent of all employment, high-tech employment, and population density in 1990 had

higher incomes in 2000, as expected. Conversely, counties that had larger average classroom sizes in 1989-90 also had smaller incomes per capita in 2000. As expected, increasing average age of the population has the effect of first increasing and then reducing per capita incomes, all else equal.

In particular, our results reveal that increasing the population with a high school degree or more by 1 percentage point raises per capita income in the average county by \$199 according to the full model. Increasing the social capital level by one unit is predicted to increase income by \$297. Adding one person per square mile increases income per capita by 50 cents. Having an Interstate highway access ramp has the same value as reducing the average classroom size (pupil-teacher ratio) by about four students — from the sample average of 16 to 12 students. Conversely, increasing the average classroom size by two pupils has about the same effect on per capita income as did reducing the population with a high school degree or more by 1 percentage point.

Furthermore, our results show that the returns to a high school degree are more than twice as large in urban areas as compared to rural areas. The effect of classroom size on per capita income is stronger in urban than in rural areas, suggesting that the negative effect of larger classrooms in rural schools on later earnings is less severe in rural than in urban areas. Public sector employment, which includes schoolteachers who in many depressed rural areas make up the largest employment group overall, is negative and highly significant statistically in rural areas. No such effect is detected in the urban counties. The value of additional high-tech establishments in raising per capita income is much larger in rural than in urban areas, but of course there are fewer such establishments in rural areas.

Important clues about the causes of different returns to education in rural and urban areas can be obtained by interacting educational attainment with the other factors that account for differences in income over space (i.e., the other regressors). For example, population density enhances the positive effect of educational attainment on per capita incomes. Since rural areas have lower average population densities than urban areas, this interaction effect is one key explanation of why returns to education are lower in rural

areas when compared to urban areas.

Interstate highway access ramps also interact strongly and positively with educational attainment, perhaps by reducing workers' commuting costs. Since rural areas have fewer such ramps, they are again at a relative disadvantage to urban areas, all else equal. Social capital has the same effect, but in this case levels of the variable are higher in rural than in urban areas.

In rural areas, private jobs, amenities and high-tech establishments each enhance the positive effect of educational attainment on per capita incomes. In contrast, population density, social capital, classroom size and highway access ramps do not enhance or reduce the effect of education in a statistically significant manner within rural areas.

We thus conclude that rural areas not only have a disadvantage in terms of returns to education because population densities are lower than in urban areas, but rural areas also would not benefit on this count in terms of the interaction effect if they could somehow raise population density. Benefits of higher population density might be achieved, or simulated, for example, through access to and greater use of the Internet and information technology generally. To illustrate further, the same is true of highway access ramps in rural areas. Rural areas do benefit from such ramps in terms of higher incomes, but they do not obtain the additional boost in the form of a spillover through higher returns from educational attainment that goes along with having such a ramp in urban areas.

About the Author

Stephan J. Goetz is the director of the Northeast Regional Center for Rural Development and a professor of agricultural and regional economics at Pennsylvania State University. He is a research fellow of the Rural Development Research Consortium at UC Berkeley. Anil Rupasingha is a senior research associate at Pennsylvania State University.

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Names

in the News

Susan Barefoot was named the Associate Dean and Chief Operating Officer of the Clemson University Experiment Station. Barefoot replaces James Fischer who has taken a position as a Senior Executive with the Department of Energy in Washington, DC.

Brian Calhoun was named the Assistant Director for the Virginia Cooperative Extension Service effective July 1.

John Kelly is the new Director of the Clemson University Experiment Station and Director of the Clemson University Extension Service effective May 1.

John Jensen has been serving as the Dean and Director of the Alabama Agricultural Experiment Station in the College of Agriculture at Auburn University since February 2003.

Steve Leath became Interim Associate Dean and Director of the North Carolina Agricultural Research Service effective June 1. Leath filled the position formerly held by Johnny Wynne.

James Oblinger was appointed Provost at North Carolina State University in May. Oblinger was formerly the Dean of the College of Agriculture and Life Sciences.

Sharron Quisenberry is the new Dean of the College of Agriculture and Life Sciences and Interim Director of the Virginia Agricultural Experiment Station at Virginia Tech, effective July 1. Quisenberry replaces Kriton Hatzios who passed away in March.

James Walker, Jr. has been appointed as Administrator of 1890 Extension Programs at South Carolina State University effective March 1.

Robert Whitson was named Interim Deputy Director for the Texas Agricultural Experiment Station, replacing Charles Scifres who passed away in July.

Fran Wolak was named Chief Operating Officer for the Clemson University Cooperative Extension Service and will replace Dan Smith who is retiring in the fall of 2003. Wolak also serves as the Associate Dean of Field Operations for the Clemson Extension Service.

Johnny Wynne was named Interim Dean of the College of Agriculture and Life Sciences effective June 1. Wynne formerly was Associate Dean and Director of the North Carolina Agricultural Research Service.