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APPLIED ECONOMICS

# THE GROWTH OF CITIES AND RURAL ECONOMIC DEVELOPMENT

**Peter F. Orazem**

Koch Visiting Professor of  
Business Economics  
University of Kansas  
School of Business

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The official U.S. rural population fell 4 percent between 1990 and 2000. That is the first time in the nation's history that the rural population has decreased. Numerous government programs have been instituted to stem the rural decline. Politicians have pledged to create new initiatives to reverse rural stagnation. Activist groups pledge to fight the economic development divide. And yet the decrease in rural population is not due to population losses in the counties designated as rural in 1990. Instead, it is due to the reclassification of formerly rural counties as urban in 2000.

Every decade, the Census Bureau determines which counties are rural, urban or metropolitan. Over time, the fastest growing rural counties change status. Of the counties designated as rural in 1970, the Census Bureau has reclassified 15 percent of the counties as metropolitan and another 15 percent as urban. In fact, the population in counties designated as rural in 1970 has grown 41 percent, exceeding the 38 percent population growth for the nation as a whole.<sup>1</sup>

The reclassification of growing counties from rural to urban is not just a statistical curiosity. It can generate misleading conclusions regarding the policies that do foster rural growth. For example, several studies have examined the fastest growing rural counties in order to identify "best policy practices," ignoring the 30 percent of formerly rural counties that the government has reclassified as urban or metropolitan.

One conclusion that can be drawn by examining the 30 percent of the counties that are no longer rural is that rural population growth is propelled by proximity to a metropolitan market. Since 1970, population growth has averaged 70 percent in rural counties that were adjacent to

<sup>1</sup>Artz and Orazem (2004)

a metropolitan county, nearly double the national average. These were among the fastest growing counties over the past 30 years. In contrast, rural counties that were not adjacent to a metropolitan area grew only 25 percent, well below the national average.

The importance of being able to access an urban market is apparent in Kansas. Table 1 shows the population share and population growth rates for six types of counties: Metropolitan counties; urban counties with a city of at least 25,000; counties adjacent to a metropolitan or urban county; counties with a main town of at least 10,000 population, counties adjacent to those counties with a main town of at least 10,000; and remote counties that are more than one county distant from a town of at least 10,000 population.

The only counties growing at the national average are the metropolitan counties (Wichita, Kansas City, Lawrence and Topeka). Counties containing cities with at least 25,000 population are growing about half as fast. Counties within commuting distance of a metropolitan or urban area are growing slowly, those with a town of at least 10,000 growing even more slowly, and their smaller neighboring counties held steady in the 1990s after shrinking in the agricultural recession of the 1980s. Remote counties that cannot easily access even a small town have shrunk steadily for the past 30 years. The unmistakable story from Table 1 is that population size fosters growth, and lacking that, proximity to population size fosters growth.

There are strong incentives for rural residents to migrate to cities. Average wages in metropolitan areas exceed average wages in nonmetropolitan areas by 20 percent after controlling for education and work experience. Metropolitan firms are 20 percent more likely to offer health insurance benefits. Nevertheless, despite better pay and benefits in metropolitan areas, surveys indicate that parents would prefer to raise children in smaller towns, and prefer houses with yards to apartments. The growth of rural areas around cities is

**Table 1: Kansas Population Growth and Population Share by Proximity to a Metropolitan Area**

	Population Share	Growth 1970-2000	Growth 1990-2000
Metropolitan	56%	37.0%	14.0%
Urban	11%	22.0%	5.9%
Adjacent urban	18%	5.4%	3.4%
Town	7%	0.5%	1.9%
Adjacent town	4%	-9.0%	-0.2%
Remote	5%	-17.2%	-4.6%
Kansas	100%	19.6%	8.50%

Source: Author's calculation based on data from the U.S. Census Bureau

evidence that many households are willing to trade-off time spent commuting in order to take advantage of both the higher incomes offered by cities and the lower housing costs and better lifestyles offered by rural areas.

Studies indicate that household decisions regarding where to live and where to work respond significantly to wages, housing prices, and commuting times.<sup>2</sup> Reductions in commuting time, say by improving roads from rural areas to the city, raise the population of counties adjacent to the metropolitan area and increase the number of commuters. Reductions in housing prices in the rural fringe counties have similar effects.

Those interested in the economic development of Kansas' rural counties must account for the economic importance of relative population density. About 85 percent of the state's population lives within 45 minutes of a metropolitan area or a large town. An additional 10 percent live within easy commuting distance of a town of at least 10,000 people.<sup>3</sup> Evidence suggests that job growth in those metropolitan, urban, and small towns represent the best economic development option for rural counties lacking a population center themselves.

What about the remaining 5 percent of the Kansas population living in more remote areas? If growth requires a

<sup>2</sup>See So et. al. (2001)

<sup>3</sup>Census data suggests that people are willing to commute up to an hour each way to access a better job.

job center with a critical mass of population, those counties need to create a virtual job center. One option is to form cooperative development strategies across several counties aimed at attracting jobs to one town in the group. There is convincing evidence that neighboring counties, even neighboring rural counties, have complementary growth patterns.<sup>4</sup> Job growth in one county leads to population growth among its neighboring counties, and even raises population two counties distant. Labor mobility through commuting allows residence of other counties to take advantage of job growth anywhere in a two county radius. Consequently, economic development cooperation rather than competition holds the greatest promise for improving the prosperity of Kansas' most rural counties.

A common objection to the cooperation strategy is that the county getting the new firm will improve its tax base. This objection leads to another possible development strategy for remotely located counties: combine tax bases. County boundaries in Kansas were set arbitrarily nearly 150 years ago and do not reflect current economic realities. The average county in California, for example, is almost 4 times larger in area and 23 times larger in population than a Kansas county. Surely it cannot be more complex to administer a four county region in Kansas than a one county region in California?

A second objection to the cooperation strategy is that consolidated county services and administration in Kansas would lower the quality of local service provision. However, it would seem equally possible that cost savings from cooperation would improve and not degrade government services. More importantly, there is no evidence that rural population growth responds to changes in government services. In fact, many studies find the opposite: that the negative effects of taxes

levied to finance the service outweigh the positive effects of the services provided. This should not surprise anyone, in that no one whose residential location decision is primarily driven by the quality of government services would move to a rural county in the first place. Rural counties were atypically populated by the self-sufficient.

A rapidly growing body of theoretical and empirical research suggests that there are substantial returns to scale that give cities a natural economic advantage in production. The close proximity of many consumers, workers and suppliers, the ability to network within and among professions, and the availability of superior infrastructure to support transportation, communication, and information processing all raise the productivity of labor in more densely populated areas. It is not possible for more sparsely populated areas to match those advantages in isolation. However, improvements in transportation allow residents of other counties to access those advantages through commuting. More remotely located counties can only compete if they can cooperate. While a single town of 10,000 may not be large enough, it is the counties with even smaller towns that have been losing ground in Kansas and elsewhere in the Midwest.

### Further Reading

Artz, Georgeanne and Peter F. Orazem. "Bias in the Beale Codes: How Changing Rural Designations Lead to Misleading Inferences Regarding Economic Growth." Iowa State University. Mimeo. 2004

Khan, Romana, Peter F. Orazem and Daniel M. Otto. "Deriving Empirical Definitions of Spatial Labor Markets: The Roles of Competing versus Complementary Growth." *Journal of Regional Science* 41 (November, 2001): 735-756.

So, Kim Sui, Peter F. Orazem, and Daniel M. Otto. "The Effects of Housing Prices, Wages, and Commuting Time on Urban-Rural Residential Choice." *American Journal of Agricultural Economics* 83 (November, 2001): 1036-1048.

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<sup>4</sup>Khan et al (2001) found that county population grows when wage or income growth occurs as far as two counties away.



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**School of Business  
University of Kansas  
Summerfield Hall  
1300 Sunnyside Ave.  
Lawrence, KS 66045-7585**

**785-864-5134 (phone)  
785-864-5369 (fax)**

**[www.cae.business.ku.edu](http://www.cae.business.ku.edu)**

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