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# The Changing Economy of the Rural Heartland

*By Mark Drabenstott and Tim R. Smith*

The economy of the rural, or nonmetropolitan, Heartland has undergone great change over the past 15 years. Deep recessions in agriculture and energy, restructuring in manufacturing, and the emergence of the service industry are just some of the forces that have reshaped the rural economy of the nation's midsection. Having shared in this economic transition and now facing a common economic future, the states of the rural Heartland form an identifiable economic region. For the purposes of this book, the Heartland is defined as the 12 states that stretch from the Mississippi River to the Rocky Mountains and from Texas to Canada. These states include Colorado, Iowa, Kansas, Minnesota, Missouri, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, and Wyoming. (Figure 1).

After a dismal decade in the 1980s, the economy of the rural Heartland has recovered somewhat. Nevertheless, questions linger about the Heartland's future. Although economic indicators have picked up on average, much of the new rural growth is in counties with scenic amenities or in emerging trade centers that draw much of their strength from surrounding counties. Many counties in the rural Heartland, meanwhile, remain in steep economic decline, with dwindling populations and growing fiscal problems. Farm-dependent and some remote counties appear to be facing particular economic challenges. In short, many observers wonder if the economy of the rural Heartland will trail the national economy in the period ahead.

Concerns over future growth have prompted business and government leaders in the Heartland to reconsider the region's future. As leaders look ahead, it is useful to answer three basic questions.

- How is the region's rural economy changing?
- Why is it changing?
- And, what are the policy options for boosting rural growth in the future?

The purpose of this book is to answer these questions. This introductory chapter reviews the recent performance of the Heartland's rural economy and explores the region's outlook. The next three chapters examine changes at work in three of the region's main sectors—manufacturing, services, and agriculture. The fifth chapter considers the fiscal challenges facing state and local governments in the region. The final chapter evaluates the policy choices facing the region's economic development officials.

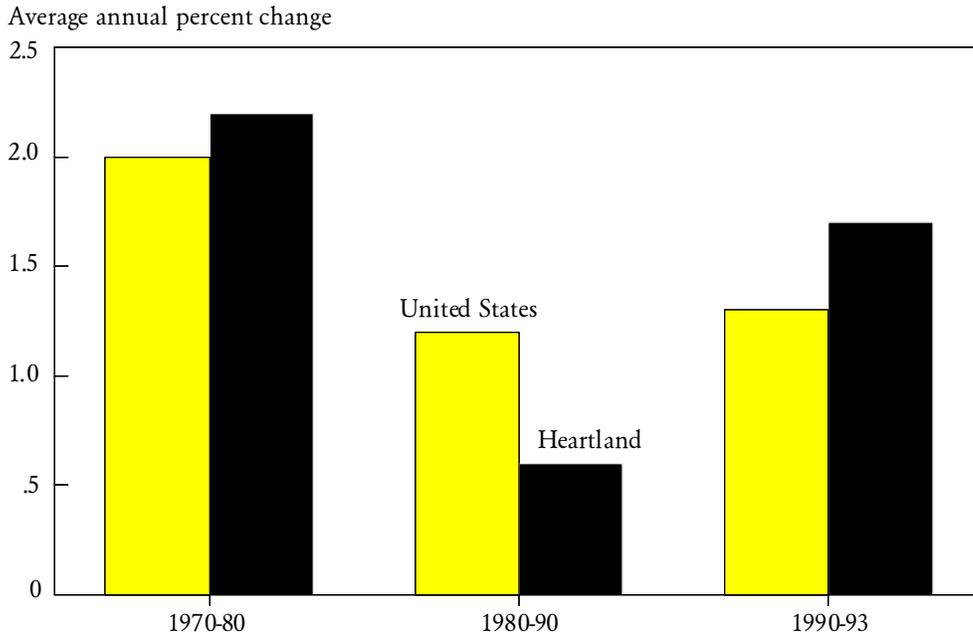
## *TRENDS IN THE HEARTLAND'S RURAL ECONOMY*

To understand how the Heartland's rural economy is changing, a useful first step is to review four broad trends that describe the current economic environment. First, the rural economy is recovering, but some rural places have adapted to a new economic environment better than others. Second, a consolidation in retail activity is producing fewer



Chart 1

**Nonmetro Employment Growth**



Source: Bureau of Economic Analysis.

were much less susceptible to the 1990-91 general recession than many other parts of rural America. In addition, the 1990s brought a big influx of new residents to the mountains of the Heartland—particularly in Colorado, Montana, and New Mexico. Economic growth was sparked by the arrival of new businesses and additional demand for housing and services.

The economic revival in the rural Heartland has been welcome but not universal. While jobs have grown 1.7 percent a year in the 1990s, the growth has been concentrated in roughly a third of the region’s rural counties. Of the 779 nonmetropolitan counties in the 12 Heartland states, only 279 counties exceeded the average. As a group, these counties enjoyed job gains of 3.3 percent a year, compared with gains of just 0.5 percent a year in the remaining

500 counties. Thus, most rural counties still struggle with economic challenges that are now more than a decade old.

In short, the gap between economic strength and weakness in the rural Heartland is widening. This gap appears to be the result of three general economic trends in the region: a consolidation in retailing, a consolidation in agriculture, and a new pattern of spatial linkages.

*Consolidation in rural retailing*

Historically, the rural Heartland has been characterized by a great number of small- to medium-sized rural trade centers. When the Heartland was settled more than a century ago, county seats were placed

about 30 miles apart in the eastern states of the Heartland and somewhat further apart in the central and western states. Sources of essential government services, these towns also became commercial and financial hubs in the region.

Today, many county seat towns can no longer claim to be a trade center for the surrounding area. Over the past two decades, commerce and finance have consolidated across the Heartland, resulting in fewer, bigger trade centers. Telecommunications and improved transportation have facilitated this trend, but one of the primary forces behind the change may have been the advent of discount retailing in rural areas. Beginning in the early 1970s, national retailers began to build large stores in rural towns. Able to exploit significant economies of scale in purchasing and distribution, the new stores offered more selection and lower prices than competing rural retail stores. This spurred a dramatic consolidation of rural retail activity. Joined by consolidation in health care and financial services, the result has been a significant reduction in the number of viable economic hubs in the rural Heartland. Although difficult to quantify, researchers have chronicled substantial reductions in the number of stores and the enlargement of market regions in Heartland states such as Iowa (Stone).<sup>1</sup>

### *Consolidation in agriculture*

Agriculture is a common ingredient to the rural economy throughout the Heartland. The 12 Heartland states are home to more than two-thirds of the nation's farm-dependent counties. Historically, agriculture has been a primary engine of growth for rural communities. A large number of midsized farms have created a significant economic multiplier effect for agriculture, enhanced by any local agricultural processing in rural areas.

Today, that picture is changing. Heartland agriculture has moved quite rapidly to fewer, bigger farms. The largest farms in the United States, those

with annual sales greater than \$500,000 a year, are just 2.5 percent of all farms; yet they account for 40 percent of farm output. A similar pattern is found in the Heartland states.

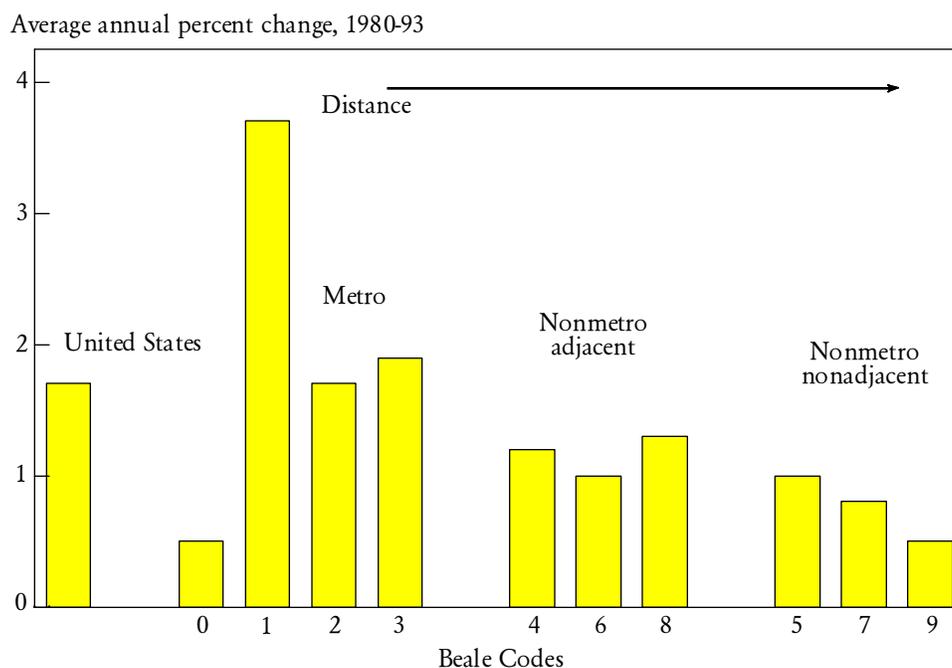
As agricultural production has moved to bigger farms, agriculture's links with local rural economies have weakened. Large farms tend to procure their inputs, including financial capital, from more distant places that can offer more products and lower prices. In addition, large farms often have direct marketing relationships with processors, bypassing local buyers.

More recently, a pickup in the industrialization of agriculture has further weakened linkages to local rural communities. Industrialization refers to the movement toward more direct production and marketing relationships between producers and processors, a trend now symbolized by the broiler industry. Under industrialization, processors attempt to secure a stable supply of consistent product while exploiting the economies of scale in new production and processing methods. The result is a further concentration of production, as production shifts to bigger firms and clusters around processing plants much more than in the past.

Industrialized agriculture produces two effects on rural communities. As production increases in some "cluster" communities, it will leave others, lessening agriculture's impact. Communities that are home to industrialized production and processing may see jobs and income increase. But even there, the economic links will be different than under commodity production. More production inputs are purchased from nonlocal sources, and more of the profits go to nonlocal owners of the firm.

Agriculture remains important to the Heartland. But its economic impact is much different than the past. Commodity agriculture remains, but it is in bigger hands. And the advent of industrialized agriculture creates a new pattern of agricultural haves and have-nots. And even in those communities that have industrialized agriculture, the economic links are different than in the past.

Chart 2

**Employment Growth Slows Away from Heartland Cities**

Note: Beale codes indicate counties' remoteness according to their proximity and population. Beale codes 0 through 3 indicate counties located within metro areas; codes 4, 6, and 8 indicate rural counties adjacent to metro areas; codes 5, 7, and 9 indicate rural counties not adjacent to metro areas. Within each group, a higher code indicates a smaller population.

Source: U.S. Department of Agriculture.

*Remoteness an economic liability?*

One of the principal definitions of the word rural is "remote." Much of the rural Heartland lives up to this definition, lying a long distance from major metropolitan areas. This remoteness appears to have become a deterrent to economic growth in many cases.

Since 1980, economic growth in remote areas has tended to be slower than in rural counties closer to metropolitan areas. Metropolitan counties in the Heartland experienced faster job growth, on average, than adjacent rural counties (Chart 2).

Similarly, rural counties adjacent to metropolitan areas had faster job growth than rural counties that were more remote.

If this pattern persists, it poses a real challenge to the many rural counties in the Heartland that are far from metropolitan areas. Nevertheless, some remote counties are clearly exceptions to this general pattern. Remote counties with scenic amenities, such as in Colorado or the Ozarks portion of Missouri, have grown at rapid rates by attracting tourists, retirees, and new businesses. On the other hand, remote farm-dependent Great Plains counties have fared much worse.

In summary, the Heartland's rural economy has recovered somewhat in the 1990s, but growth has been concentrated in about a third of the region's rural counties. Consolidation in rural retailing and agriculture has further accentuated differences between growing and declining rural counties. Finally, remoteness appears to deter growth for many rural counties in the Heartland, particularly those that do not have scenic amenities.

### *THE OUTLOOK: A TALE OF TWO HEARTLANDS*

Buoyed by recovery in parts of the region and still confronted with some fundamental economic adjustments, the Heartland's leaders are giving renewed attention to the outlook for its rural economy. It is difficult to discuss the rural outlook for the region as a whole due to the widening gap between the region's growing and shrinking rural communities. A more useful approach is to examine in greater detail the factors that appear to distinguish economic winners in the rural Heartland from the losers. Doing so provides some clues to which locations are likely to achieve better-than-average growth in the period ahead, and which are likely to lag behind. Creating such a profile provides a clearer picture of what the region can expect in the coming decade, and it enables policymakers to consider policy options appropriate to their own set of circumstances. While the past is not always prologue to the future, there is little reason to believe that the economic trends discussed above will abate.

Examining the economic changes that have taken place since 1980, this section concludes that the outlook will continue to be a tale of two Heartlands. After mapping where the economic winners and losers have been, the section describes the characteristics that may divide rural Heartland communities into quite different economic futures.

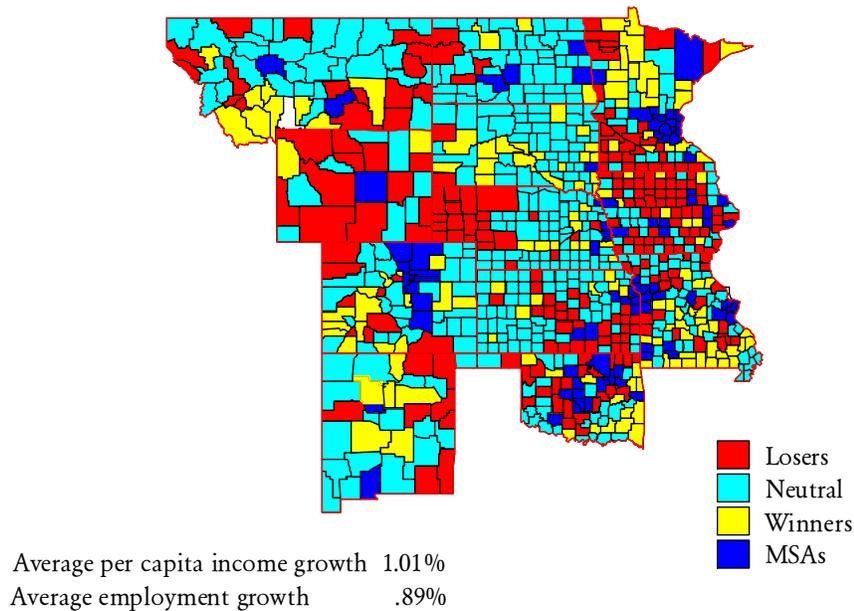
### *Where has the rural Heartland been growing?*

The best way to see the geographic layout of economic performance across the Heartland is to look at a map of economic winners and losers over an extended period of time. To help identify places with growing economies, economic "winners" are defined here as rural counties that have grown faster than the average for all rural Heartland counties. More specifically, winners are counties with above-average annual growth in both employment and real per capita income for the period 1980-93. According to that definition, winners are rural counties with average annual growth in employment greater than 0.89 percent and growth in real per capita income greater than 1.01 percent. Slightly less than a fifth of the Heartland's rural counties qualified as winners during the period spanning the 1980s and early 1990s. Over that period, 148 of the 779 nonmetro counties had above-average growth in employment and per capita income. Rural losers, by contrast, had employment and income growth far below average. In these lagging counties, employment declined slightly (-0.11 percent) and per capita income grew barely at all (0.2 percent).<sup>2</sup>

Winning counties in the rural Heartland enjoyed robust economic growth in the 1980-93 period. These 148 counties actually outperformed their urban counterparts. Rural counties that met the test for winners had average annual employment growth of 2.29 percent and income growth of 1.69 percent. Thus, income and employment growth for rural winners far outpaced growth in the region's metropolitan counties, where employment grew an average of 1.82 percent per year, while real per capita income grew 1.03 percent per year.

Where were the winners and losers? Figure 2 provides a map of the region that identifies winning and losing rural counties. Winners were clustered in the Rocky Mountains, northern Minnesota, southeastern Oklahoma, and southern Missouri. All of these areas offer scenic and recreational amenities. The losers were concentrated in Wyoming, eastern

Figure 2

*Economic Winners and Losers, 1980-93*

Nebraska, southern Minnesota, Iowa, and Oklahoma—areas depend heavily on traditional natural resource industries.

While losing counties depended on natural resource industries, winning counties tended to depend more on services. A classification system developed by the U.S. Department of Agriculture allows rural counties to be sorted according to their dominant economic base (Table 1).<sup>3</sup> Using this sorting method, the share of farm counties in the rural winners group was 15.5 percent, half the share of farm counties in the rural losers group. Government and retirement accounted for 17.6 and 12.8 percent of rural winners, respectively. The shares for both these classifications were much smaller for rural losers. In contrast, the share for rural trade counties was much larger for rural losers than winners. Retail consolidation led to the decline of

many counties that were trade centers at the beginning of the period. Since the economic bases listed in Table 1 are attached to counties at the beginning of the period, trade centers accounted for a large share of the losers.

*Characteristics of rural winners and losers*

Absent changes in state and local economic development policy, places that were winners during the past 13 years will probably continue to do well, and places that were losers will continue to lag. However, state and local economic development policy is rarely static. Policymakers will strive to bring economic success to places that have traditionally been losers and to sustain growth in places that have become winners. In doing so, they will

*Table 1*  
*Economic Bases in Rural Heartland Counties, 1980-93*

County type	Winners		Losers	
	Number	Percent	Number	Percent
Farming	23	15.5	73	30.9
Manufacturing	10	6.8	17	7.2
Mining	1	.7	12	5.1
Government	26	17.6	16	6.8
Retirement	19	12.8	9	3.8
Trade	35	23.6	97	41.1
Other	16	10.8	8	3.4
Mixed	18	12.2	4	1.7

Sources: U.S. Department of Agriculture and Federal Reserve Bank of Kansas City.

undoubtedly try to mimic the characteristics of the winners and avoid taking on the characteristics of losers. Thus, while rural winners can be identified by location and industrial base, a more thorough examination of the underlying characteristics that may have led to their relatively better economic performance helps to reveal which places are likely to be winners or losers in the years ahead.

Table 2 lists the characteristics most often associated with business location and rural economic growth. The first column lists location factors often cited in the business location literature: labor and other business costs, transportation costs, agglomeration, health care, education, and industry mix. A measure of each factor is given for the 148 winning counties in the second column and for the 236 losing counties in the third column.<sup>4</sup>

*Rural winners: The best of times.* Rural counties with the best prospects for growth during the remainder of the 1990s appear to be those with unique transportation or location features that overcome remoteness and provide access to markets, and

those able to leverage their scenic amenities into tourism and retirement-based growth. Evidence shows that rural economic winners generally have lower labor and other business costs, better transportation, a higher level of agglomeration, more doctors, more colleges, a better educated work force, and more retirement activity.

Among these, two features of winning counties stand out. The first is the ability to overcome remoteness. Winning rural counties had low transportation costs (measured by interstate highway miles) and high agglomeration economies (measured by employees per square mile). Although proximity to metro areas did not appear to distinguish winners from losers (the same proportion of winners and losers were adjacent to metro areas), relatively low transportation costs helped winners access markets inside and outside the Heartland region.<sup>5</sup> Moreover, winning counties appeared to benefit from agglomeration, where a concentration of economic activity possibly lowered business costs by increasing the availability of specialized supplier networks

*Table 2*  
***Selected Characteristics of Rural Heartland Counties, 1980-93***

<u>Characteristics</u>	<u>Winners</u>	<u>Losers</u>
<i>Labor and other business costs</i>		
Relative wage rate (as a percent of the U.S.)	69.4	74.3
Housing costs (median value of owner-occupied housing units)	37,279	32,361
Right to work (percent of counties in right to work states)	29.1	41.3
Local taxes per capita	358.6	482.2
<i>Transportation factors</i>		
Interstate highway miles (per 1,000 square miles)	11.4	10.1
Adjacent to metro areas (percent of counties adjacent to metro areas)	26.4	26.8
<i>Agglomeration</i>		
Employees per square mile	13.2	11.0
<i>Health care factors</i>		
Hospital beds (per 100,000 population)	546.0	636.3
Doctors (per 100,000 population)	72.9	65.8
Nursing home beds (per 100,000 population)	1,130.9	1,409.7
<i>Educational factors</i>		
Local government education expenditures per capita	490.5	559.6
College (percent of counties with colleges)	37.8	27.9
Percent of population with 16 or more years of education	13.7	10.9
<i>Industry mix factors</i>		
Retirement counties (percent)	12.8	3.8
Farm and mining income (as share of total income)	6.2	10.0

for materials or business services.

The second feature of winning counties is scenic amenities. Figure 2 reveals that winners are generally located in parts of the region with mountains or lakes. Moreover, the frequency of retirement counties among rural winners suggests that scenic amenities may play an important role in rural growth.

In the years ahead, the best economic performance among rural places in the Heartland is likely to occur in those counties that have already become winners. Some of these locations started with a combination of characteristics that attracted businesses and led to above-average growth over the entire period of the 1980s and early 1990s. Other locations turned scenic and recreational amenities

into retirement and recreation-based growth or found themselves centers of retail consolidation, often at the expense of surrounding locations. Those locations that continue to overcome remoteness by enhancing their ties to markets and those locations blessed with amenities are the most likely places to prosper in the second half of the 1990s.

*Rural losers: The worst of times.* Rural losers generally have higher labor and other business costs, less-extensive transportation networks, a lower degree of agglomeration, fewer doctors, fewer colleges, a less-educated work force, less retirement, and a higher degree of dependence on natural resources. Although rural losers tended to be no more remote than rural winners, these characteristics suggest they may have had difficulty overcoming remoteness. Moreover, the general absence of scenic and recreational amenities among losers prevented these places from riding the wave of retirement and recreation-based growth.

In the years ahead, remote places with strong ties to farming and mining and few scenic or recreational amenities will have difficulty boosting their economic performance. Well-thought-out economic development strategies might improve local business climates enough to bring moderate economic growth to a few places. But most places without fundamental access to markets, good overall business climates, or amenities will probably remain at the bottom of the distribution of economic growth among Heartland locations.

## CONCLUSIONS

The rural Heartland is enjoying an economic rebound in the 1990s, but gains are not being shared evenly across the region. Consolidation in rural

retailing and in agriculture is leaving fewer viable rural trade centers. Meanwhile, many small rural places are struggling because they are remote from economic hubs.

The outlook suggests a tale of two rural Heartlands in the period ahead, a continuation of a well-established pattern. Rural counties that have overcome their remoteness and improved their access to markets or emerged as rural trade centers, or that have scenic amenities, all appear to have a bright future. On the other hand, counties that are remote or depend on traditional natural resource industries will probably grow somewhat slower. The future of agricultural counties may depend on whether they become home to one of the emerging clusters of production and processing.

This divergent outlook for the region's rural communities will have many implications for policymakers. First, there will be a lively debate over the future of declining communities. Should policymakers attempt to halt their decline, and if so, how? Alternatively, should public investments be focused on counties that are more likely to grow? Second, economic policy will of necessity become more tailored to local circumstances than in the past. A "one size fits all" policy will not be effective in a region where economic performance ranges so widely. Finally, in a region tied historically to agriculture and mining, the economic changes now underway will require whole new approaches to economic development. Economic diversification will be critical to the future of many Heartland communities. Even those places that remain tied to agriculture will need to adjust to a new agriculture. The chapters that follow provide a more detailed insight into the economic changes occurring across the region and explore some of the policy questions that face the region's leaders.

## ENDNOTES

<sup>1</sup> Studying Iowa retail patterns from 1983 to 1993, Stone found that the introduction of Wal-Mart stores into 34 of Iowa's larger rural communities led to a decline in total retail sales of 46 percent in neighboring small communities with populations of 500 to 1,000.

<sup>2</sup> Rural counties with above-average employment *or* income growth (but not *both*) are classified as "neutral."

<sup>3</sup> Definitions of nonmetropolitan areas were derived from those used by Bender and others at the Economic Research Service, U.S. Department of Agriculture. The definitions used in this paper include updates developed by Hady and Ross (1990) for four economic base types (farming, manufacturing, mining, and government). Manufacturing counties received at least 30 percent of total proprietor's income from manufacturing enterprises in 1986. Mining counties received at least 20 percent of this income from mining sectors in 1986. Farming counties realized at least 20 percent of their labor and proprietor's income from agriculture in 1981, 1982, 1984, 1985, and 1986. (The definition of farming-dependent counties adjusts for fluctuations in farm income over time by using a five-year average. The year 1983 was dropped because it was an extremely aberrant year for farm income.) Government counties received at least 25 percent of their income from government payrolls in 1986. Retirement counties are identified by 1970-80

immigration patterns. If the number of immigrants over the age of 60 comprised more than 15 percent of the 1980 over-60 population, the county was assumed to be a retirement county. Income in these counties is likely to depend highly on transfer payments, private pensions, dividends, and interest earnings. Mixed counties are those meeting more than one of the economic base criteria. Trade counties do not fall into any of the other categories mentioned and are assumed to be trade centers that derive income by providing goods and services to surrounding counties. "Other" counties were either poverty counties or federal land counties that did not qualify for any of the economic base categories. (The approach in cataloging the counties was to emphasize a single economic base for each county and allow the poverty and federal lands counties to sort to the economic base group where they belonged.)

<sup>4</sup> For a more detailed discussion of these location factors and their expected influence on economic growth, see Smith.

<sup>5</sup> This finding is not inconsistent with the information shown in Chart 2. While employment growth during the 1980-93 period was faster in nonmetro counties that were adjacent to metro areas than in nonadjacent counties, not enough of the adjacent counties passed the strict criteria for being a "winner" to be able to conclude that a larger proportion of winners were adjacent to metro areas.

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Figure 2

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