Rural America in Transition

Mark Drabenstott & Lynn Gibson

Grade Levels: 9,10,11,12

Document Type: Supplementary Materials

Description:

Explores the economic change underway in rural America today and reviews the policy alternatives for dealing with this change.

This document may be printed.

Catalog

Main Menu

Document

Rural America In Transition

Foreword

The 1980s have brought more economic change to rural America than any decade since the 1930s. The sweeping changes have had especially pronounced effects on the states served by the Federal Reserve Bank of Kansas City—Colorado, Kansas, Nebraska, Oklahoma, Wyoming, the northern half of New Mexico, and the western third of Missouri. After a wave of rural business and bank closings, the rural economy is now beginning to stabilize.

As rural America looks to the 1990s, a number of essential economic and policy questions remain unanswered. This booklet attempts to understand the fundamental economic transition underway in the rural economy and discusses the important policy questions related to that transition.

Roger Guffey
President

The Contributors

Douglas E. Bowers
Head, Agricultural and Rural History Section, National Economy and History Branch, United States Department of Agriculture

Mr. Bowers assumed his present position at the Department of Agricultural in 1986. Prior to that, Mr. Bowers served as a historian in the Agricultural and Rural History Section. He first joined the Department of Agriculture in 1972. Mr. Bowers received his B.A. degree in history from the University of Maryland. He earned his M.A. and Ph.D. degrees in American History from the University of Chicago. Mr. Bowers has conducted research and written extensively on a variety of agricultural topics. Most recently, his interests have been focused on the creation and the effects of farm legislation since World War II and the effects of technology on agriculture.

Mark R. Drabenstott
Assistant Vice President and Economist, Federal Reserve Bank of Kansas City

Mr. Drabenstott heads the Regional Economics group within the Bank's Economic Research Department. Mr. Drabenstott has written and spoken widely on the problems and concerns of rural America. In addition, he has provided testimony to Congress on the nation's rural policy alternatives. Mr. Drabenstott joined the Bank as an agricultural economist in 1981, was named Senior Economist in 1983, and was appointed to the official staff in 1985. He holds a B.A. degree from Earlham College, and M.S. and Ph.D. degrees from Iowa State University. A native of Indiana, he was involved in a family farm business during his collegiate years.

Lynn E. Gibson
Assistant Economist, Federal Reserve Bank of Kansas City

Ms. Gibson is a member of the Regional Economics group in the Bank's Economic Research Department. In her duties, she has extensively researched the problems facing rural America. Her writings include several articles discussing rural economic development issues. Ms. Gibson's articles appear frequently in the Bank's *Economic Review and Financial Letter.* She received a B.A. degree in international affairs from the University of Colorado and a M.S. degree in agricultural and resource economics from Colorado State University. Before joining the Bank, Ms. Gibson worked as a Peace Corps volunteer on rural development projects in Ecuador.

Mark S. Henry
Professor of Agricultural Economics, Clemson University

Mr. Henry joined the faculty of Clemson University in 1978. Previously, he taught at the University of North Dakota. In 1986, Mr. Henry was a visiting scholar in the Economic Research Department at the Federal Reserve Bank of Kansas City. In 1983, he was a Fulbright Nominee to Erasmus University, The Netherlands. He received his B.A. degree in economics at Baker University. His M.A. and Ph.D. degrees in economics were granted by Kansas State University. Mr. Henry's areas of research include regional economics, rural development, government finance, and natural resources. His work has been published in a number of professional journals including *Agricultural Economics Research, American Journal of Agricultural Economics,* and *Socioeconomic Planning Sciences.* In addition, Mr. Henry has received several government research grants to study economic development.

Wayne D. Rasmussen
Chief, Agricultural History Branch, The United States Department of Agriculture, Retired

Mr. Rasmussen joined the Department of Agriculture in 1937. He assumed responsibility for the department's Agricultural History Branch in 1952 and held the post until his retirement in 1986. He has also served as an adjunct professor at the American University, George Washington University, the University of Maryland, and the Department of Agriculture's Graduate School. In his retirement, Mr. Rasmussen is acting as a consultant for and writing the 75th anniversary book on the Cooperative Extension Service. In his 35 year career at the Department of Agriculture, Mr. Rasmussen received a number of awards including the department's Distinguished Service Award and an honorary degree of Doctor of Letters from George Washington University in 1987. He has published a number of scholarly articles and has edited and written several books. He received his B.A. degree from the University of Montana and his M.A. and Ph.D. degrees from George Washington University.

Executive Summary

Rural America faces a number of serious problems moving into the 1990s. Among these are the plight of displaced rural workers and rural America's crumbling infrastructure and eroding tax base. Developing workable solutions for these pressing problems requires policymakers to make a careful examination of rural America. In particular, it is important that policymakers study the current structure of rural America, the factors influencing its growth, and the available policy alternatives.

Rural America has changed since the turn of the century. The idealistic vision of rural America as Thomas Jefferson's agrarian society is no longer valid. In reality, manufacturing—not agriculture—is the staple of rural America. In 1984, manufacturing accounted for about 40 percent of the jobs in rural America. Retirement communities, government, and trade sectors all contributed more to rural employment than agriculture. In fact, farm employment accounted for only about 9 percent of the jobs in rural areas.

While the rural economy is diverse, it has performed poorly in recent years. For example, income growth in rural areas has slowed significantly since the 1970s compared to metropolitan areas. Counties with their economies based on traditional rural industries—agriculture, manufacturing, and mining—saw the largest income declines. Together, these counties accounted for more than half of the rural population and income.

The lagging performance of U.S. rural counties results from structural changes in the economy. International forces, the shift to service industries, deregulation, and the modernization of agriculture all contributed to the decline of traditional rural industries.

Non-traditional rural industries have shown impressive growth, however. Counties depending on retirement services, government institutions, and trade continued to grow through the 1980s. As a result, these counties represent a new force in rural America that could sustain rural growth into the 1990s.

What factors might rural policymakers target to stimulate rural growth? County employment patterns generally result from a number of local characteristics, as well as national employment trends and industrial mix. While national employment trends and a county's industrial mix do the most to influence employment, they are outside the control of policymakers. So the real question is, what growth factors can policymakers control? According to empirical studies, three influential local factors which policymakers can influence are labor costs, transportation costs, and taxes.

Labor costs proved an important factor in stimulating county employment growth. All else the same, lower private-sector wage rates increase a rural county's ability to garner a larger share of private-sector employment. Also, right-to-work laws appear to have a positive influence on employment growth.

The effect of transportation costs on employment varies from county to county. Counties with a manufacturing base benefit from lower transportation costs. However, a highly developed transportation system seems to adversely affect retirement counties.

Taxes also influenced employment growth. Higher per capita local taxes reduced employment in farming and manufacturing counties. In retirement and trade counties, taxes appear to have little effect on employment.

Knowing how certain characteristics—such as labor costs, transportation costs, and tax burden—influence employment enables policymakers to offset their effects. In other words, policymakers can craft development programs to highlight strengths and minimize weaknesses.

In charting an overall rural policy, policymakers can choose between two policy alternatives: a rural transition policy and a rural development policy. A rural transition policy assumes economic problems in rural areas result from market forces. In other words, market forces shift rural resources to other parts of the economy. Given this, a transition policy would ease and facilitate the transition of rural resources. Under this policy, displaced workers might receive job training that would enable them to find work in other areas. Also, programs to inform displaced workers of new opportunities might be devised. Under this policy, infrastructure investments would be made to ease the transition of resources, not subsidize rural communities permanently.

Policy makers could also select a rural development policy. This policy assumes that a healthy rural economy is desirable, even if market forces appear pointed in the other direction. Under this policy, long-term programs designed to build the rural economy would be enacted. Under such a plan, the federal government would make infrastructure investments while the job of developing new industries would be left to state and local governments. The difficult aspect of this policy is the realization that not all rural areas warrant long-term investments. As a result, policymakers have to decide which areas have the best chance of success.

In conclusion, how policymakers approach the problems facing rural America will determine its shape in the 1990s. Before crafting solutions, however, policymakers should consider the structure of modern-day rural America, the factors influencing its economic growth, and the available policy alternatives.

1
Rural America in the Twentieth Century

Wayne D. Rasmussen, Douglas E. Bowers

Rural America has changed during the 20th century. At the beginning of the century, it was the center of American life. Today, rural America is but one component of the U.S. economy with about a fourth of the nation's population. Over that period, the character of the rural economy has changed from one dependent primarily on farming to one dependent on a striking diversity of economic activity including industry, retirement communities, recreation areas, as well as farming.

The typical rural community in 1900 consisted of a small town or village with numerous small farms within a few miles. Most people lived their lives and fulfilled most of their needs, economic and otherwise, within this community. Today, a single town may serve an area of widely scattered farms or might depend primarily on an industry or other form of economic activity. Services, information, and other needs may come from areas far removed from the community.

Several factors have been responsible for the dramatic change in rural America. Agriculture has undergone a technological revolution that sharply reduced the number of farms while increasing their specialization and capital requirements. The rural economy has gone through a series of booms and busts, pushing many farmers off the land. As a result of vast improvements in communications between city and country, many of the cultural differences between the two have been removed. Improved communication has made it easier for rural people to move to the cities, and vice versa, making for an integrated rather than a divided rural and urban economy.

Rural America in the Early Twentieth Century

After decades of depression and turmoil, rural America entered a period of prosperity at the turn of the century. Six out of ten Americans at that time lived in rural areas, including towns of less than 2,500, and most were employed in agriculture. Farm income was critical not only to rural areas but to the country as a whole. About a fifth of the nation's gross national product (GNP) came from farm income.

Several developments worked to the benefit of farmers. The closing of the frontier increased land values by reducing the amount of new land put into farms. Land values more than doubled between 1900 and 1920, rising 118 percent. Farm production, though still rising, slowed from the sharp increases of the late nineteenth century. Meanwhile, demand for farm products expanded due to burgeoning foreign sales and the rapid growth of cities, where most of a million or so new immigrants settled every year. Farmers also benefited from the mild inflation triggered by the discovery of gold in Alaska. Taken together, these changes meant higher farm prices and greater prosperity than farmers had seen for Many years.(1)

During the early 20th century, many progressive reformers became interested in improving the quality of rural life. The highlight of this movement was a report by the Country Life Commission, which was appointed by President Theodore Roosevelt in 1908 to study the condition of country life. The commission reported that rural areas needed substantial government aid to improve their living standards. Over the next ten years, many of the commission's recommendations became law. These recommendations included federal aid for roads, federal land banks, a parcel post system, a postal savings system, and a national cooperative extension service. The United States Department of Agriculture's (USDA) road program, launched on a large scale in 1916, proved especially important in linking rural and urban areas and providing farmers with easier access to markets.(2)

To encourage farm production during World War I, the government set minimum prices for wheat and hogs. As a result, large quantities of food were shipped overseas, both during and immediately after the war, and farm prices, in tandem with the general price level, rose. Land values also rose sharply as many farmers took advantage of higher prices to borrow large sums of money and expand their operations.

Farm prosperity came to an abrupt end in July 1920 when farm prices collapsed because of falling exports. In the space of a few months, prices for nearly all the major commodities fell by half. Land values also dropped which, coupled with some tightening of credit by the Federal Reserve, brought serious credit problems for overextended farmers. This downturn in farm income and asset values was the beginning of an agricultural depression that lasted a decade and a half. Commodity prices recovered some during the next few years but never again reached their wartime highs. Farmland lost 27 percent of its value between 1920 and 1927, a period when urban land values were rising.(3)

For urban America, the 1920s was a decade of prosperity. The urban population continued its rapid growth, surpassing rural population for the first time in 1920. For rural America, however, the 1920s was a decade of stagnation, with only a slight population increase for the decade. Moreover, many farm-oriented industries, such as implement and fertilizer manufacturers and rural business depending on farm trade, failed. In constant dollars, farm income did not return to anything close to prewar levels until the second half of the 1920s. And then, farmers found the prices they paid for manufactured goods had risen well above what they had paid before the war.(4)

The stock market crash of 1929 sent the entire country, urban and rural, into the worst depression in American history. By 1932, farm income had sunk to half its 1929 level. Between 1929 and 1933, the value of farmland and buildings had dropped 35 percent.(5) It was recognized almost immediately that recovery in rural areas, which still held 44 percent of the total population in 1930, was essential to recovery of the entire country. Under a law passed in 1929, federal funds could be loaned to farm cooperative associations so they could buy and hold farm commodities until prices improved. This effort had little effect on prices but did encourage farmers to form cooperatives. Direct government purchases in the early 1930s provided only temporary relief.

Rural America in the Great Depression

The inauguration of the New Deal in 1933 brought a concerted attack on the problems of rural America and gave the federal government a more direct role in resolving these problems. First came efforts to bolster farm income. The Agricultural Adjustment Act of 1933 and its 1938 successor laid the foundation for current price support policies. As these policies developed in the 1930s, they involved nonrecourse loans to farmers on crops that, in effect, set a floor under prices. In return, farmers were usually asked to cut production to eliminate surpluses. Farmers also were helped by expansion of government credit programs, such as the Farm Credit Administration, established in 1933. The USDA also provided drought relief, initiated crop insurance, and subsidized certain farm exports.

New Deal programs reached well beyond the farm. The Rural Electrification Administration organized local rural electric cooperatives to expand electrical service in rural areas. By 1941, the number of farms with electricity had more than tripled, and many rural communities had access to electrical power for the first time. Electricity not only improved life in rural areas but provided a base for new enterprises. The Resettlement Administration (RA) and its successors engaged in what is now called rural development. Poor families farming submarginal lands were moved to homesteads in new communities where it was hoped they could farm part time while working in new industries. Unemployed industrial workers were also settled on rural homesteads so they could increase their incomes by growing part of their food. Several suburban "greenbelt" communities were also set up near cities as demonstration projects. The RA also loaned money to low-income families for farm and home management, brought creditors and debtors together to adjust debts, and set up cooperative group health associations. Programs such as these were partly responsible for keeping the number of farmers high during the depression, even though many farmers were being forced out of business. Many of the RA's programs, operated by the Farm Security Administration after 1937, were considered experimental and ended after World War II.

Other New Deal relief programs also benefited rural areas. Food stamp and school lunch programs were aimed largely at cities but also applied to rural areas. The USDA's road building program was expanded to include more secondary roads, bringing rural people closer to towns. A large-scale soil conservation effort saved millions of acres of badly eroded land and retired 6 million acres of submarginal land, largely in the South and the Great Plains. Taken together, the New Deal set the precedents for most of the agricultural and rural programs in force today.(6)

Postwar Rural America

New Deal programs alleviated the worst suffering of millions of people during the Great Depression, but they failed to end the depression. That was accomplished by World War II. Between 1940 and 1945, war demand raised farm prices almost 90 percent. In constant dollars, income per farm rose 93 percent in that period. The government raised its price supports for most commodities to 90 percent of parity and guaranteed the supports for two years after the war.

Prosperity continued into the postwar years, but rural America began showing signs of profound change. Thousands who left the countryside to work in the cities during the war never returned. Part of this shift was because of a second agricultural revolution. Greater mechanization and use of fertilizers and pesticides made it possible to produce more food with fewer people. New technology was encouraged by the continuation of price supports at high wartime levels for basic commodities until 1954. Even when supports were lowered, they remained substantially higher than before the war.

The combination of high supports and the new technology increased production—and productivity—beyond anything seen before. Until then, farms had been mostly diversified, general operations with cash crops identified with particular regions of the country, such as cotton in the South, corn in the Midwest, and wheat in the Plains. Increasingly, farms became more specialized and crops shifted to new regions. Cotton and rice, for example, headed west.

Livestock, once found on almost all farms, became concentrated in a few places. Soybeans became a major crop associated with no particular part of the country.

This new, more productive style of agriculture led to the accumulation of surpluses and higher government costs as the farm population was undergoing a sharp decline. Between 1940 and 1950, the number of farms dropped significantly for the first time, from 6.3 million to 5.6 million. By 1960, the number had fallen to 3.9 million. This dramatic drop in the number of farms affected the makeup of rural areas. Farm families still accounted for most of the rural residents in 1940, but by 1960, they accounted for less than a fourth of the rural population. As a percentage of the total U.S. population, the farm population fell from 23.2 in 1940 to 8.7 in 1960.(7)

Many farmers remained prosperous, but rural poverty persisted in the midst of agricultural abundance and national prosperity. By the mid-1950s, attention was again focusing on the problems of low income farmers. A study requested by President Eisenhower suggested in 1954 that human and other resources should be moved out of agriculture. The report recommended that agricultural productivity be increased still further, that prospects for part-time farming and nonfarm rural jobs be improved, that opportunities for training be increased, and that employment of underemployed rural residents be encouraged by decentralizing defense industries.(8)

There were obvious problems with some of the proposals. Increasing agricultural productivity, good as the idea was, led to mounting surpluses and further migration from the farm. Part-time farming allowed underemployed farmers to supplement their farm incomes, but some full-time farmers felt part-time farmers undercut the markets by selling their products for less. Most of the concern, though, was over the idea of decentralizing defense industries. Many cities, already hurt by the shutdown of wartime industries, opposed any proposals for decentralization.

Nevertheless, the 1954 report signaled the beginning of modern rural development. The USDA took a decentralized approach to the problem by targeting 50 counties and areas for public projects. The Cooperative Extension Service took the lead in developing programs to be carried out by a number of federal and local agencies organized into rural development committees. Projects included job training and health programs for young people, farm improvement, and the luring of new industrial jobs to areas with high unemployment. By 1960, the program had been expanded to cover work planned or underway in 262 counties spread across 30 states and Puerto Rico.(9)

The rural development program came at a time of diversification in the rural economy, when other industries were rising to rival agriculture as sources of income. Spurred by the building of good roads, recreation became the main industry in some areas. In others, new factories absorbed some of the migration from farms. Still other areas became retirement centers. Many of these changes would have been made anyway, but studies showed that counties included in rural development programs developed faster than those that were not. Rural population remained stable during these years. While many poor farmers, particularly in the South, left for large cities, many remained to take new jobs. And some urban people left the cities for a new life in the countryside, though seldom in farming.

In 1961, the Kennedy Administration made rural development a priority for the USDA and set up a special Office of Rural Area Development. Emphasis was placed on eliminating rural underemployment by further expanding the system of local committees. These committees were at work in 42 states and 1,012 counties by early 1962. They received input from several USDA agencies and other departments, such as Commerce, Labor, and Health, Education, and Welfare. Congress enlarged the program that year to provide technical and financial assistance for locally initiated and sponsored programs aimed at eliminating chronic employment problems and fostering sound rural economies. Government loans were made to local groups to establish recreation areas, build hospitals, start small manufacturing plants, build water and sewer facilities, and carry out similar developmental activities. Between 1961 and 1972, annual appropriations for these projects increased from $575 million to $2.9 billion. An unstated major goal behind this and other programs was to stem the flow of rural poor to the cities. Thus, the emphasis was on providing jobs in local areas and using existing public facilities.(10)

The new rural renewal program began with multicounty pilot projects in several states. The Little River County Rural Development Authority project in Arkansas illustrates how the program worked. In 1964, the authority received loans totaling $458,000 to build lowcost modern homes. A loan of $95,000 financed the purchase of 614 acres for a forestry and recreation area. Other grants were made for administrative expenses, surveys of forestry and recreation areas, and the development of experimental vegetable plots, the produce of which went to a nearby processing plant. Federal finds helped build a hospital, and a plant to manufacture pallets was established with a loan from the Small Business Administration. Two years later, the USDA's Economic Research Service concluded that the economy of Little River County was growing much faster than similar nearby counties not participating in the renewal program and that its social institutions were better maintained.

The Economic Opportunity Act of 1964 marked the beginning of the Johnson Administration's ambitious War on Poverty. The act provided for a Jobs Corps of young people recruited from groups that were economically and educationally deprived. The act also provided for community action programs in urban and rural communities and for loans to low-income rural families when such loans offered a reasonable prospect of increasing family incomes. The 1965 Housing and Urban Development Act authorized the Farmers Home Administration (FmHA) to make personal loans for the purchase of previously occupied dwellings and farms and for improvements in farm buildings.

A Task Force on Agriculture and Rural Life in 1965 urged President Johnson to expand food programs, establish a rural senior citizen corps, help landowners over 65 maintain their farms, ensure a minimum annual income for all persons, provide literacy training, extend medicare benefits to all age groups, and set up "opportunity homesteads" with training programs for disadvantaged rural residents. Another far-reaching study by a presidential advisory commission, *The People Left Behind,* submitted a set of recommendations in 1967 that included providing employment opportunities for everyone willing and able to work, ensuring minimum incomes, starting an education extension service, expanding rural health services, developing family planning programs, and increasing rural housing aid. The next year the Extension Service released its own report calling for greatly expanded rural development.(11)

None of these calls for sweeping change were ever fully implemented. Escalating costs for the Vietnam War led President Johnson to recommend sharp cuts in rural development proposals as part of his drive to cut federal expenditures. Congress increased appropriations for food programs but many of the other proposals fell by the wayside.

The Prosperous 1970s

Rural America as a whole prospered in the 1970s, partly because farmers were doing well and partly because other areas of the rural economy were growing. For the first time in this century, the economies of nonmetropolitan counties grew faster than urban areas. The largest employment gains were in the service sector, but opportunities also increased in manufacturing, mining, and recreation. Farm income rose in the mid-1970s to levels not seen since the high price support era of the 1940s. The rise was due largely to a surge in agricultural exports after the Soviet grain sale in 1972. Farmers enthusiastically expanded their operations. Adjusted for inflation, the average price of land doubled between 1972 and 1977 and more than tripled by 1981. Farm debt for real estate also shot up. In the inflationary environment of the 1970s, few farmers worried about debt.(12)

The rural economy lessened its dependence on agriculture in the 1970s. By 1980, only about 700 out of 2,443 counties outside metropolitan areas were still considered heavily dependent on agriculture. Most of the rural population gains of the 1970s were in areas less dependent on agriculture. Agriculture itself accounted for only 13.2 percent of rural employment in 1979. Employment in related industries brought the total for the agricultural sector up to only 29 percent of the whole. Even within farm families, nonfarm income surpassed farm income in the 1970s, reaching 56 percent of the total by 1979. And despite general prosperity, steady productivity gains continued to reduce the number of farms, from 2.7 million in 1969 to 2.4 million in 1979.(13)

Rural development programs underwent review and change during the Nixon and Ford administrations. A cabinet-level Council for Rural Affairs was set up to aid in developing policies to strengthen the rural economic base, slow rural-urban migration, and create opportunities in rural communities that might attract urban residents. One new approach to the problem was federal revenue sharing, proposed by President Nixon in 1971. Another approach emphasized the regional nature of rural development problems by creating regional extension committees and regional rural development centers. In other respects, the government's rural development programs during the 1970s continued along the lines of earlier programs. Under authority of the Rural Development Act of 1972, for example, 1,213 private business and industrial loans in rural areas were guaranteed by the FmHA by 1979. Loans continued to be made for rural housing, water and sewer systems, and other projects. Rural development remained a regular part of agricultural legislation.

The Difficult 1980s

The 1980s have seen a turnaround in the rural economy, especially in the parts related to agriculture. Agricultural exports began declining after reaching an all-time high in 1981. Farm income became increasingly unstable, and the cost of government price support programs escalated because of lower prices and heavy surpluses. The credit picture became even worse. Farmers that had borrowed heavily during the 1970s and early 1980s, often at high interest rates, began suffering as incomes dropped and farmland values plummeted. Farm bankruptcies increased and the entire rural credit system was affected. Farmers found themselves increasingly at the mercy of macroeconomic forces beyond the control of traditional agricultural policies.

Problems on the farm have raised the spector of further problems in rural areas, especially where agriculture is the leading industry. Some communities, especially in the Corn Belt and Great Plains, are wasting away. Others are surviving but losing facilities. Bank failures increased 12 times between 1981 and 1985, with nearly 70 percent of them coming in rural areas.(14) Other businesses in rural towns have also been depressed. Economic problems have spilled over to schools, hospitals, and other institutions. In the hardest hit areas, the loss of community structure is changing the face of the landscape. Counties less dependent on agriculture have fared better. For many of them, however, the strong population growth of the 1970s has ended.

There is a temptation to compare the current agricultural problem with that of the 1930s, but there are more differences than similarities. For one thing, the Great Depression had a devastating effect on all segments of the agricultural sector. Today, the farmers in the worst trouble are those that borrowed too heavily when times were better. Moreover, the parts of the country most dependent on exports, such as the main corn and wheat areas, have been harder hit than others. Even in the worst-hit areas, prosperous farmers can be found living next to families on the verge of bankruptcy. Farm foreclosures between 1929 and 1934 were running at the rate of 25 per thousand farm businesses. In 1985, the rate was about 2.5 per thousand. In the 1930s, rural banks often disappeared when they went of business. Today, most of the banks that fail quickly reopen under new ownership without any severe loss in service.

Farmers in the 1980s are also protected by a safety net of price supports and other government programs that were not in place in the 1930s. Today's situation is probably closer to that following the price break of the 1920s than to the extraordinary and pervasive depression of the 1930s. By 1987, there were signs that credit problems were easing. Nevertheless, agriculture has been going through another period of significant adjustment in which still more farmers will leave the land and more rural communities will decline.

Summary

Rural life has changed dramatically since the turn of the century. The farm population has fallen from 42 percent of the total U.S. population to less than 3 percent today.(15) Fewer than a third of the rural counties now depend heavily on agriculture. Rural and urban lifestyles are closer to being the same than ever before. Yet for many years, surveys have shown that most Americans believe farms and rural communities offer a better quality of life than cities. This feeling has increased as some of the drawbacks to rural life have ended and isolation has been reduced by surfaced roads, automobiles, telephones, radios, and television. Cultural deprivation has been solved by the same forces that ended isolation and by the greater availability of cultural facilities. Electricity, water and sewer systems, low-cost credit, improved housing, recreational resources, and many other things that enhance the quality of rural life have come from government programs and the private sector.

Don Paarlberg wrote in 1980, "Agriculture is in the process of losing its uniqueness.... Farm people have entered the mainstream of American economic, social, and political life .... The institutions set up to serve a unique vocation have had the unforeseen consequence of helping to reduce—indeed, almost to destroy—that uniqueness."(16) He was writing about agriculture, but his general thesis would apply to all rural people. They can no longer be readily distinguished from nonrural people in speech, dress, or manner, and they enjoy many amenities formerly available only in cities. But despite this change, overall economic opportunities in rural areas still lag behind those in urban areas. The current agricultural problem and the slowing down of the rural economy as a whole suggest that rural areas will face more than their share of problems in years to come.

Notes

(1.) Wayne D. Rasmussen, "Agricultural and Rural Policy: A Historical Note," U.S. Congress, 99th Congress, 2nd Session, Joint Economic Committee, *New Dimensions in Rural Policy: Building Upon Our Heritage,* June 5, 1986, p. 33; Richard Lingeman, *Small Town America, A Narrative History 1620-The Present,* Houghton Mifflin, Boston, 1980, p. 331; Bureau of the Census, *Historical Statistics of the United States, Colonial Times to 1970,* Government Printing Office, Washington, 1975, I, pp. 11, 127, 232.

(2.) Clayton S. Ellsworth, "Theordore Roosevelt's Country Life Commission," *Agricultural History,* 34, October 1960, pp. 155-172.

(3.) Murray R. Benedict, *Farm Policies of the United States, 1790-1950,* Twentieth Century Fund, New York, 1953, pp. 171-175; U.S. Department of Agriculture, Economic Research Service, *Farm Real Estate Historical Series Data: 1850-1970,* Economic Research Service, Washington, 1973, p. 2.

(4.) Bureau of the Census, *Historical Statistics,* I, 11; U.S. Department of Agriculture, *Major Statistical Series of the U.S. Department of Agriculture, How They Were Constructed and Used,* III, Gross and Net Farm Income, U.S. Department of Agriculture, Washington, 1957, p. 50.

(5.) U.S. Department of Agriculture, *Major Statistical Series,* III, p. 50; U.S. Department of Agriculture, *Farm Real Estate Historical Series,* p. 2.

(6.) Gladys Baker, *et. al., Century of Service: The First 100 Years of the United States Department of Agriculture,* U.S. Department of Agriculture, Washington, 1963, pp. 143-222.

(7.) Bureau of the Census, *Historical Statistics,* I, 11, 13, 457.

(8.) U.S. Department of Agriculture, *Development of Agriculture's Human Resources,* U.S. Department of Agriculture, Washington, 1955.

(9.) Donald L. Nelson, *Silver Threads Among the Gold: The First 25 Years of Community and Rural Development Programs,* Joint Planning and Evaluation Staff Paper, 1980.

(10.) Wayne D. Rasmussen, "90 Years of Rural Development Programs," *Rural Development Perspectives,* II, October 1985, p. 4.

(11.) President's National Advisory Commission on Rural Poverty, *The People Left Behind,* Government Printing Office, Washington, 1967; Joint USDA-NASULGC Extension Study Committee, *A People and A Spirit,* U.S. Department of Agriculture, Washington, 1968, pp. 53-57.

(12.) U.S. Department of Agriculture, *Agricultural Statistics,* 1985, Government Printing Office, Washington, 1985, pp. 369-370.

(13.) Mindy F. Petrulis, "Effect of U.S. Farm Policy on Rural America," *Rural Development Perspectives,* I, June 1985, pp. 31-34; U.S. Department of Agriculture, *Fact Book of U.S. Agriculture,* U.S. Department of Agriculture, Washington, 1981, p. 33; Bureau of the Census, *Historical Statistics,* I, p. 483; U.S. Department of Agriculture, *Agricultural Statistics,* 1985, pp. 370-372.

(14.) Gregory Gajewski, "Rural Bank Failures Not a Big Problem—So Far," *Rural Development Perspectives,* II, June 1986, pp. 2-8.

(15.) Bureau of the Census, *Historical Statistics,* I, p. 457; U.S. Department of Agriculture, *Agricultural Statistics,* 1986, p. 382.

(16.) Don Paarlberg, *Farm and Food Policy: Issues of the 1980s,* University of Nebraska Press, Lincoln, 1980, pp. 8-9.

2
A Changing Rural Economy

Mark Henry, Mark Drabenstott, Lynn Gibson

A brisk wind blowing across rural America is bringing economic change. In the 1980s, rural lenders incurred sharp increases in loan losses, and rural bank failures reached post depression heights. Small rural towns have found their economic viability in question, and county governments have strained under an eroded tax base. In short, the rural economy has come under pronounced stress that has increased the tempo of change.

Although rural economic change has been underway for a long time, the recent economic downturn has been significant for two principal reasons. First, it marked the first time in the past two decades that rural residents have not made real economic gains toward their urban counterparts. Urban residents have long had higher per capita incomes than rural residents, but the gap had been narrowing until recently. The stall in rural improvement has been especially difficult after the rapid economic gains made by many rural residents, notably farmers, in the early 1970s. Second, it marked the first time since the Great Depression that so much public attention has been focused on rural problems. Federal, state, and local authorities have brought forward an array of public policy initiatives to address rural issues. The initiatives range from increased farm program spending to new rural development programs. For these two reasons, there is a great need for understanding how the rural economy is changing.

This chapter compares the recent economic performance of rural America with that of urban America. It also explores some of the causes of the recent rural performance. The chapter concludes that the convergence of rural and urban incomes seems to have stalled and that the remaining gap will be more difficult to remove because of structural forces now at work.

How Well Is Rural America Doing?

Is there an economic gap between rural and urban counties? If so, is rural America catching up with the rest of the country or falling behind? This section answers these questions by reviewing the patterns of per capita income in rural and urban America over the 20 years ended in 1984. The section also discusses the pace of rural economic activity over that period and examines the variability of rural incomes.

What is rural America?

For the purposes of this study, nonmetropolitan counties are assumed to constitute rural America.(1) Of the more than 3,000 counties in the contiguous 48 states in 1984, about 83 percent, or 2,441, were classified as nonmetropolitan counties. These rural counties are then grouped according to the economic sector most important to each: manufacturing, mining, farm, retirement, government, mixed, trade, and other.(2)

Contrary to the popular notion that rural counties depend mostly on farming, manufacturing is the dominant economic base of rural America. Counties depending on manufacturing accounted for about 36 percent of the nonmetropolitan personal income and population in 1984 (Table 2.1). Manufacturing also accounted for about 40 percent of the employment in rural areas, more than any other sector. These proportions of nonmetropolitan economic activity were more than three times the proportion for counties depending on farming. Taken together, counties dependent on government, retirement, and trade accounted for about the same proportion of rural population, income, and employment as farm-dependent counties. While the farm-dependent counties account for more activity in some regions, such as states of the Tenth Federal Reserve District, the economic composition of rural America is much more diverse than usually recognized.

TABLE 2.1
Population, personal income, and employment in the United States, metropolitan and nonmetropolitan counties, 1984

County	Population	Personal Income	Employment			
Type	Number(*)	(thousands) †	Percent of Total	($ billions) †	Percent of Total	(thousands) ††
All Counties	3,067	232,882	100.00	2,971.52	100.00	91,546
Metropolitan	626	168,302	72.27	2,309.58	77.72	72,029
Nonmetropolitan	2,441	64,580	27.73	661.94	22.28	19,517
Manufacturing	618	23,401	36.23	240.76	36.37	7,703
Mining	176	3,918	6.07	38.01	5.74	1,115
Farm	602	7,407	11.47	77.57	11.72	1,782
Retirement	222	7,316	11.33	76.97	11.63	2,115
Government	239	8,329	12.90	84.26	12.73	2,538
Mixed	128	1,896	2.94	17.75	2.68	530
Trade	370	10,571	16.37	110.75	16.73	3,228
Other	86	1,742	2.70	15.87	2.40	506

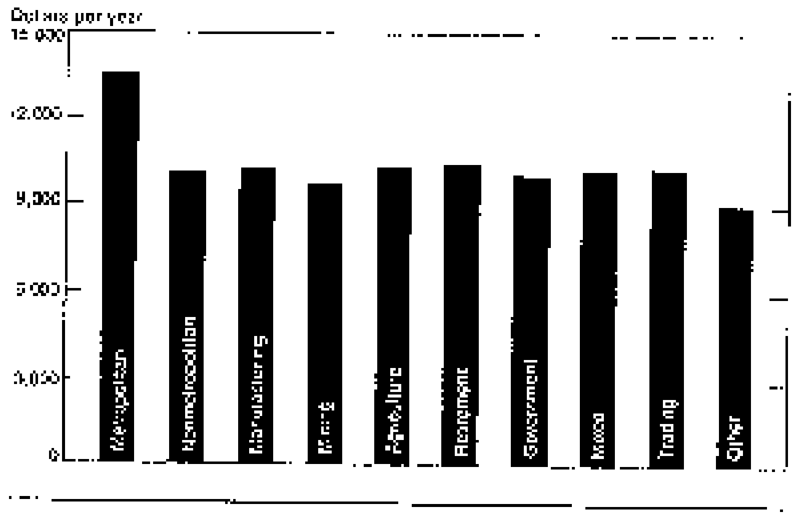
(*) Economic Research Service, U.S. Department of Agriculture, modifications by the authors

†Bureau of Economic Analysis, U.S. Department of Commerce

††Bureau of Labor Statistics, U.S. Department of Labor. Includes private and civilian government employees for second quarter 1984. Excludes farms with fewer than ten employees.

CHART 2.1

Mean per capita income, metropolitan and nonmetropolitan counties, 1984

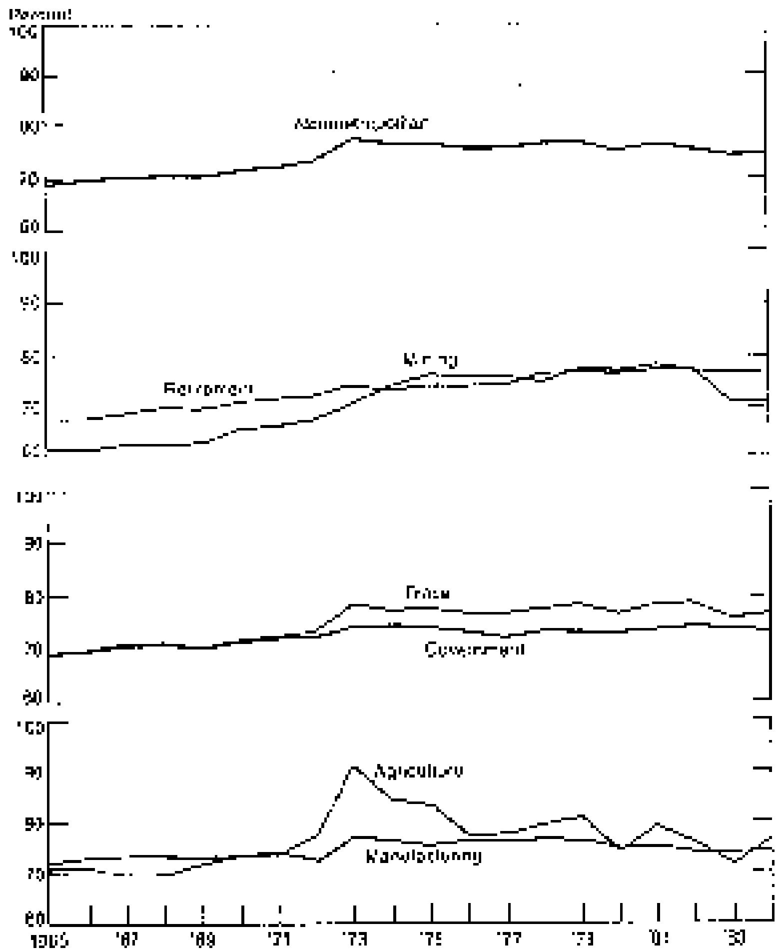


The rural income gap

Per capita income differs substantially between rural and urban counties. Metropolitan counties of the United States had income levels approaching $14,000 per capita in 1984—$4,400 in 1967 dollars (Chart 2.1). In contrast, the nonmetropolitan counties clustered around the $10,000 level—$3,300 in 1967 dollars. To match metropolitan levels in 1984, rural per capita incomes would have needed to be about 35 percent higher.(3) Chart 2.1 also shows that per capita income varies somewhat between rural areas but far less than between metropolitan counties and any of the rural county groups.

Has the per capita income gap been increasing or decreasing in recent years? Chart 2.2 shows the real per capita income gap expressed as the ratio of nonmetropolitan per capita income to metropolitan per capita income for the 1965-84 period. Two periods appear to have been particularly important over this 20-year span. First, the 1965-73 period reveals a narrowing of the gap ratio, with rural income rising as a percentage of urban income from 69 percent in 1965 to 78 percent in 1973. In constant 1967 dollars, the gap declined from $970 in 1965 to $885 in 1973. Second, the 1973-84 period shows nonmetropolitan per capita incomes making no further progress toward metropolitan levels. The gap has actually widened over the last five years, with the ratio of rural to urban income falling to 75 percent in 1984. In 1967 dollars, the gap rose from $885 in 1973 to $1,116 in 1984.

CHART 2.2
Nonmetropolitan real per capita income as a percent of metropolitan real per capita income, by type of county, 1965-1984



For most of the rural county groups, then, incomes appear to have stagnated from 1973 to 1979. But another interpretation of Chart 2.2 can be made for some rural counties. Farm-dependent counties had a spectacular jump in income in 1973 due to a unique set of world circumstances—among them world crop shortages and increased Soviet imports—that sent U.S. crop prices soaring. The high farm income subsequently proved unsustainable, and farm income declined through 1977. Nevertheless, farm income in the late 1970s was still higher than in the early 1970s. Some would suggest, therefore, that the 1973-77 period was an aberration and farm-dependent counties were, in effect, closing the gap with metropolitan counties from 1965 to 1979. The steady gains in farm wealth and farmland values throughout this period support this view. But even though farm dependent counties may have made steady gains, the evidence suggests that income growth in many other types of rural counties, notably the dominant manufacturing-dependent counties, began to fall behind urban counties in 1973, and the gap widened through the remainder of the 1970s.

Thus, the overall rural income gap appears to have narrowed from 1965 to 1973 and widened from 1973 to 1984. These two periods are now examined to determine how the various types of rural counties have fared.

The most dramatic gains in the 1965-73 period were made in farming and mining counties (Chart 2.2). Farm-dependent counties moved from 70 percent of the metropolitan per capita income level in 1965 to almost 92 percent in 1973. As noted above, 1973 was unusually profitable for U.S. agriculture due to extremely favorable commodity market conditions. Mining counties increased their incomes from 62 percent of the metropolitan level in 1965 to 71 percent in 1973. The other traditional rural counties, where manufacturing dominates, made less dramatic improvement relative to metropolitan counties, but they still raised their incomes from about 72 percent of the metropolitan level in 1965 to about 77 percent in 1973. Similar growth was seen in the other major groups of nonmetropolitan counties, those dependent on government, trade, or retirement activities. Income in each of these county groups grew from about 68 percent of the metropolitan per capita income average in 1965 to the 74 to 78 percent range in 1973.

From 1973 to 1984, when the overall income gap was widening, some types of nonmetropolitan counties fared better than others. Only the retirement counties, however, were able to improve their relative wellbeing, advancing from 74 percent of the metropolitan level in 1973 to 77 percent in 1984. Incomes of all other types of nonmetropolitan counties fell further behind the metropolitan level.

The most dramatic drop was in farm counties, where real per capita income fell from 91 percent of the metropolitan level in 1973 to 76 percent in 1984. Incomes in manufacturing counties started the period at 77 percent of the metropolitan level and showed a slow but steady downward trend to 75 percent by 1984.

Relative per capita income in mining counties fluctuated during the period but ended 1984 at about 71 percent, the same as in 1973. Government and trade counties also showed little net change from their 1973 positions. Government counties had about 75 percent of the metropolitan level in 1973 and 74 percent in 1984, while trade counties dropped from 78 percent of the metropolitan income level to 76 percent.

Rural and urban economic activity

Real per capita income reflects the average wellbeing of the population in a county group. By looking at changes in the gap between urban and rural per capita incomes, it can be determined whether the average level of wellbeing of rural America is converging or diverging with urban wellbeing. To assess the overall vitality of the rural economy, however, other measures of economic activity are needed.(4)

One measure of change in economic activity at the county level is the rate of growth in total real income. The rate of population growth also is useful, since population change reflects the number of local workers available and the number of local consumers of goods and services. Table 2.2 shows average annual rates of growth in total real income, population, and real per capita income for metropolitan and nonmetropolitan counties. To the extent that the data allow, they are divided to coincide with business cycle peaks.

TABLE 2.2

Real personal income, population, and real per capita income growth in the United States, metropolitan and nonmetropolitan counties, selected periods, 1965-84

	Average Annual Growth Rates (percent)							
		1965-69			1969-73			1973-
Area	Total(*) Personal Income	Popu-lation	Per(*) Capita Income	Total Personal Income	Popu-lation	Per Capita Income	Total Personal Income	Pop-latio
Metropolitan	7.0	3.3	3.7	3.4	1.1	2.2	1.9	0.9
Nonmetropolitan	4.6	0.4	4.2	6.2	1.5	4.7	2.2	1.4
Farm	3.7	-0.6	4.3	9.3	0.5	8.7	-0.2	0.7
Mining	3.8	-0.4	4.2	6.9	1.4	5.4	4.7	2.0
Manufacturing	5.0	0.9	4.2	4.8	1.3	3.5	2.0	1.1
Government	5.2	1.1	4.1	5.9	2.1	3.7	2.7	1.8
Retirement	5.3	0.9	4.3	7.7	3.6	4.0	5.0	3.3
Trade	4.0	0.0	4.0	6.1	1.0	5.0	2.1	1.1
Mixed	5.4	1.3	4.0	6.2	1.2	5.0	1.6	1.2
Other	3.3	-0.3	3.6	7.0	1.3	5.6	3.4	1.8

Source: Calculated from unpublished data, Bureau of Economic Analysis, U.S. Department of Commerce.
(*) The personal income and per capita income data used to compute growth rates were in 1967 dollars.

As shown in Table 2.2, nonmetropolitan counties had a small 0.5 percent advantage over metropolitan counties in per capita income growth from 1965 to 1969. That advantage was consistent with the slow upward movement in the gap ratio shown in Chart 2.2. During that period, however, there were indications that economic activity was increasing faster in metropolitan counties. Metropolitan rates of growth in both total personal income and population exceeded the nonmetropolitan rates. Thus, while the per capita income gap was slowly narrowing from 1965 to 1969, nonmetropolitan counties were not showing robust growth in economic activity.

Sluggish rural economic activity in the 1965-69 period was particularly evident in terms of population growth. While metropolitan population grew an average of 3.3 percent a year, the population of nonmetropolitan counties grew only 0.4 percent a year. Farm and mining-dependent counties actually lost population during this period. Taken in conjunction with the slower total income growth in nonmetropolitan counties, therefore, nonmetropolitan counties were not keeping up with metropolitan areas in generating new economic activity.

The period from 1969 to 1973 was a far different story. During that period, total personal income grew faster in all types of nonmetropolitan counties than in metropolitan counties. Population growth in nonmetropolitan counties also exceeded growth in metropolitan counties. Only the farm and trade counties lagged metropolitan counties in population growth. That was also a period when rural per capita incomes grew more than twice as fast as metropolitan incomes. Further, the 1969-73 period saw the emergence of strong population and income growth in retirement counties, a trend that has persisted throughout the 1970s and 1980s. Population in retirement counties grew at average annual rates more than three times the rates in metropolitan areas. The rate in retirement counties was well over twice the rate of the average nonmetropolitan county. The 1969-73 period, then, was a time of vigorous economic activity in rural America and a time of convergence in the wellbeing of rural and urban residents.

From 1973 to 1979, indicators of broad economic activity remained strong in nonmetropolitan counties. All types of nonmetropolitan counties—except those dependent on farming—had faster population growth during this period than metropolitan counties. Moreover, more rapid growth in nonmetropolitan personal income accompanied the growth in rural population. However, not only was this late 1970s growth in rural population temporary, but it was also concentrated in a small subset of rural counties—those dependent on retirement, mining, and government. Population increased 3.3 percent in counties dependent on retirement, 2.0 percent in counties dependent on mining, and 1.8 percent in counties dependent on government. In comparison, population growth in metropolitan areas averaged only 0.9 percent. Further, on average, total real personal income was falling in farm counties.

The gap in per capita income growth widened substantially between rural and urban counties from 1979 to 1984. Table 2.2 shows that the expanding overall gap between rural and urban wellbeing was also accompanied by slower rural rates of growth in total personal income and population. This divergence underscores the conclusion that the economic health of rural America has worsened in the 1980s. While the divergence in per capita incomes from 1973 to 1979 was associated with generally robust rural population growth, the divergence of the 1980s was in tandem with slower income and population growth in rural areas than in urban areas.

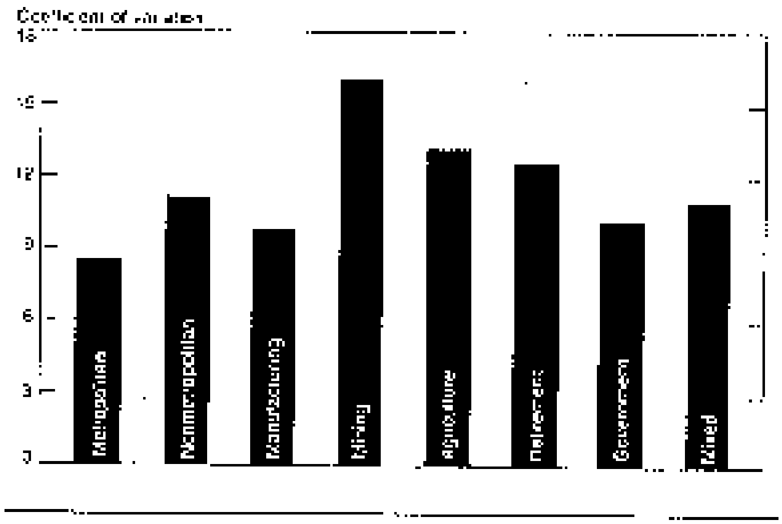
Thus, growth in the average level of wellbeing and the volume of rural economic activity has slowed significantly since 1979, both absolutely and relative to gains in metropolitan counties. In terms of income growth, the parts of rural America that have lagged the most are the traditional rural counties—those depending on agriculture, manufacturing, and mining. Nonmetropolitan counties with economies based on government and retirement activities continue to outperform the metropolitan areas in both income and population growth.

Instability in rural incomes

Rural incomes have not only lagged behind metropolitan incomes, they have also ranged more widely over time—that is, they have not been stable. Since 1965, all the nonmetropolitan county groups have experienced a wider range of fluctuations around the 20-year mean per capita income than have the metropolitan counties. This is illustrated in Chart 2.3, which plots the coefficient of variation, a statistic that measures the variation of observations around their mean value.(5) The wide variations in income suggest that rural counties are highly sensitive to short-term economic events that affect the value of the commodities or goods they produce. As might be expected, the commodity-dependent counties—those depending on agriculture and mining—

show the greatest instability. Those based on manufacturing and government activities show the least instability.(6)

CHART 2.3
Variation in mean per capita income, metropolitan and nonmetropolitan counties, 1965-1984



The Rural Income Gap: Long-Run Trend or Cyclical?

Views differ on whether the gap in rural and urban per capita incomes should be expected to disappear or to become larger as time passes.(7) One consideration is whether the gap is associated with phases of the business cycle. for example, urban per capita incomes might increase faster than rural per capita incomes during business expansions. If so, the per capita income gap would tend to widen during the expansion phase of the business cycle and the size of the gap would be partially a cyclical phenomena.

A procedure to test for the influence of the business cycle is to express the gap in real per capita income over the past 20 years in terms of an annual index and then compare movements in that index with annual changes in real GNP. The aggregate income gap index measures the dispersion of per capita income for each category of counties around the national average per capita income.(8) If per capita incomes of rural and urban counties are converging over time, this index should become smaller, indicating that the per capita income for each region is moving closer to the national average. The index also reflects per capita income differences between the various types of rural counties. Thus, the index is a measure of both the degree of income dispersion between rural and urban counties and between rural counties over the past 20 years.

CHART 2.4
Relation of metropolitan to nonmetropolitan income dispersion to growth in real GNP

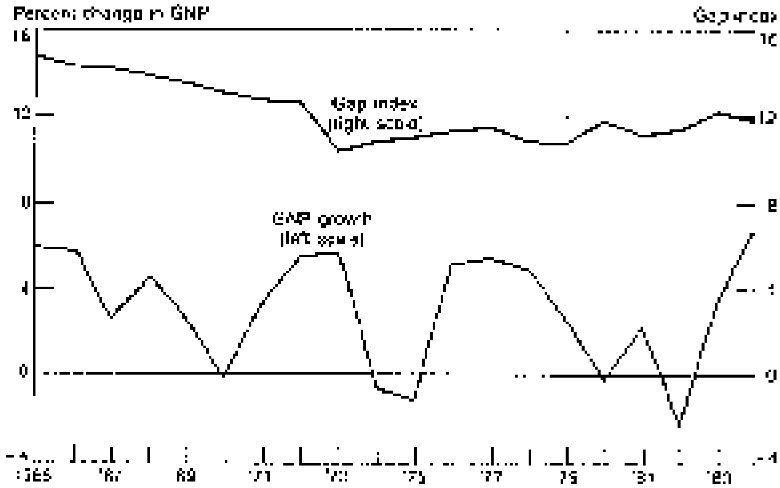


Chart 2.4 plots the per capita income gap index against annual changes in real GNP. Examination of the gap index by itself supports the findings that the difference between urban and rural incomes narrowed and then widened. The index fell until 1973, indicating that the gap between rural and urban per capita incomes narrowed. Since 1973, however, the index has increased slightly, indicating that the income gap widened. The convergence of urban and rural incomes seems to have stalled for ten years.

Comparison of the gap index with annual percentage changes in real GNP shows no correlation. That conclusion is supported when the income gap index is regressed on the percentage change in GNP and some time variables. The coefficient that reflects the relationship between the gap index and percentage change in real GNP is not statistically different from zero.(9)

Thus, the rural income gap does not appear to respond to business cycles. This finding supports the view that the rural income problem is more a long-term structural issue than a manifestation of the business cycle. That being the case, such variables as public infrastructure, education and job skills, and institutional change take on added importance as factors affecting rural America.

Forces Leading To Rural Economic Change

As shown above, rural incomes have not made gains on urban incomes in the past ten years. And despite slight overall increases, real per capita incomes have declined in some rural counties during the last five years, especially in many of the traditional rural counties depending on mining and agriculture. In addition, the gap between rural and urban incomes appears to be structural, unrelated to the business cycle.

What forces explain the slowdown in the rural economy? This section discusses four forces that appear to have contributed to rural economic problems in the 1980s: international factors, the shift to services, deregulation, and agricultural change.

International factors

Several international factors have played a critical role in the U.S. economy in recent years. Those that have affected rural industries are brought into focus by examining the international forces at work in the national economy and then looking at how traditional rural industries have performed.

Mounting international competition has put many U.S. industries on the defensive in the 1980s. Good examples include basic manufacturing, agriculture, and forest products. A strengthening of the U.S. dollar from late 1979 to early 1985 intensified the competition by giving foreign producers a price advantage. Also, a deep worldwide recession in 1981-82 cut demand for many products traded in international markets, including food and energy, so that producers from various countries were left to compete for a stagnant or declining total world market. As the effects of the world recession linger, many international markets, especially commodity markets, remain weak.

The net result of these international factors is that U.S. industries that export or compete against imports have not performed well in the 1980s. And it is just such industries that form the economic backbone of the traditional rural economy.

Rural manufacturing has been especially subject to foreign competition in recent years. Rural manufacturing plants tend to produce labor-intensive goods and, thereby, face stiff competition from other countries where wage rates are often lower than in the United States. For example, the textile industry in the United States, concentrated in the rural Southeast, has seen a rise in textile imports from Pacific Basin countries that has replaced a significant share of domestic production in recent years. As a result, textile makers, like many other rural manufacturers, have had disappointing sales in the 1980s and employment has been pared.

Agriculture—a uniquely rural industry—has endured a deep recession in the 1980s that to a considerable degree can be attributed to developments in international food markets. Agriculture's downturn has put many rural communities under economic stress. Recent surveys suggest that nearly a fourth of rural nonfarm businesses are having severe financial problems.(10)

The energy industry also has undergone a sharp downturn due mainly to international factors. Like agriculture, energy production— the extraction of oil, gas, and coal—is largely a rural industry. Increased international energy supplies and stagnant world demand have led to significant declines in energy prices in recent years. Because of the downturn in the international energy industry, many rural regions that developed rapidly when the industry boomed have recently had extremely weak local economies.

The forest products industry also has been affected by increased foreign competition, notably from Canada. Lumber production in the Northwest and, to a lesser degree, the Southeast has been curtailed partly because of the increase in imports. Thus, local economies in regions that depend on lumber production have been weak.

In general, the traditional rural economy has been adversely affected by international forces in the 1980s. Manufacturing, agriculture, energy, and forest products industries all have had difficult economic problems as a result of increased foreign competition, the strong dollar, and weak world markets. While the same international factors also have had negative effects on the urban economy, metropolitan areas generally have more diverse economies that buffer some of these effects. Rural economies, however, normally depend on one principal industry, and none of the traditional rural industries have fared well in the 1980s.

The shift to services

While many U.S. basic industries have been in recession through much of the 1980s, the service portion of the U.S. economy has boomed. But urban areas have benefited more from that development than rural areas. Most rural counties essentially have been left behind in the nation's shift to a service-based economy.

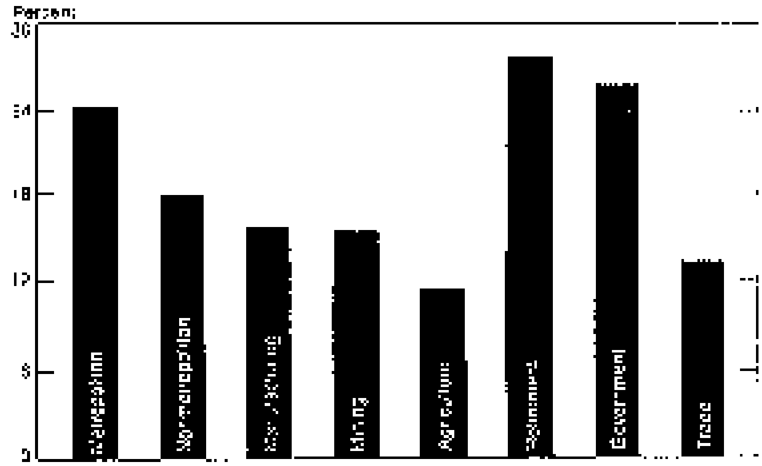
Service jobs are less important in the rural economy than in the urban economy. Service jobs provided about 15 percent of total rural employment at the end of 1984, compared with 22 percent of total urban employment. Thus, service industries are about half again as important in urban areas as in rural areas.(11) This difference means that if the service sector of the economy continues to grow faster than other sectors, most rural counties will likely have slower growth in total employment than urban counties.

Service jobs have grown in rural areas, but much more slowly than in urban areas. More than two-thirds of the new jobs created in the United States between the fourth quarter of 1979 and the fourth quarter of 1984 were in services—over 3.6 million jobs. Seven out of every eight of the new service jobs were in metropolitan areas. Over this period, service jobs increased 24.1 percent in metropolitan areas and only 18.0 percent in rural areas. Chart 2.5 shows that between 1979 and 1984 the increase in rural service jobs was concentrated in counties depending on retirement and government activities, where the percentage increase was greater than in metropolitan areas. Service jobs in the traditional rural counties increased much less than in metropolitan areas.

Most rural communities are ill-situated to benefit from the U.S. economy's shift to services. Recent studies indicate that the types of service employment that have increased most rapidly are business services, computer and data processing services, and temporary help services.(12) Firms that provide these types of services prosper in metropolitan areas, where potential clients are concentrated. They are not likely to locate in rural areas, where clients are fewer and much more dispersed.

CHART 2.5

Percentage change in service employment, metropolitan and nonmetropolitan counties, fourth quarter 1974 to fourth quarter 1984



Deregulation

Deregulation, especially of financial markets, has been another force for rural economic change in the 1980s. In essence, deregulation appears to have forced businesses in many rural areas to pay higher interest rates and, in some cases, higher transportation rates than in the 1970s, when both the banking and transportation industries were regulated.

Many analysts argue that deregulation of the banking industry has raised interest rates to rural borrowers.(13) When the interest rates banks could pay on deposits were regulated, the cost of funds to rural banks was lower overall than the cost of funds to urban banks. Many rural banks had large demand deposits that paid no interest. Because the cost of their funds was lower than metropolitan banks, rural banks charged lower interest rates for their loans. But with the lifting of interest rate ceilings under the Depository Institution Deregulation and Monetary Control Act of 1980, nearly all rural banks had to pay more to attract deposits. Thus, deregulation contributed to an increase in the cost of funds at most rural banks in the 1980s. As the cost of their funds increased, so did the interest rates they charged rural borrowers.

While the cost of capital in rural areas tended to be below the market in the 1970s, it has been about the same as the market in the 1980s. Hence, while rural business activity was spurred by low-cost capital in the 1970s, the higher cost of capital in the 1980s has slowed rural business activity. This negative effect of deregulation has been offset, at least to some degree, by the higher interest rates rural savers receive on their deposits. On balance, however, economic activity in many rural communities probably has been negatively affected by the higher interest rates from deregulation. Higher debt service costs have an immediate effect on rural business activity while higher returns to rural savers increase rural wealth, which tends to influence spending and economic activity over a longer period of time.

Deregulation of the transportation industry has not affected the rural economy as much as the deregulation of banking, but it too has brought changes. Generally, transportation service to rural areas has not been reduced, but corresponding prices have increased in some cases, especially compared with transportation costs for metropolitan areas. For example, airline service to rural areas has increased since deregulation, but the number of flights that service metropolitan areas has increased more.(14) Airfares to and from many rural locations have increased, while heightened hub travel at major airports has actually driven down airfares between many major cities. Truck freight hauling rates have risen in some rural areas, particularly remote places.(15)

In the past, regulation contributed more to lower interest rates and transportation costs in rural areas than in metropolitan areas. Recently, though, deregulation has brought new market forces to bear on rural areas. And coming at a time when the rural economy was under many downward pressures, the effects of deregulation may have contributed to that stress.

Agricultural change

Farm financial stress is the most widely known reason for rural economic problems. That stress has left serious marks on the rural economy and exacerbated an already well-established trend in U.S. farm structure. Increasingly, U.S. agriculture is dominated by a large number of small part-time farms that earn most of their family income off the farm and by a relatively small number of very large farms that produce most of the nation's food and fiber. The farms in between, the closest remaining relative to the "family farm," are those on the decline. Since many rural communities have built their local economy around servicing a large number of medium-sized farms, it is not surprising that these communities are having economic problems.

Recent data on U.S. farm numbers verify these trends. In 1984, 70 percent of the United States' 2.3 million farms had annual sales of less than $40,000. The vast majority of these farmers earned more income off the farm than on the farm. Together, they produced only 15 percent of U.S. farm products. But 1 percent of the nation's farms had annual sales of more than $500,000 and these farms produced nearly 30 percent of U.S. farm products.

A distinguishing feature of the large farms that control a mounting proportion of U.S. farm production is their sophistication in purchasing inputs and services and in marketing the commodities they produce. Dealing in large volumes, these farm operators often bypass small communities in search of better prices. Meanwhile, most of the small farms tend to be located near cities that offer employment opportunities. Such jobs often are not available in small farm communities. Some small farm-dependent communities, then, are likely to continue to suffer economically due to the evolving farm structure of U.S. agriculture.

Thus, a confluence of forces has negatively affected the rural economy. International competition and a strong dollar served to put traditional rural industries at a disadvantage in the first half of the 1980s. Also, the rural economy has not participated fully in the shift to service jobs. Moreover, deregulation has brought new market forces to bear on rural areas, and structural change in agriculture has placed financial and economic pressures on many rural communities tied to an earlier farm structure.

Conclusions

Rural America is in the midst of difficult economic change. A few of the nonmetropolitan counties, especially those depending on retirement and government, have continued to show income growth since 1979. Overall, however, the growth in rural incomes has slowed significantly since the 1970s compared with growth in metropolitan incomes. The divergence in income growth does not appear correlated with movements in the business cycle. Rather it appears related to longer term structural problems in rural areas. Thus, the causes for rural America's lagging incomes probably go well beyond short-run fluctuations in the demand for the goods that rural America produces.

Traditional rural America faces the most difficult problems. Real per capita income in farm-dependent counties has declined on an average annual basis since 1973.

Counties depending on mining and manufacturing have also shown slow growth or declines in average income in recent years. Together, these three groups of traditional rural counties account for more than half of the rural population and income in the United States.

A new group of counties is moving to the fore of the rural economy. The bright spot in the rural mosaic currently is the strong growth in the retirement counties. Along with increases in the number of people seeking environmental amenities with retirement, the steady growth in transfer payments and other sources of nonwage income in these rural counties may provide the basis for a steady increase in the growth in the retirement-dependent counties. Similarly, the rural counties that depend on military bases, institutions of higher learning, and other government installations might expect stable growth in incomes. Rural counties that are becoming wholesale and retail trade centers may be another group with growth potential, though perhaps at the expense of traditional mainstreet businesses in neighboring small communities.

Much public attention has been focused on farm problems in the 1980s. But, the economic problems facing rural America encompass far more than just agriculture. Thus, as policymakers begin to consider rural problems, their challenge will be to craft policy that addresses the full scope of rural economic change.

Notes

This chapter first appeared as an articled titled "A Changing Rural America" in the July/August 1986 edition of the Federal Reserve Bank of Kansas City's *Economic Review.*

(1.) The definition of nonmetropolitan as rural America is consistent with the framework developed by Lloyd Bender and others, "The Diverse Social and Economic Structure of Nonmetropolitan America," *Rural Development Research Report 49,* Economic Research Service, U.S. Department of Agriculture, September 1985. Nonmetropolitan status is based on 1974 Office of Management and Budget designations.

Definitions of nonmetropolitan areas were derived from those used by Bender and others at the Economic Research Service, U.S. Department of Agriculture. Manufacturing counties received at least 30 percent of total labor and proprietor's income from manufacturing enterprises in 1979. Mining counties received at least 20 percent of this income from mining sectors in 1979. Farming counties realized at least 20 percent of their labor and proprietor's income from agriculture over the 1975-79 period, based on the weighted mean contribution of this income over the entire period. Government counties received at least 25 percent of their income from government payrolls. 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. Diverse counties do not fall into any of the other categories mentioned and may be trade centers that derive income by providing goods and services to surrounding counties. Of the 86 counties classified as "other," half were poverty counties and half were 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. Counties that satisfied more than one of the economic base groups were assigned to the mixed group. This process allowed an accounting of population, income, and employment shares for each type of rural county.

(2.) The economic base model of regional economics is founded on the assumption that certain types of economic activity are affected by exogenous forces—forces outside the regional economy. These are called basic economic sectors. Examples are farming, mining, and manufacturing sectors that sell their goods to users outside the region. Other examples include tourist activities that draw spending into the region from outside residents, retirement communities that receive transfer payment income from outside the region, and government activities like military bases that obtain income from outside the region.

In contrast, the nonbasic sectors of a regional economy are those in the region providing goods and services to the basic sectors and local population. These are usually the trade, utility, and personal services sectors. The level of activity in these nonbasic sectors depends on the level of activity in the basic sectors.

(3.) Another explanation for the gap in metropolitan and nonmetropolitan per capita incomes is simply that the cost of living is usually much lower in rural areas than in urban areas. Thus, some argue the income gap is much narrower when adjusted for differences in local prices. That is, the real gap, computed with the appropriate deflators, is much smaller than the nominal gap. Unfortunately, there are no reliable indexes for measuring the cost of living differences. One effort to gauge regional cost of living differences concluded that low-income areas differ from high-income areas in terms of the expenditure patterns associated with low and high-income households but that there may not be much difference in prices paid for items in the budget. See Advisory Commission of Intergovernmental Relations, *Regional Growth: Historical Perspective,* 1980.

(4.) Harvey S. Perloff, "Problems of Assessing Regional Economic Progress," *Regional Income: Studies in Income and Wealth,* National Bureau of Economic Research, Princeton University Press, 1957, pp. 48-49.

(5.) The index is the coefficient of variation (CV) of weighted per capita income in each group of counties. CV is the standard deviation of the group's weighted mean per capita income expressed as a percentage of the weighted mean per capita income. Large coefficients of variation indicate a large amount of variation within a county group around the group's mean per capita incomes.

(6.) Rural counties also have had wider disparity in income at any particular time. Some mining-dependent counties, for example, may be consistently in the high-income range while others hover near the poverty line. The average of yearly coefficients of variation in the incomes of county groups from 1965 through 1984 shows that nonmetropolitan counties have a significantly wider range of income levels than metropolitan counties. Of the nonmetropolitan counties, those depending on manufacturing, retirement, and mixed bases have average disparity measures close to that of metropolitan counties. Farming and mining counties have much wider variations.

(7.) Some analysts expect rural and urban per capita incomes to converge over a long time. Arguments for this view are based on a model of regional growth that predicts labor and capital resources will be sufficiently mobile to equalize rates of return to these resources over geographical areas. Resource movement continues until wage rates— and ultimately, per capita incomes—converge between regions.

Others view regional income gaps as the result of long-run structural problems that will not be reversed by resource reallocations in the economy. According to this view, once a region obtains some growth advantage, it will continue to grow faster than other regions. For example, agglomerative (or mutual attraction) forces in urban areas may arise from the diversified pools of skilled labor, services, and intermediate goods available mostly in urban counties. These forces may give urban areas a growth advantage that will be cumulative and result in larger income gaps between rural and urban areas as the national economy expands.

(8.) The index of the regional income gap derived from Jeffrey G. Williamson, "Regional Income Inequality and the Process of National Development: A Description of the Patterns," *Economic Development and Cultural Change,* July 1965, pp. 1-45, and Orley Amos, "The Sensitivity of Regional Income Variation to Cyclical Economic Fluctuations," *Review of Regional Studies,* Spring 1983, pp. 4-11.

$$Vw = \frac{\left[\sum_{I=1}^{n} (yi-y)^2 fi/N\right]^{1/2}}{y}$$

where

yi = mean income of the ith region
y = national mean income
fi = population in region i
N = national population
n = number of regions

In this article, there are seven nonmetropolitan regions defined by their economic base categories and one metropolitan region. The "other" category, which included 86 nonmetropolitan counties that could not qualify in any economic base categories, was eliminated from the national totals and, thus, did not enter into the calculation.

(9.) The estimated equation is:

$$\underset{(33.04)}{Vw = 16.17^*} - \underset{(-0.23)}{0.01\ GNPR} - \underset{(-7.51)}{0.69^*Year} + \underset{(5.86)}{.025^*Year^2}$$

The t values in parentheses and the asterisks indicate regression coefficients that are significant at the 0.001 level. Vw is the gap index with a range shown in Chart 5: Year=1 through 20, with 1965=1; GNPR is the real annual growth in GNP, with a range from -2.13 to 6.80. Summary statistics are:

Durbin-Watson=1.43, or in the indeterminate range for positive auto correlation. R square=0.86. Use of a first order auto regressive correction procedure yielded results similar to those reported.

A second equation was estimated, using the nonmetropolitan/metropolitan per capita income ratio as the dependent variable in place of Vw. Using the gap ratio from Chart 2 as the dependent variable also revealed no statistically significant relationship between GNPR and the gap ratio given the time trend in the gap ratio.

$$\frac{\text{Nonmetro Per Capita Income}}{\text{Metro Per Capita Income}} = \underset{(63.0)}{0.66} + \underset{(0.52)}{.0005}\ \text{GNPR} + \underset{(6.80)}{.014^*}\text{Year} - \underset{(-5.34)}{.0005^*}\text{Year}^2$$

Durbin-Watson=1.26
R^2=0.83

(10.) *Agricultural Credit Survey,* Federal Reserve Bank of Kansas City, February 1986.
(11.) Federal Reserve Bank of Kansas City analysis of Bureau of Labor Statistics data. Services include lodging, business services, repair services, and health, educational, and social services, Standard Industrial Classification two-digit groups 20 through 89.
(12.) Wayne J. Howe, "The Business Services Industry Sets Pace in Employment Growth," *Monthly Labor Review,* April 1986, pp. 29-36.
(13.) See Peter J. Barry, "Deregulation: A More Competitive Rural Credit Market," paper delivered at the meeting of the Federal Reserve System Committee for Agriculture and Rural Development, Kansas City, May 31, 1984.
(14.) T. Moore, "U.S. Airline Deregulation: Its Effect on Passengers, Capital, and Labor," *Journal of Law and Economics,* XXIX(1), April 1986, pp. 1-28.
(15.) See U.S. Department of Transportation, *Fourth Follow-up Study of Shipper/Receiver Mode Choice in Selected Rural Communities, 1984-1985* and U.S. Department of Transportation, *Trucking Deregulation in 1986.*

3
Searching for Rural Success

Mark Henry, Lynn Gibson

Why are some rural counties growing while others lag behind? The economic base of a county is an important part of the answer. Counties dominated by traditional rural economic bases— farming, mining, and manufacturing—have grown at a slower pace than metropolitan counties and nonmetropolitan counties with nontraditional bases. But what other factors influence county growth?

For policymakers, answers to these questions can help identify appropriate economic development policies for rural America. In exploring the differences between rural winners and losers, this chapter considers location and economic factors. To reach its conclusions, the first section introduces a technique for measuring rural economic success and gives a broad overview of changes in rural employment from 1978 to 1985. Changes due to local competitive factors—the county share effect—are isolated. The second section explores the county share component, providing some evidence of how competitive each type of rural county has been in gaining new employment. The third section presents a more detailed analysis of the local characteristics affecting county employment patterns. The analysis highlights the factors most critical to a county's competitive economic position—that is, the factors contributing to employment gains or losses in the face of current economic trends in rural America. The findings are then summarized, and the implications for policy are discussed.

Identifying Components of Rural Employment Change

Changes in county employment can generally be separated into three components. This section identifies these factors and determines the extent of their influence on county employment patterns. The results, computed though shift-share analysis, form the empirical base for the next two sections.

The shift-share technique

Changes in employment for a rural county can be attributed to national employment trends, the mix of industry in the county, and the county share effect. The first two of these factors are straightforward. Any county can expect to take part in the nation's economic growth. If the nation as a whole is growing, many parts of the country must also be growing. County growth also is affected by the mix of its industries. Counties with higher concentrations of fast growing industries are likely to have a growth advantage over those with a higher concentration of slow growing industries.

The county share effect is particularly important in identifying characteristics separating rural winners and losers. The county share factor expresses an area's position relative to other areas.(1) A positive county share effect—or a gain in local employment due to a county's own complement of local characteristics—means the county may have become more attractive than other counties to business. A negative county share indicates the county is losing jobs to other counties.

Shift-share analysis is one way of quantifying these three components of employment change. Shift-share analysis is a statistical technique for separating the total change in county employment into the three components defined in Equation 1.(2)

(1) Regional Employment Change	=	National Growth Component	+	Industry Mix Component	+	County Share Component

This equation separates total employment change into three major components: national economic growth, the mix of industry, and the local characteristics of a particular county.

Broad trends in rural employment

What does shift-share analysis show about overall rural employment change in recent years? Table 3.1 shows that all three components had marked effects for the 1978-85 period.(3) As expected, the most important factor was national employment growth, which accounted for more than 16 percent of the total employment change from 1978 to 1985. The industry component had mixed effects on rural areas, ranging from -5.53 percent for manufacturing-based nonmetropolitan counties to 2.71 percent for mining counties. The county share effect, which reflects the influence of each region's own spatial and economic attributes on local business decisions, ranged from -6.08 percent in farm-dependent counties to 12.1 percent in retirement counties. The wide range suggests that local attributes influence the success of rural economies.

Table 3.1
Employment change by shift-share components
Percentage change, 1978:Q1 to 1985:Q1

	Urban Counties	Rural County Types				
		Manufacturing	Mining	Agriculture	Retirement	Government
National growth component	16.2	16.2	16.2	16.2	16.2	16.2
Plus: industry mix component	0.6	-5.5	2.7	0.1	1.0	-0.0
Plus: county share component	0.5	-4.8	-1.9	-6.1	12.1	3.9
Equals: total employment change	17.3	5.9	17.0	10.2	29.3	20.1

Source: Calculated from ES202 unemployment insurance files, Bureau of Labor Statistics, U.S. Department of Commerce

Table 3.1 highlights two major patterns in rural employment. First, most of rural America is losing shares of private-sector employment as more of these jobs go to urban counties. Metropolitan counties increased their local county share of total private-sector employment. Traditional rural counties—those depending on farming, mining, and manufacturing—and rural counties depending on trade lost local county share. In short, the trend toward greater concentration of jobs in urban areas—even after allowing for the influence of national growth and industry mix—underscores the decline in rural competitiveness. Second, in addition to losing employment shares to metropolitan counties, traditionally based rural counties appear to have lost employment shares to counties depending on government and retirement.

New counties, then, are coming to the fore in the rural economy as traditional counties wane. These data further underscore the conclusion that rural America is divided. The traditional rural economic bases no longer provide the impetus for substantial employment growth in most rural counties. Many such counties appear to be losing competitive advantage in their traditional industries and do not appear to be building competitive bases for other sectors. The new rural counties—those depending on retirement and government—seem to be keeping pace with most metropolitan areas.

Table 3.2 provides more detail in support of these two rural employment trends. The table separates employment change due to the county share effect across all major categories of employment. Each row represents a major sector of the economy used in cataloging employment. Each column represents a unique economic base for rural counties (the same economic bases used in Table 3.1 and in the previous chapter). Each row sums to zero because each county type is compared with the national average growth. That is, the sum of the rural county shares is equal to the urban county shares but opposite in sign. Because the effects of national economic growth and industry mix have already been taken into account, the county share effect accounts for the residual growth.

Reading across a row shows the county types, identified by the column headings, that gained (positive numbers) or lost (negative numbers) shares in that employment category. For example, the first row indicates that urban growth in manufacturing employment was above the national average. Urban counties increased their share of manufacturing employment by some 38,000 employees.(4) Thus, after accounting for the national growth component, manufacturing employment was still growing faster in urban counties than in the average rural county. As the rest of the first row illustrates, there were both gainers and losers of manufacturing employment share in rural America. Rural counties depending on manufacturing, as well as counties depending on mining and trade, lost manufacturing jobs to both urban counties and the other rural counties.

Table 3.2 suggests two conclusions about employment patterns in rural America. Traditional rural counties have lost employment share pretty much across the whole employment spectrum. The new rural counties have gained in nearly every category. Therefore, economic momentum appears to be important in rural areas. When the key base declines, all other sectors appear to decline with it. Second, the employment gains and losses have been concentrated in a comparatively small number of employment categories. Traditional rural counties have lost county share primarily in manufacturing, construction, retail, and services. Conversely, most of the gains in the new rural counties have been made in the manufacturing, retail, and services categories.

TABLE 3.2
County local share effect, 1978:Q1 through 1985:Q1
(thousands of employees lost or gained due to local county share effect)

	Urban	Rural County Types§						
Sector(*)	Counties	Manufacturing	Mining	Agriculture	Retirement	Government	Mixed	Trade
Manufacturing	38	-101	-12	19	35	22	11	-12
Construction	141	-57	-14	-17	7	-4	0	-57
TCPU†	-8	-4	7	-4	12	-3	0	0
Wholesale	53	-17	-2	-23	8	1	-2	-17
Retail	66	-43	-9	-46	57	19	0	-43
FIRE‡	11	-22	5	-4	11	2	-1	-2
Services	158	-87	-12	-33	22	12	1	-60
Other	10	-3	-25	-6	8	8	0	8
Federal	-32	4	5	6	6	2	1	7
State	-25	6	8	6	8	-9	2	5
Local	-105	-4	33	8	15	29	-1	25
All sectors	575	-684	16	-72	215	82	-6	-126

Data Source: Bureau of Labor Statistics, U.S. Department of Labor, ES202 program
Note: Michigan data are missing.
(*) Sectors are industry categories of employment defined in the *Standard Industrial Classification,* Office of Management and Budget, Executive Office of the President, 1972.
†TCPU-Transportation, Communication and Public Utilities
‡FIRE-Finance, Insurance and Real Estate
§Rural county types are defined by their dominant economic base as found in Mark Henry, *et al.,* "A Changing Rural America," *EconomicReview,* Federal Reserve Bank of Kansas City, July/August 1986.

Some Determinants Of Rural Competitiveness

The county share component of regional employment growth in Table 3.2 is a convenient way of identifying the types of counties that are gaining employment in broad industry groups relative to the national average. However, the county share component does not explain why some counties gain employment shares while others lag. This section focuses on why some counties gained more than the average share of new private-sector jobs while others lost share. To reiterate, the national growth component, which should lift employment levels in all counties, is not of interest here. The influence of industry mix at the beginning of the period is also of secondary interest. It influences county growth primarily through variation in the demand for the goods a county exports—a factor largely beyond the control of rural policymakers. The relevant question for rural policymakers is, what local attributes contribute to local competitive advantage?

The theory of local competitive advantage

Economic theory provides some clues in finding attributes of successful rural counties.(5) Basic location economics suggests that firms are more likely to expand or locate in places where (1) labor costs are lower, (2) transportation costs are lower, (3) there is greater access to inexpensive business and local government services, and (4) the size of the community, in terms of land and population, will support business expansion. These four groups of profitability factors are expected to influence business profits in rural counties in several ways.

Relative labor costs. Labor costs are often the single most important input cost to a firm, and these costs vary across regions of the United States. The relevant variable is the cost of labor in a county relative to labor costs in other counties. All else the same, higher labor costs should reduce both the competitive position of a county and its share of private-sector employment.

Three important county-level indicators of labor costs are average nominal wage rates, cost-of-living, and right-to-work laws. Higher nominal wage rates increase average labor costs and reduce employment share relative to lower wage areas. Firms relocating may be attracted to places with lower than average living costs. Choosing a county where the cost of living is low allows a firm to avoid offering benefits that might be needed to induce employees to relocate to areas with higher living costs. Although there is no county cost-of-living index, the median rental rate in a county relative to the national average is assumed to be a good proxy for regional differences in the cost of living. All else the same, counties with a lower cost of living should be more attractive to new and expanding firms and employment share should increase. The other labor related cost variable is the presence of right-to-work laws. Counties in states with right-to-work laws generally are not highly unionized, and firms tend to have more flexibility in using labor resources.(6) Thus, all else the same, a related hypothesis is that areas with right-to-work laws gain employment over areas without such laws.

Transportation costs. Businesses are concerned with the costs of both transporting inputs to their plants and moving their products to market. Lower transport costs increase net profits and, all else the same, increase the locational advantage of a county with ready access to transportation. Two reasonable proxies for county transportation costs are the miles of interstate highway in a county and the proximity of a county to urban centers. The availability of interstate highways improves access to markets. All else the same, rural counties with more interstate highway miles should increase their share of private-sector employment relative to similar nonmetropolitan areas without interstate highways. Similarly, rural counties adjacent to metropolitan counties can be expected to have lower costs of moving products to market. Counties adjacent to metropolitan areas also should have better access to larger labor markets and lower costs of transporting other inputs to rural locations. Thus, these counties can be expected to gain employment share from the rural counties more remote from the urban centers.

Costs of other inputs. Economic theory suggests that counties with large "agglomeration" effects gain competitive advantage. Agglomeration is the concentration of economic activity. Counties with greater concentrations of input supplies, business and marketing services, and financial services offer lower overall costs of doing business. One reasonable proxy for the agglomeration effect is the number of employees per square mile. As a proxy for greater agglomeration, higher employment density is expected to improve employment share.

The availability of local government services, such as water, sewer, and fire protection, is a prerequisite for attracting new employers. New firms are also interested in the cost of these services. Local taxes paid per capita can be used as a proxy for the price of these services. All else the same, the higher this price, the less attractive the county site is to new business.

Size of county. The size and population of a county influence the county share of private-sector employment in several ways. Larger geographic units potentially have a larger number of sites for new or expanding business. Accordingly, larger counties can expect to gain employment share, all else the same. Population serves as a proxy for the availability of local amenities. A larger population can support a wider range of public and private services, which may be especially important to new or expanding businesses. Moreover, Carlino and Mills found that at the county level increases in population precede increases in employment.(7) Accordingly, a larger county population at the beginning of the period (1978) is expected to increase the county share of private-sector employment by the end of the period (1985), all else the same.

Empirical evidence on local competitive advantage

Given the expectations for the influence profitability factors should have on the competitiveness of rural counties, what do the available data show about the differences between rural counties that gained employment share and those that lost? Data on the profitability factors are shown in Table 3.3. The counties are divided into those that gained employment share as a result of the county share effect and those that lost—the winners and losers.

TABLE 3.3
Selected characteristics of rural counties gaining or losing county share, 1978-85

	Gaining Rural Counties		Losing Rural Counties	
Profitability factors	Mean	Standard Error	Mean	Standard Error
Labor costs:				
Relative wage rate (as percent of U.S.)	73.7%	0.6%	76.4%	0.4%
Relative manufacturing wage rate (as percent of U.S.)	67.8%	0.8%	73.8%	0.6%
Relative service wage rate (as percent of U.S.)	68.0%	0.6%	65.1%	0.4%
Cost of living (as percent of U.S.)	94.1%	1.4%	88.7%	0.7%
Right to work (percent of counties in right-to-work states)	60.1%	1.7%	52.9%	1.2%
Transportation factors:				
Interstate highway miles	10.4	0.7	8.8	0.4
Nonmetropolitan adjacency (percent of counties adjacent to a metropolitan area)	42.6%	1.8%	38.1%	1.2%
Other local cost factors:				
Agglomeration (number of employees per square mile)	13.1	0.6	11.4	0.3
Local taxes per capita	$240	9.0	$233	3.6
Size characteristics:				
1978 population	25,238	1,064	24,771	586
Land area (square miles)	660	3	656	2

Relative labor costs. Counties with lower labor costs generally gained employment. Three wage rate ratios were used to measure the county mean wage relative to the U.S. mean wage for all workers, manufacturing workers, and service workers. As expected, declining counties had higher overall relative wage rates and higher manufacturing wages. Relative wages in the service sector were lower, however, in the declining counties.

Contrary to expectations, the cost of living was generally higher in counties that gained employment share. This may be due to retirement and government counties accounting for most of the gains in rural competitiveness. Cost of living may be less important in these types of counties. Results also indicate that, all else the same, areas with right-to-work laws are likely to be favored by businesses over areas without these laws. Rural counties that gained employment were more likely to be in states with right-to-work laws than counties that lost employment.

Transportation costs. Transportation variables also appear to help separate rural winners and losers. Counties that gained employment shares had better transportation—an average of 10.4 miles of interstate highways, compared with an average of 8.8 miles in counties losing employment shares. Similarly, being adjacent to a metropolitan county also appears to influence growth. Some 42.6 percent of the counties gaining employment were adjacent to metropolitan counties, while only 38.1 percent of the counties losing employment were adjacent to metropolitan counties.

Costs of other inputs. As expected, the agglomeration variable, employment divided by land area, suggests that concentration of economic activity confers some advantage. Gaining counties had an average of 13.1 employees per square mile, while losing counties had 11.4 employees per square mile. Thus, agglomeration may lower business costs and encourage employment growth. Contrary to expectations, the average local tax per capita was slightly higher in gaining counties ($240) than in the losing counties ($233).

Size of county. Results indicate that size may not distinguish rural winners and losers. There appears to be little difference in the average size of gaining counties (660 square miles) and declining counties (656 square miles). Average population was somewhat larger, however, in gaining counties in 1978 (25,238) than in the losing counties (24,771).

Summary

The effects of declining agricultural and manufacturing employment have been particularly pronounced on rural America. Growth in service-oriented retirement and government counties, however, suggests the national trend of service sector growth is making inroads into rural areas.

Several factors appear to distinguish successful rural counties from those falling further behind. Winners seem to be the larger counties in states with right-to-work laws. These counties tend to be near metropolitan areas and have lower nonservice wages. There is also some evidence that winners often have better access to transportation, a denser existing core of employment, and a tendency to be dominated by retirement or government activities. Conversely, losers are more likely to be dependent on farming and manufacturing. The losers also tend to be more remote, less populated counties, with higher nonservice wage rates and higher transportation costs.

Statistical Estimates of Factors Influencing Rural Competitiveness

The simple comparisons between rural winners and losers are not adequate in themselves to isolate the influence of these characteristics on rural competitiveness. The reason for this inadequacy is that simple comparisons of mean values of characteristics do not satisfy the "all else the same" conditions used in discussing the characteristics of gainers and losers. To investigate the role that a single characteristic, such as labor cost, might have on a county's share of employment requires a statistical technique that controls the influence of all other characteristics, such as interstate highway access. The statistical technique used to provide this control is multiple regression analysis. The location economic theory discussed in the previous section still guides the selection of the explanatory variables included in the multiple regression analysis, and the expected effects are all the same.

What are the important economic, policy, and location factors that give some rural counties a competitive edge and what role does each of these factors appear to play? This section isolates the profitability factors that ultimately contribute to a rural county's ability to grow and build employment. The multiple regression model used here tests whether the profitability factors discussed in the previous section are important to rural competitiveness and, if so, how large their effect is.

Model of rural competitiveness

The relationship between local competitiveness and the profitability factors that influence competitiveness can be expressed as Equation 2. This equation simply says the ability of a county to compete with other counties depends uniquely on the profitability factors discussed previously.

(2) County Share of Employment = f (relative wage rates, cost-of-living, right-to-work laws, urban adjacency, interstate highway access, agglomeration, local taxes, population, and land area)

Using the county share effect on rural employment change as the dependent variable allows a more rigorous testing of what local attributes contribute to rural competitiveness.(8) To reiterate, the county share effect represents a residual employment change after accounting for national growth and industry mix. Thus, regression coefficients for the independent variables—the profitability factors discussed previously—gauge the contribution of each variable to rural competitiveness, or the detraction of each to rural competitiveness. The model was estimated for all rural counties and then for each of the different economic base county types.(9)

Model results

The results shown in Table 3.4 suggest that local attributes are important in distinguishing rural winners and losers. Each column represents an estimate of Equation 2 for a particular set of rural counties—first, all rural counties; then, rural counties depending on manufacturing, farming, retirement, and trade.

TABLE 3.4
Determinants of all private employment county share by type of nonmetropolitan county 1978-85

Independent variables	Type of Rural County				
	All	Manuf	Farm	Retire	Trade
Intercept	1.921283	13.03489	-20.1505	-30.2532	31.3027
	0.15	1	-1.12	-1.19	0.48
Labor costs					
Relative wage rate	-79.0471(*)	-44.7835(*)	-36.9931	-82.3505(*)	-124.210
	-4.79	-2.79	-1.06-2	-1.65	
Cost of living	44.73081(*)	0.87006	50.60333(*)	60.33698(*)	22.42337
	2.58	0.11	1.85	3.75	0.74
Right to work	11.61155(*)	2.819343	17.6621(*)	31.86978(*)	4.145904
	4.23	0.68	3.31	4.53	0.54
Transportation costs					
Nonmetropolitan	8.987536	3.799357	0.107798	12.82732(*)	10.68628
adjacency	0	1.09	0.02	2.21	1.24
Interstate highway	753.3595	8610.387(*)	173.2486	-4239.22(*)	1182.926
miles	0.21	1.91	0.05	-2.12	0.14
Other costs					
Local taxes per capita	-42.4493	-55.6424(*)	-95.2782(*)	15.75626	6.478613
	-0.87	-2	-2.44	0.4	0.11
Agglomeration	-0.27022(*)	-0.30703(*)	-1.27125(*)	0.10214	-0.16422
	-1.8	-2.65	-1.47	0.33	-0.36
Size					
Land area	38.45556	-19.0053	46.64836	185.4934(*)	1.766547
	0.46	-0.77	0.94	5.83	0
1978 population	0.000085(*)	0.000099	0.000169(*)	0.000286(*)	
				0.000452(*)	
	70323	1.06	1.33	1.85	1.43
Summary statistics					
Dependent mean x 1000	-14.0622	-30.4972	-16.3988	18.69135	-23.0427
RMSE	0.047954	0.040738	0.035570	0.042958	0.038183
Adjusted RSQR	0.112	0.0913	0.1128	0.4445	0.1276
F	30.2	7.0542	7.498	19.318	6.51
Prob F	0.0001	0.0001	0.0001	0.0001	0.0001
N	2084	586	460		

Dependent variable: County private employment share/1978 population (in thousands); t value below each coefficient;
(*) indicates the regression coefficient is significantly different from zero at the 0.10 level of significance.

Role of relative labor costs. As expected, the results indicate that other factors held constant, lower private-sector wage rates improve a county's ability to garner a larger share of private-sector employment. This result is consistent for all rural counties, as well as the four economic base types. The wage effect is strongest in trade counties and weakest in the farm counties. For the trade counties, a ten percentage point drop in the relative wage rate would result in 12.4 more private-sector jobs per 1,000 county residents. For the average rural county, the same change would result in about 7.9 more jobs for every 1,000 residents.

The other two labor cost proxies suggest relative labor costs are less important in determining competitive share. Right-to-work laws are significant for the total sample as well as for counties depending on farming and retirement. All else the same, a right-to-work law appears to increase county share of private employment by some 3.2 jobs per 1,000 residents of retirement counties, and 1.2 jobs per 1,000 residents in the average rural county. Somewhat surprisingly, the effect of right-to-work legislation is not as strong in counties depending on manufacturing, where union activity might be expected to be strongest. Also, counter to expectations, the cost of living variable is generally positive. Counties gaining county shares may place more pressure on local housing markets so that these variables tend to move in tandem, an effect that might overwhelm whatever initial attraction there was to locating or expanding in counties where living costs are low.

Role of transportation costs. Unless they are dominated by retirement or trade activities, rural counties do not appear to benefit from proximity to metropolitan areas as expected. The highway variable shows no strong influence on the average rural county but has significant, yet opposite, effects on manufacturing and retirement counties. As expected, more highway miles per capita improve the county share in manufacturing based counties. Many of the large manufacturing firms locating in rural areas consider access to interstate highways as critical. For example, General Motors' new Saturn plant in Spring Hill, Tennessee, is located near an interstate highway complex. However, retirement counties with a high level of interstate highway density seem to lose county share to retirement counties that are more remote by this measure. This suggests that environmental amenities may be more important to retirees than ease of access.

Role of other local business costs. Higher per capita local taxes appear to have mixed effects on local competition. In counties depending on farming and manufacturing, higher taxes reduce county share. But in the average county and the retirement and trade county groups, higher taxes appear to have no effect on county share.

More surprising is the negative impact of the agglomeration variable on county share. Either the measure of agglomeration used here is inadequate or the businesses likely to be strongly influenced by agglomeration effects are mostly located in large urban centers, where these effects are strongest. The negative sign on this variable suggests that businesses may seek rural sites not for the benefit of agglomeration but to avoid competition for local labor supplies.

Role of size characteristics. Consistent with expectations, a larger population brings about a larger county employment share in all types of counties except those depending on manufacturing. The availability of land seems to influence only retirement-based counties, where more land per capita increases county share. This result is consistent with the notion that uncongested areas are attractive to retirees and the businesses that serve them. For other rural industries, however, land mass is not particularly important.

Implications Of The Results For Development Policy

Empirical analysis of rural winners and losers suggests there is no single appropriate path to success in rural economic growth. Characteristics that create a competitive edge for rural counties seeking manufacturing growth may be completely neutral or even counterproductive for counties that want to compete for retirement activities and vice versa. For instance, all else the same, results indicate that a rural county based on manufacturing can increase its share of private-sector employment through lower per capita taxes and additional access to interstate highways. This is true even if their average wage rate is somewhat higher than the national average. However, lower per capita taxes and increased interstate access may actually deter retirement-based counties from gaining private-sector employment if the additional employment increases congestion and lowers quality public services. In all cases, retaining population seems to be a positive force to remaining competitive. Also, there may be a wide array of local policy tools available to improve the attractiveness of rural places as residential communities.

The major implication of these results is that rural states and communities have policy tools at their disposal for influencing growth. In some cases, the tools may involve projects targeted for specific areas, such as improved access to transportation, and in others, broader legislative action may be needed. In any case, however, policymakers must set development goals, take stock of their local strengths and weaknesses, and then seek the most appropriate uses for their legislative and fiscal resources. The county share analysis presented here highlights factors that communities and policymakers need to evaluate as they seek their own paths to rural economic growth. The analysis also emphasizes that although some competitive disadvantages are beyond community control, such as location or high wage rates, steps can be taken to partially offset the disadvantage.

Notes

(1.) In some cases, a positive county share effect may reflect the strength of institutions like powerful labor unions that can prevent loss of employment that is occurring in counties where the institutions are weak. Some might view this as a county strength and a reflection of the county's ability to increase its share of national employment. Others would view this as an indication that the county labor force cannot compete with lower cost labor elsewhere and, therefore, a long-run weakness for the county's ability to attract new employers. While the data do not include the information on labor productivity and county level output needed to test for these institutional effects, it will be shown later that counties with fewer labor restrictions, as proxied by right-to-work laws, seem to have increased their county shares during the first half of the 1980s.

(2.) The exact relationships in shift-share analysis are defined by the following simple identity:

$$\text{Regional growth} = \sum(e_{it} - e_{iO}) =$$
$$\sum_{I}([e_{iO}*(E_t/E_O)] + \sum_{I}(e_{iO}*(E_{it}/E_{iO} - E_t/E_O)) + \sum_{I}[e_{iO}*(e_{it}/e_{iO} - E_{it}/E_{iO}))$$

National growth component + Industry mix component + county share or residual component

where,

e_{io}=county employment in industry i at the beginning of the period (1978)

E_{io}=national employment in industry i at the beginning of the period (1978)

e_{it}=county employment in industry i at the end of the period (1985)

E_{it}=national employment in industry i at the end of the period (1985)

$$E_t = \sum_{i} E_{it}$$

$$E_O = \sum_{i} E_{iO}$$

The terms on the right side of the identity starting at the left are: (1) the national growth component—the larger this rate (E_t/E_o), the faster the region should grow, *ceterius paribus,* (2) he industry mix component derived from the difference between the rate of growth for each national industry (E_{it}/E_{io}) located in the county at the beginning of the period (1978) and the national growth rates for all industries (E_t/E_o), and, (3) the residual term or county share component, the difference between the national and regional rates of growth for the same industry.

(3.) Table 3 presents the percentage changes in employment contributed by each of the three growth components in the shift-share analysis of total employment growth from 1978-85. For example, total employment in urban counties (column 1) grew by 17.3 percent. This total growth is attributed to three separate growth factors— national growth component, the industry mix component, and the county share component. Most of the employment growth in the urban counties is attributed to the 16.2 percent (row 1) growth in employment nationwide over the period. The mix of industries in urban areas added 0.6 percent (row 2) to their employment growth, and employment grew by an additional 0.5 percent (row 3) due to county share factors present in urban counties. The percentage changes in employment resulting from each component (rows 1-3) combined to equal the total employment change over the period (row 4) for each of the county types (columns 1-8).

(4.) This is a small absolute number for two reasons. First, national manufacturing growth was very slow during this period, with the well-documented shift to a service-based economy continuing during this period. Second, the national manufacturing employment growth rate is dominated by the urban growth rate. This dominance means the urban county share component will be a small component of urban county employment growth relative to the national growth component. (Refer to Table 1 for the overall contribution of each component to urban growth.)

(5.) See, for example, A. Charney, "Intraurban Manufacturing Location Decisions and Local Tax Differentials," *Journal of Urban Economics,* Vol. 14, 1983, pp. 184-205.

(6.) For some state-level evidence supporting a positive relationship between right-to-work laws and employment growth, see Robert Newman, *Growth in the American South,* New York University Press, New York, 1984, pp. 51-67.

(7.) Gerald Carlino and Edwin Mills, "The Determinants of County Growth," *Business Review,* Federal Reserve Bank of Philadelphia, July/August 1985.

(8.) The major limitation of using the county share effect as the dependent variable is the level of aggregation employed. The industry mix of county and national industry division employment is different. Accordingly, a comparison of industry growth rates at the national and county levels involves comparing different industry makeups. This limitation means that some of a positive (negative) share effect may reflect a more (less) favorable within-industry division mix at the county level in 1978. Whether the share effects change with the level of disaggregation is a largely empirical matter. One recent study did not find much change in the regional share effect as the level of disaggregation was expanded from 26 to 116 industries. See Harvey Armstrong and Jim Taylor, *Regional Economics and Policy,* Phillip Allen Publishers, Oxford, 1985, p. 129.

(9.) Ordinary least squares technique was used for all regression estimates, but heteroscedasticity of the error variance is present, as expected with county-level cross-section data. White's procedure for estimating a consistent variance-covariance matrix is used so that tests could be made for the statistical significance of the regression coefficients. For a discussion of this procedure, see Halbert White, "A Heterosckedasticity—Consistent Covariance Matrix Estimator and a Direct Text for Heteroscedasticity," *Econometrica,* 48, 1980, pp. 817-838.

APPENDIX

Profitability factors and model variables are defined as follows:

Local county $Share_{ik}$=f ($Population_k$, $Agglomeration_k$, Land $Area_k$, Relative Wage $Rates_{ik}$, Cost of $Living_k$, Urban $Adjacency_k$, Local $Taxes_k$, Right to $Work_k$, Transportation $Access_k$) where:

Local county $Share_{ik}$ = local county share in industry i for employment in county k from 1978-85 per capita.

Calculated as:

E_{ik} (1985)-[E_i(1985)/E_i(1978))*E_{ik}(1978)]/Population in 1978. E_{ik} employment in industry i in county k and E_k as employment in the United States in industry i. (Local county share is expressed in per capita terms to make comparisons between large and small counties more meaningful.)

$Population_k$ = the 1978 population in county k

$$Agglomeration_k = \frac{\text{(total employment in county k in 1978)}}{\text{total land area in county k in 1978}}$$

Land $Area_k$ = total county acreage per capita in county k

$$\text{Relative Wage } Rate_{ik} = \frac{\text{(mean wage rate in industry i in county k for 1978)}}{\text{mean wage rate in the U.S. in industry i for 1978}}$$

$$\text{Cost of } Living_k = \frac{\text{(mean rent in county k for 1978)}}{\text{mean rent in the U.S. for 1978}}$$

Urban $Adjacency_k$ = nonmetropolitan adjacent dummy with a value of 1 if the rural county is located adjacent to a metropolitan county and a value of 0 if not.

Local $Taxes_k$ = local taxes per capita in county k.

Right to $Work_k$ = a right-to-work dummy variable with the value of 1 if the county k is located is a right-to-work state and 0 if not.

Transportation $Access_k$ = number of county k miles of interstate highway miles in 1980 per capita.

4
The Rural Economic Policy Choice

Mark Drabenstott, Mark Henry, Lynn Gibson

Rural America is undergoing a serious economic adjustment. Traditional rural industries are depressed and relatively few rural communities have been able to find a new economic base from which to grow. In many parts of rural America, economic stress has raised unemployment while leaving some capital resources underutilized. Rural communities—and some predominantly rural states—are also having difficulty maintaining public infrastructure— roads, schools, and health care facilities. In short, the rural economy is struggling.

How should policymakers respond to the rural economic problems? Policymakers in Washington, state capitols, county seats, and small rural towns are grappling with the question. The difficulty in finding an answer arises from the elusive nature of rural policy. Traditionally, farm policy has been viewed as a convenient surrogate for rural policy. While farm policy has form and function, rural policy has no clear dimensions. While farm policy undergoes systematic revision at least every four years, rural policy has no time clock in Congress or the statehouses. It is clear by now that policymakers will implement rural programs of one sort or another in the near future. But to prevent these programs from becoming a hodgepodge that lacks effect, policymakers should first consider the type of rural policy that will guide their response.

Policymakers can choose between two rural policies or some combination of the two. One is a rural transition policy. Fundamental economic forces are encouraging people and resources to move out of rural communities into other segments of the economy. Working in harmony with these market forces, a transition policy aims to facilitate and ease the costs of resource adjustments. The other choice is a rural development policy that seeks, to some extent, to reverse market trends. With a development policy, public funds are used to subsidize rural economic development because social value is attached to the vitality of the rural economy.

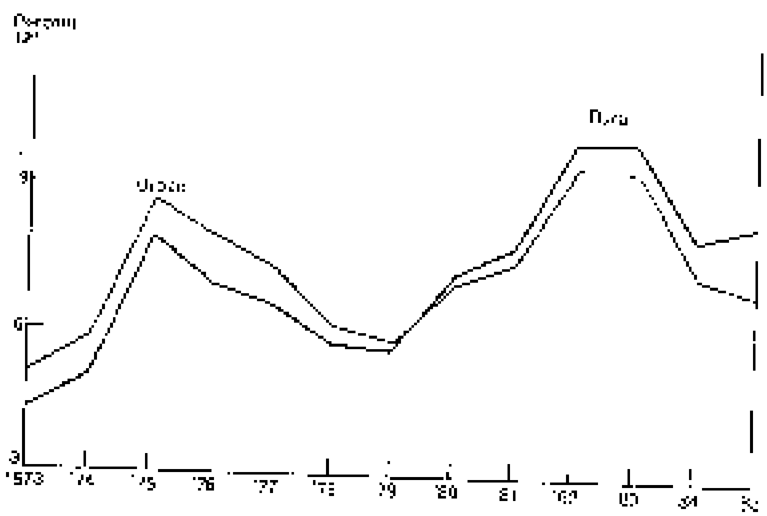
This chapter outlines the factors policymakers will weight in the decision and describes what each policy might contain. First, the rural economic problems most likely to concern policymakers are discussed. Then, a rural transition policy and a rural development policy are examined in turn. For each policy, operating objectives are posed, and program alternatives to meet these objectives are reviewed and evaluated.

Emerging Rural Policy Issues

Previous chapters have shown that the rural economy is in the midst of difficult economic change. Growth in rural incomes has lagged well behind growth in metropolitan incomes for the past ten years. The gap between rural and urban wellbeing has widened sharply since 1979. In the 1980s, economic strain has been especially evident in traditional rural counties—those depending on agriculture, mining, and manufacturing. These counties account for more than half the rural population and income. The gap in rural and metropolitan economic performance does not appear to be cyclical. Rather, the gap appears related to structural factors such as international economic forces, the shift to services in the U.S. economy, deregulation, and structural change in agriculture.

The changing rural economy is giving rise to two issues that will be the focus of much policy discussion. One is the mounting number of displaced rural workers faced with the prospect of finding employment elsewhere. The other is the strain beginning to show in rural public infrastructure as rural population dwindles and tax based erode further.

CHART 4.1
Rural and urban unemployment rates
Annual average unemployment rate

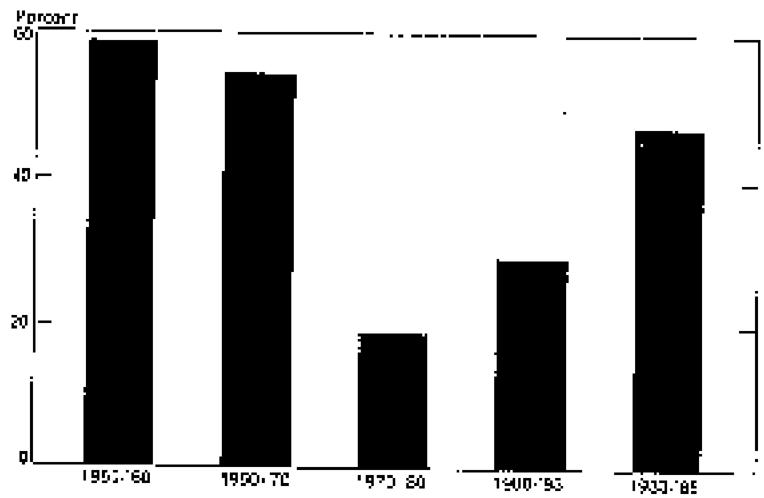


Displaced rural workers and rural outmigration

Unemployment is becoming a persistent problem for many rural regions. With the onset of economic woes in several basic industries during the 1980s, rural unemployment has climbed well above the levels of the 1970s to surpass urban unemployment (Chart 4.1). The unemployment problem is compounded by an ongoing underemployment problem. Studies indicate that a large proportion of rural workers—as many as a fourth in some cases—are in jobs below their skill level because no other work is available.(1) Furthermore, job skills of rural residents tend to be less versatile than those of urban residents, and the range of employment opportunities is more limited in rural areas.

With the rural economy under stress, it seems likely that many displaced workers will leave rural communities and some rural states in coming years. Overall, rural population continues to grow slowly, but the number of regions experiencing net outmigration is increasing. More than half the nonmetropolitan counties in the United States were losing population in the 1950s and 1960s (Chart 4.2). The outmigration then was generally associated with rapid job formation in metropolitan areas. In the 1970s, when the rural economy was generally prospering, the proportion of rural counties losing population fell to less than a fifth. But in the 1980s, the rural outmigration has again quickened. Between 1983 and 1985, nearly half the rural counties lost population. With economic stress widely evident in rural counties depending on farming, mining, and manufacturing, many of these counties can expect further outmigration.

CHART 4 2
Percent of rural counties with declining populations



The displacement of rural workers, then, is not a new development. Rural residents have been moving to the city to find new employment throughout this century. The difference today is that job opportunities are much different. Rural residents that left farms and small communities in the 1950s and 1960s usually found well paying, semiskilled jobs in industry. As the goods-producing part of the economy loses employment share, most new jobs are either low-paying service jobs or well-paying jobs requiring specific technical skills. Another disturbing aspect of rural workers in transition is their apparent lack of mobility. In a 1984 survey of Iowa farmers who had gone out of business, more than three-fourths of the respondents decided to remain in the same community at a lower standard of living rather than relocate.(2) In short, one principal problem facing policymakers is to ease the transition for displaced workers whose skills may not afford them good job opportunities outside their local areas.

Strained rural infrastructure

Rural areas increasingly face a dual infrastructure problem. On the one hand, economic stress is creating fiscal pressures that make it difficult to maintain infrastructure and public services. On the other hand, many of the same areas lack the sufficient infrastructure to support a successful transition to a new economic base. Thus, many rural communities and some rural states are finding public funds scarce at a time when the need to meet existing demands is great and when infrastructure investment for economic diversification is also necessary.

As the economic viability of many rural communities starts to wane and population declines, maintaining infrastructure and public services becomes especially difficult. Adjoining small communities often find that they are simultaneously trying to maintain what have become redundant public facilities. For example, some communities may find that one hospital now can serve the needs of several communities. Similarly, some rural counties are struggling to maintain the full complement of county government services.

The strains on rural tax bases are clearly mounting, but no comprehensive assessment of the problem's magnitude has been made. A 1986 report by the Senate Subcommittee on Intergovernmental Relations concluded that many local rural governments face the prospect of a shrinking revenue base for the rest of this decade and longer.(3) Rising tax delinquency rates in rural areas, dramatic declines in agricultural land values, and significant declines in nonfarm incomes and property values all support that conclusion. The report found property tax delinquencies in eight selected farm-dependent regions rose from 1.5 percent in 1981 to 9.5 percent in 1986. The report suggested that local rural governments would have to implement tax increases and spending cuts amounting to as much as $200 per capita to offset revenue shortfalls and maintain essential public services.

The fiscal strain in rural America is compounded by the revenue strains of many predominantly rural states. Table 4.1 shows that of 17 states with higher than average percentages of rural population, all but four had tax capacities below the national average for nonrural states in 1984.(4) To offset revenue shortfalls, 13 of the 17 states increased taxes between 1975 and 1984. Tax capacity and tax effort are only two of many possible indicators of fiscal pressure, but these statistics suggest that some rural states face the same problems in supporting infrastructure and public services as many local governments.

TABLE 4.1
Fiscal stress symptoms in rural states(*)

State	1984 Tax Capacity	Tax Effort Change From 1975 to 1984
Arkansas	75	- 11%
Idaho	89	+ 4
Iowa	78	+ 20
Kansas	100	+ 12
Kentucky	77	+ 5
Maine	88	+ 2
Mississippi	70	- 1
Montana	95	+ 10
Nebraska	93	+ 16
New Mexico	103	0
North Carolina	87	+ 4
North Dakota	106	+ 1
South Carolina	77	+ 11
South Dakota	83	- 1
Vermont	95	- 13
West Virginia	79	+ 17
Wyoming	181	+ 51
17-Rural-State-Average	92.7	+ 9
Nonrural U.S. Average	102.4	+ 3

Source: Advisory Commission on Intergovernmental Relations, Washington, D.C.

(*) Rural states are those where the ratio of nonmetropolitan population to metropolitan population is greater than the average for all 50 states. The unweighted average ratio in 1984 was 1.09.

Note: Tax capacity, as developed by the Advisory Commission on Intergovernmental Relations, measures the multiple resources that state governments can claim through a variety of taxes. A tax capacity greater than 100 indicates the state has more fiscal capacity than average for the 50 states. Similarly, tax effort measures a state's total tax collections relative to its total capacity.

Rural states and communities face an especially acute infrastructure problem as they try to diversify away from total dependence on a traditional economic base. Attracting new industry often entails putting in place new infrastructure, such as roads, industrial parks, and water and sewer facilities. The adequacy of rural infrastructure is difficult to assess, but a 1984 FmHA survey concluded that many rural communities still lack some basic public services.(5) For example, only 55 percent of the rural communities in the United States were served by public water systems, and fewer than a third had wastewater treatment plants. In addition, firms considering sites for location often have special needs for infrastructure that cannot be met by rural areas without additional investment.

Thus, rural communities are left with the dual problem of trying to maintain existing services while improving their infrastructure enough to attract new industries. Growing needs and weakened capabilities to meet those needs may characterize the fiscal condition of many rural areas if current trends go unchecked.

The Rural Transition Policy

Displaced rural workers and strained infrastructure are the byproducts of structural change in the basic fabric of the rural economy. Market forces are driving down the return to rural resources and encouraging those resources to find other uses in the economy. Labor and capital resources alike probably will leave rural areas and look for more productive uses in urban areas. What role should public policy play in such a transition?

One response is a rural transition policy that aims to facilitate the structural change already underway in the rural economy. Rural outmigration and reduced rural infrastructure may not be popular in rural America, but from the perspective of the whole economy, they are simply reallocations of rural resources to more productive parts of the economy.

There is sound [illegible text] Put simply, rural resources are not perfectly mobile and social costs attend rural resource adjustment. Information on alternative opportunities is often limited for rural labor and capital resources. As a result, the time that the resources are unused or underused tends to lengthen. Even when information is available, rural resources may simply lack mobility. Moreover, the social costs of adjustment—in the form of unemployment insurance and other income support programs—rise as rural unemployment rises. Thus, it is in the public interest to reduce the social costs by facilitating resource adjustments.

Transition objectives

What operating objectives should guide the selection of rural transition programs? Three goals appear relevant: easing human resource adjustment, easing public infrastructure adjustment, and supplementing rural incomes.

Easing human resource adjustment. The easing of human adjustments appears to be the most pressing objective of rural economic policy. Economic theory suggests that labor resources gravitate toward opportunity, yet rural workers—whether displaced farmers, factory workers, or lumber workers—may lack information on these opportunities, the means of relocating, or the ability to acquire the skills new jobs often require. Many public programs have been aimed at keeping farmers in business, but far fewer programs have addressed what may be the more important problem of retraining displaced farmers and other rural workers for productive employment elsewhere in the economy.

Easing public infrastructure adjustment. Funds for schools, public health facilities, and other public services are under pressure in depressed rural areas. The federal government and states may be able to assist communities that lack the funds for essential public services. Education infrastructure is especially important to meet retraining needs. Nevertheless, under a rural transition policy, federal or state assistance would not be regarded as permanent. Rather, assistance would be part of an overall goal of facilitating market adjustments in rural resources.

Supplementing rural incomes. Incomes are low in many depressed rural areas. Temporary direct government income support to rural residents linked to retraining programs may be appropriate as a bridge to new employment elsewhere. Also, many rural communities are being left with a concentration of elderly residents as younger workers leave to find employment in other places. For these communities, income support programs become more important.

Rural transition programs

What transition programs will meet the objectives suggested above? Retraining programs, assistance to maintain public infrastructure<longdash>especially educational facilities—and assorted income maintenance programs appear to be most suited.

Programs to ease human resource adjustment. Retraining is the basic response to human resource adjustment problems. The federal government has long had job training programs, but the programs generally have not been directed at rural problems. Some states have recently launched programs to assist displaced rural workers.

At the federal level, the existing comprehensive job training program was created under the Job Training Partnership Act (JTPA) in 1983 to replace the Comprehensive Employment and Training Act (CETA). The chief objective of the program is still to provide job training to unskilled workers and disadvantaged workers, whether rural or urban. The new act seeks to link training with the opportunities in local job markets by placing more of the administrative responsibility at the local and state level. This added flexibility allows the program to address the problems of displaced rural workers. But the program does not appear to have been used widely enough to ease the transition for significant numbers of displaced rural workers. Criticisms of the program include its failure to use community colleges and existing local training efforts and its failure to link training programs with local economic development programs.(6)

State efforts to address rural worker adjustments are relatively recent in origin. Many midwestern states, including Kansas and South Dakota, have initiated retraining programs for farmers and other rural residents out of work. Most of the programs provide tuition credits for classes at local colleges, universities, or vocational schools, as well as opportunities for on-the-job training. A few programs offer relocation benefits when the training is completed, in some cases, including relocation from the state. The state programs are too new for any comprehensive evaluation of their effectiveness. On the whole, the programs appear well guided. However, program budgets often fall short of meeting projected needs.

Some predominantly rural states face a social and financial dilemma when they undertake retraining programs. States that do not have a realistic prospect of developing a new economic base may face the unpleasant likelihood of declines in population. Workers that are retrained, largely if not totally at state expense, may find employment only in other states. Thus, the state that bears the cost of training may not reap its benefits. Yet without the retraining programs, many displaced workers might remain tied to state welfare programs.

The solution to the problem may lie in regional and federal cooperation. Neighboring states might reduce costs by sharing retraining programs, with each state furnishing the training it is best suited to provide. There also appears to be a role for the federal government in sharing retraining costs. The rural displaced worker is a national problem, and retrained rural workers promise dividends to the national economy. Thus a fairly strong case can be made for the federal government sharing the cost of state administered programs. This is especially critical in cases where state budgets are strained and the states themselves will receive no direct economic return as a result of retaining. The federal government might also help by adding a clear rural emphasis to JTPA and linking training to available rural education programs. Much of the retraining task, however, will fall to the states in conjunction with local communities. State programs are just now emerging, but the budgets of many rural states are seriously strained.

Programs to ease public infrastructure adjustment. The basic means of making the necessary infrastructure adjustments would be a program linking grants-in-aid to the maintenance of essential services in declining rural communities. Neither federal nor state programs of this type are now in place. Although the federal government spent nearly $8 million on rural infrastructure in 1986, the fund went to economic development, not transition assistance to maintain rural infrastructure. The principle behind transition infrastructure programs is to assist communities in such a way that services are provided for a sufficient transition period but not in such a way as to subsidize communities permanently. The challenge, therefore, is to craft programs that effectively channel funds to communities that need them while allowing structural changes to continue.

The greatest rural public infrastructure need for the near future is schools and universities. Rural communities and some rural states will have great difficulty maintaining quality education because of scarce resources and dwindling enrollments. Programs will be needed to maintain those facilities for two purposes: to keep overall education standards high for resident elementary, secondary, and college students and to provide adequate facilities for retraining displaced workers. An appropriate federal program might be to provide grants to universities in rural states. The grants could be linked to the establishment of quality retraining programs and be phased out over a period of years.

States may want to consider programs to encourage the pooling of rural infrastructure. For example, two neighboring communities may find they lack the resources or population to support two hospitals but may be unable or unwilling to address the problem. Rather than further dissipate public funds, state grants-in-aid could be linked to community agreements to share responsibility for essential public services, such as health care. In doing so, states encourage the market flow of resources while increasing the efficiency of public spending at both state and local levels. A similar approach could be used to encourage neighboring counties to combine public services. That issue remains controversial, but some states are beginning to consider such combinations.(7)

Programs to supplement rural incomes. Farm programs and other income transfer programs have been the two main approaches to supplementing rural incomes. Both approaches simply direct government transfer payments to rural residents. The programs continue to receive support, though they are not long-run solutions to the gap between rural and urban incomes.

Federal farm commodity programs have mushroomed into large income transfer programs in the 1980s. Designed originally to stabilize farm prices and farm incomes, the programs have become a mechanism in recent years for large federal infusions into a depressed industry. The 1985 Farm Bill moves agriculture to greater market orientation but provides substantial income protection as the transition occurs. As a result, farm program spending has increased dramatically. Between 1971 and 1975, net outlays for farm commodity programs—both Commodity Credit Corporation (CCC) loans and deficiency payments—averaged only $2.4 billion a year. Between 1981 and 1985, outlays increased to an annual average of $11.7 billion. Program costs swelled to $26.0 billion in 1986.

The question must be asked whether farm programs meet an objective of supplementing rural incomes. Federal farm programs keep farm incomes high and, thereby, improve business activity in areas dependent on farming. But only a fourth of the nation's 2,400-odd rural counties—and less than 12 percent of the rural population—depend primarily on agriculture. Meanwhile, counties depending on manufacturing and mining—the other traditional rural counties—have also experienced downturns in the 1980s, and nearly half the rural population lives in these counties. Moreover, farm programs increasingly benefit a relatively small number of larger farms. In 1985, for instance, the 27,000 farms with annual sales greater than $500,000 represented only 1.2 percent of all farms but received 16.6 percent of the farm commodity program benefits. These large farms, which had an average net farm income of $647,037 in 1985, received an average of $151,111 in CCC loans and direct government payments. Farm income programs, then, may be too narrowly focused to meet broad rural objectives.

A host of federal and state income transfer programs, ranging from social security to food stamps also have significant effects on rural incomes. Social security has become especially important to many rural counties. As counties with depressed economies often lose large portions of their younger population and are left with a larger concentration of elderly residents, social security becomes an even more important source of income to such rural counties. Not only does the program meet an objective of improving incomes of the elderly, it also helps soften a region's downward economic adjustment.

Overall, direct income transfer programs probably meet fairly limited policy objectives. Most economists and policymakers agree that programs that encourage economic growth offer a better long-run solution than programs that create dependency on government assistance. Nevertheless, with the ongoing stress expected to confront many rural communities in the next few years, some existing direct income transfer programs will serve a short-run objective of easing rural economic adjustment. Farm income support programs, the traditional channel to raise rural incomes, probably are too narrow to meet truly rural objectives.

Summary

A rural transition policy aims to facilitate the difficult structural change underway in the rural economy and to ease the costs of the change. The most urgent need will be retraining programs to ameliorate the adjustment of displaced rural workers. The JTPA could be refined to target rural workers more specifically. In addition, the federal government should consider partially funding the retraining programs in rural states where budgets are stretched and the states are unlikely to keep retrained workers. State retraining programs are beginning to emerge, but greater emphasis on these programs will be needed. Both federal and state assistance could be used to maintain public services while encouraging the adjustment of rural infrastructure to new market realities. Finally, income transfer programs likely will serve a useful purpose while the rural economy is in transition, but questions must be raised whether farm income programs meet broader rural needs.

The Rural Development Policy

A rural development policy would be a much different response to current rural economic problems. Rural transition policy is a short-run commitment to ease the costs of resources adjusting to market trends already at work. Rural development policy, on the other hand, is a long-run commitment to stimulate economic development in rural areas, even though such development may run counter to current fundamental economic trends.

Adopting a rural development policy may not preclude a rural transition policy. A rural economic development policy logically includes a transition component for the parts of the rural economy with little chance of economic recovery. Thus, a rural development policy can be regarded as a two-pronged response: on the one hand, an effort to ease resource adjustment in areas with little likelihood of economic revival and, on the other hand, an effort to stimulate economic activity in areas that offer more promise for future growth. The difficulty with this dual policy is that it forces policymakers to decide which rural areas fall into which category. The first step becomes a sort of triage, a determination of the rural areas that are not likely to grow, the areas with some growth potential, and the areas most likely to grow. What remains unclear is whether policymakers have sufficient information, knowledge, or the discipline to make such decisions.

Justification for rural development

Rural transition policy can be justified on solid economic grounds, but the justification for rural development policy lies apart from economics. Two reasons can be given for rural development policy: the social value of the rural lifestyle and the past history of U.S. rural development policy.

The United States has attached social value to rural living since its founding. Thomas Jefferson was a leading exponent of rural virtue.

> Cultivators of the earth are the most valuable citizens. They are the most vigorous, the most independent, the most virtuous, and they are tied to their country, and wedded to its liberty and interests, by the most lasting bonds. As long, therefore, as they can find employment in this line, I would not convert them to...anything else.(8)

From Jeffersonian roots, an economically strong rural population soon came to be regarded as a national asset. Such thinking resulted in congressional action, like the Homestead Act of 1862, which encouraged widespread ownership of rural resources.

Public opinion still supports rural causes. This support is frequently expressed in public backing of farm policy. A wide majority of voters continue to support farm policy.(9) Voters may be treating farm policy as a surrogate for rural policy, though that is unclear. As the public becomes more aware that farm programs benefit large, well-capitalized farmers more than small farmers, farm programs may be redirected, possibly to reflect rural goals more closely.

The second justification for rural development policy stems from historical fact. The United States has had a rural development policy of one form or another for nearly 100 years and is likely to continue having such a policy. Table 4.2 shows that from the Country Life Commission under Theodore Roosevelt to the Agricultural Adjustment Acts, Resettlement Administration, and Rural Electrification Administration under Franklin Roosevelt, federal rural development policy grew into a diverse set of programs.(10)

TABLE 4.2
Summary of federal rural development programs

Year	Rural Characteristics	Major Developments	Goals
1908	33% of population live on farms, 54% of population live in rural areas	Country Life Commission appointed	Major report on needs of rural population
1920	30% of population (32 million) live on farms		
1935	35% of farms electrified	Rural Electrification Administration organized	Bring electricity to farms
		Resettlement Administration organized	Resettle farm laborers and disadvantaged rural residents in part-time farming communities
1940	23% of population (30.5 million) live on farms 43% of population live in rural areas		
1955		Rural Development Committees organized	Aid local communities in establishing new training programs and other activities Coordinate federal efforts in rural development
1960	8% of population (15.6 million) live on farms		
1965		Housing and Urban Development Act passed	Improve rural and urban housing
		Rural Community Development Service replaces Office of Rural Areas	Coordinate USDA's rural activities Recommend legislation to improve rural life
		Development Interagency Task Force on Agricultural and Rural Life established	
1966		National Advisory Commission on Rural Poverty	Develop major program for attacking rural poverty
1970	26% of population	Rural Community	Coordinate USDA

	in rural areas	Development Service transferred to USDA Rural Development Committee	rural development programs
		USDA Committee for Rural Develop-ment set up in each state	Coordinate USDA programs for rural development within states
1972	5% of population lives on farms	Rural Development Act	Broad authority for rural development programs
1978		White House rural development initia-tives on health, water, sewers, communications, energy, trans-portation	Secure cooperation in solving these problems
1980		Rural Development Policy Act passed	Extend authorization for appropriations
		USDA establishes National Advisory Council on Small Community and Rural	Gives groups opportunity to parti-cipate in policy and program planning
1982	3% of population on farms	National Advisory on Rural Develop-ment established	Identify rural problems and sup-port rural develop-ment policies

Source: Wayne D. Rasmussen, "90 Years of Rural Development Programs," *Rural Development Perspectives,* October 1985, pp. 6-7.

Current rural policy derives from the Rural Development Act of 1980.(11) The act established a framework for implementing rural development policy. The act requires the Secretary of Agriculture to review the nation's rural development strategy every year and to identify federal involvement in meeting the rural objectives stated by Congress.(12) In practice, however, the Rural Development Act does not serve as the motivating force behind most federal spending for rural development. Diverse federal programs, most unrelated to rural policy objectives or to each other, continue federal spending on rural projects (Table 4.3).

TABLE 4.3
Administration's proposed fiscal 1986 budget for selected rural development programs

Development programs	Nonmetro share ($ million)
Community and infrastructure development	
Spending programs	7,554
Credit programs	881
	8,435
Business and government economic assistance	
Spending programs	1,014
Housing and credit assistance	
Spending programs	120
Credit programs	4,660
	4,780
Other selected programs	
Spending programs	2,180
Credit programs	3,596
	5,776
Total selected programs	
Spending programs	10,868
Credit programs	9,137
	20,005

Source: U.S. Department of Agriculture, Office of Rural Development Policy.

The United States, then, has a national rural development strategy. But the strategy is only a loose guide to rural policy, not policy blueprint. The Secretary of Agriculture facilitates rural development policy and implements a few discretionary programs within the USDA. But the strategy falls far short of being a comprehensive policy statement that clearly marks objectives and programs. Most federal spending in rural areas happens apart from any such rural policy blueprint.

Rural development objective

If the United States wants to encourage rural development, it should work from a comprehensive policy that guides the selection of specific programs. The first step toward a comprehensive policy is identifying primary policy objectives. Easing the transition from narrower traditional economic bases to new, more diversified rural economies appears appropriate as the major objective of a federal rural development policy. A diversified economy is no guarantee against economic stress, but diversification helps buffer the wide economic swing many rural areas have experienced in the 1980s.

Rural development programs

Three program approaches can be taken to facilitate rural economic diversification: infrastructure investment, business development, and information dissemination. The federal role might best be confined to infrastructure investment. State and local governments might best bear responsibility for the other two approaches.

Infrastructure investment programs. Investing in rural infrastructure and then allowing market forces to determine the location of business activity is a long standing tradition in federal rural development policy. Infrastructure investment appears to be the main program area where the federal government can still play a role in rural development. Two major program areas in infrastructure development have been evident in the past.(13) The one is economic overhead capital (EOC), which consists of public works, such as power systems, sewer and water utilities, and highways and other transportation facilities. The other is social overhead capital (SOC), which consists of such human resource development programs as education, public health, and rural housing. Federal policymakers might appropriately view SOC as part of a rural transition policy.

Federal spending on rural infrastructure most often has been for loans or grants for improving water and sewer systems and developing highways into isolated regions.(14) Federal rural development policy continues to emphasize the public works aspects of infrastructure development. More than $8 billion was budgeted for spending on community and infrastructure development in fiscal 1986 (Table 4.3). Many of these programs are intended to make plant sites in rural areas more attractive and accessible to new businesses.

Federal infrastructure programs appear to have stimulated income growth in rural counties. Counties receiving Economic Development Administration (EDA) aid have consistently grown more rapidly than counties without aid. Furthermore, EDA investments in infrastructure have been more successful in boosting rural economic growth than have direct EDA loans to businesses.(15)

The success of the Appalachian Regional Commission in bringing rural parts of its constituent states into the mainstream of the U.S. economy may offer a paradigm for other federal investment in rural infrastructure. Increased growth in the Appalachian region can be attributed largely to public investment in the area's transportation network. The programs also appear to have facilitated the outmigration of labor to urban areas. Thus, EOC infrastructure development can serve both transition and development objectives in rural areas by enhancing the attractiveness of the area's resource base while making rural resources more mobile.

The future success of federal investment in rural infrastructure will depend on carefully targeting funds. Public investment in EOC seems warranted where funds are targeted to communities that already have characteristics that will attract private investment. Such characteristics might include low-cost energy, a favorable location relative to existing transportation, a pool of adaptable labor—possibly associated with declining rural industries—and availability of a natural resource base. Under such conditions, public investment in EOC serves as the catalyst for private investment in the rural area rather than merely accommodating private investment. Increased EOC investment in lagging rural communities, however, is not likely to be effective in promoting growth in areas lacking growth potential.

Business development. Programs to develop local business are almost entirely the province of state and local governments. Federal funds might be directed to infrastructure investment, but it falls to state and local governments to stimulate further development. Business development programs take essentially one form, a subsidy to entice business investment.

Many rural communities and states continue to emphasize various forms of investor subsidies to attract industry. Common forms of local investor subsidies in rural areas include tax abatement, interest subsidies through industrial development bonds, and subsidized production inputs.(16) Since such subsidies are a cost to local communities, do they pay off in terms of new jobs and income to local residents?

Investor subsidies appear to have only limited effect on industrial location for two reasons. First, companies select a general region in which to locate on the basis of market potential or resource availability. For example, a manufacturer of textile products might first consider locating in the South because of the availability of experienced labor and relatively cheap land. Local subsidies have little or no influence on the decision, because the subsidies are often a small part of the cost differentials between regions. Second, nearly all communities offer new plants some sort of subsidy. The general availability of subsidies reduces their locational pull. Accordingly, investors are not likely to locate in an area solely on the basis of local subsidies.

Industrial revenue bonds illustrate the relative ineffectiveness of investor subsidies. First introduced in Mississippi in 1935, industrial revenue bonds are tax-exempt municipal bonds issued by local public agencies on the behalf of private firms. They were originally intended to attract new businesses to areas with little indigenous capital, but evidence suggests they are now widely used and available to existing local businesses as well as new business interests. As such, they have little effect on location decisions. Rather, they serve as a general subsidy for new investment, with the costs borne by the federal Treasury, since municipal bonds are exempt from federal income tax.(17) Moreover, the recently passed federal tax reform further restricts the use of industrial revenue bonds.

Tax abatements and subsidizing production inputs, such as manpower training, also have drawbacks as development tools. There is some evidence that location decisions—the choice, say, between neighboring states or counties—are influenced by special tax abatements or offers of subsidized inputs.(18) However, the value of subsidies varies greatly with the capital needs, marginal tax structure, and resource requirements of potential investors. Accordingly, rural development agencies would do well to provide an array of incentives that can be tailored to the needs of potential investors in rural areas.(19) It should also be emphasized that the locational advantages of tax abatement could be offset if lower tax bills resulted in poor public services. Finally, states that want to direct new development to lagging rural areas will need to provide special state incentives for those areas since investor subsidies are generally available in all areas of a state, whether urban or rural.

Many rural areas likely will find recruiting industry more difficult in the future. Recent evidence suggests two reasons for this outlook. First, low-wage, labor-intensive jobs increasingly are going to foreign countries with outright comparative advantage. Second, many of the new jobs in manufacturing are being directed toward the more diversified labor pool and more highly developed infrastructure found in larger cities.(20) As a result, some states are proposing to stimulate local business formation through training and seed capital programs. Examples of such approaches are to use colleges and technical schools as centers for small business development and to provide local development agencies with technical assistance to broaden their perspective. The effectiveness of seed capital programs remains unclear.

Information dissemination programs. Federal, state, and local governments all have experience in providing information on development opportunities. The basic aim of the information programs is to promote rural communities as places to invest or to promote the goods rural communities produce.

The federal government has a long history of stimulating foreign demand for goods produced in rural areas through information dissemination and export promotion. The federal government has dozens of programs for facilitating export expansion, such as the International Trade Administration, the Export-Import Bank, the Small Business Administration, the U.S. Trade and Development Program, and perhaps of greatest significance to many rural areas, the Foreign Agricultural Service (FAS) of the USDA.(21) These programs are not specifically targeted at rural products, but they have considerable influence on the rural economy and probably serve a useful purpose in rural development.

States are taking several steps to stimulate rural exports, both to the rest of the U.S. economy and to foreign buyers. Many states are trying to provide rural communities with technical assistance to expand exports. Accordingly, many state universities have community and rural development personnel to help small communities identify development goals and attract industry. States are also becoming more involved in promoting export goods from their states through programs that seek market niches for locally produced goods.(22) To be successful, programs that promote local processing of raw goods need to be based on products that offer comparative cost advantages over competing regions. Products based on traditional local raw materials and processing activities will not necessarily offer a comparative advantage in the changing market. For example, the cotton producing states of the Southeast may no longer have an advantage in textile production. On the other hand, the Mississippi catfish industry is an example of where state programs have been coupled with comparative cost advantages to develop a rural industry.

Local governments tend to specialize in providing information about communities through local chambers of commerce or county industrial recruiting offices. No comprehensive evaluation of the effect of such programs on economic development is available. However, the low cost of such efforts and the perceived need to match the recruiting efforts of neighboring counties and states ensures that the policy will continue to be popular with local leaders.(23)

Summary

In sum, rural development policy involves a long-run commitment to stimulate economic growth in rural areas. Such a policy aims to reverse, at least to some degree, structural changes now at work in the rural economy. This approach is justified by social goals, not economic ones. The federal role in rural development appears to be investing in rural economic infrastructure. States can play a part by providing special business development incentives and information programs to enhance markets for goods produced in rural areas. Rural policymakers should set clear priorities for infrastructure investment. Scarce public funds should be spent only when there is a reasonable likelihood they will spur private economic activity. Local communities will be left with the greatest rural development task—that of attracting businesses to rural locations. Local communities will offer a variety of investor subsidies, but the results of these efforts may fall short of expectations.

Conclusions

The rural economy is undergoing fundamental change. The effects of this structural change are showing up in an increasing number of displaced rural workers and mounting strains on the public infrastructure of rural communities and states. Policymakers are just now beginning in earnest to decide how they will respond to rural economic problems. Before going further, policymakers need to decide whether a rural transition policy, a rural development policy, or some combination of the two will guide their responses.

Rural transition policy is the logical starting point for responding to rural economic stress. The structural change unfolding in rural America is creating resource adjustment strains that policy can effectively address. Retraining programs for displaced rural workers and programs that maintain essential public services and encourage the pooling of rural infrastructure can facilitate rural economic change while holding social costs to a minimum. States will carry the principal responsibility for administering many of these programs, but the federal government likely will play a role in funding the programs.

Whether the United States goes beyond transition policy and pursues a rural development policy depends on the social value attached to the economic growth of rural areas. The United States has explicitly pursued rural development goals for more than a hundred years. If those goals are still considered worthy, a comprehensive policy needs to be formulated to guide rural development programs. Infrastructure, business development, and information dissemination programs should be targeted to rural communities that have a reasonable likelihood of attracting private investment. Finally, policymakers should decide if farm programs, currently the primary policy link to the rural economy, may be too narrowly focused to meet rural objectives. If so, some of the public funds now going to farm programs may need to be redirected to rural programs.

Notes

This chapter first appeared as an article in the January 1987 edition of the Federal Reserve Bank of Kansas City's *Economic Review.*

(1.) For example, the underemployment problem in Nebraska was analyzed by the Nebraska Department of Economic Development and Labor in *The Nebraska Project: State of the Labor Market Economy,* Lincoln, 1985.
(2.) See Daniel Otto, "Analysis of Farmers Leaving Agriculture for Financial Reasons: Summary of Survey Results from 1984," Iowa State University, 1985.
(3.) U.S. Senate, Subcommittee on Intergovernmental Relations, "Governing the Heartland: Can Rural Communities Survive the Farm Crisis?" May 1986.
(4.) For an analysis of fiscal pressures facing rural governments, see James Hite and Holley Ulbrich, "Fiscal Stress in Rural America," invited paper presented at the annual meeting of the American Agricultural Economics Association, Reno, Nevada, July 1986. See also, "The Agricultural Recession, Its Impact on the Finances of State and Local Government," Advisory Commission on Intergovernmental Relations, Staff Report, June 1986.
(5.) See J. Norman Reid and Patrick J. Sullivan, "Rural Infrastructure: How Much? How Good?" *Rural Development Perspectives,* U.S. Department of Agriculture, October 1984.
(6.) See Ted K. Bradshaw, "Economic Development in Rural America: The Hard Case," *Looking Ahead,* The National Planning Association, Vol. IX, No. 2, Spring 1986, and Sigurd Nilsen and Frank A. Fratoe, "Job Training Partnership Act, CETA, and Rural Communities," *Rural Development Perspectives,* U.S. Department of Agriculture, October 1984.
(7.) In the fall of 1985, the Iowa legislature briefly discussed the possible need to consolidate the state's 99 counties into fewer counties that would be more fiscally sound.
(8.) Saul K. Padover, *Thomas Jefferson on Democracy,* Mentor 1939, p. 68. Quoted from a letter Jefferson sent to John Jay in 1785.
(9.) Recent public opinion polls reveal that two out of three U.S. citizens support farm programs.
(10.) For a discussion of rural development policy history, see Wayne D. Rasmussen, "90 Years of Rural Development Programs," *Rural Development Perspectives,* U.S. Department of Agriculture, October 1985.
(11.) PL96-355, the Rural Development Act of 1980, was enacted September 23, 1980. The act extended the Rural Development Act of 1972.
(12.) Harking back to traditional goals, the act identified five rural objectives: to raise rural incomes, to improve rural business and employment opportunities, to improve the management capabilities of rural governments, to "strengthen the family farm system," and to maintain and protect the environment and natural resources of rural areas. See "Rural Development Strategy: 1985 Update," Office of Rural Development Policy, U.S. Department of Agriculture, and "Rural Communities and the American Farm: A Partnership for Progress," U.S. Department of Agriculture, Office of Rural Development Policy, July 1984.

(13.) See, for example, Niles Hansen, "Development Pole Theory in a Regional Context," *Kyklos,* Vol. XX, 1967, pp. 709-725.

(14.) For an overview of government and private agencies involved in rural development, see Judith M. Richards, *Rural economic Development,* Southern Rural Development Center, Mississippi State University, Spring 1984. The Economic Development Administration, U.S. Department of Commerce, and the Farmers Home Administration, U.S. Department of Agriculture are two important sources of federal funds for public works projects in rural areas.

(15.) For analysis of infrastructure programs, see Randolph C. Martin and R. E. Graham, "The Impact of Economic Development Administration Programs: Some Empirical Evidence," *The Review of Economics and Statistics,* February 1980, pp. 42-52, and Randolph C. Martin, "Federal Development Programs and U.S. Problem Areas," *Journal of Regional Science,* May 1985, pp. 157-170.

(16.) For an exhaustive guide to incentives, see *Directory of Incentives for Business Investment and Development in the United States: A State by State Guide,* Urban Institute Press, Washington, D.C., 1983.

(17.) Matthew Marlin, "Industrial Revenue Bonds: Evolution of a Subsidy," *Growth and Change,* Vol. 16, No. 1, January 1985, pp. 30-35.

(18.) W. Warren McHone, "State Industrial Development Incentives and Employment Growth in Multistate SMSA's," *Growth and Change,* October 1984, pp. 8-15.

(19.) See D. Rasmussen, M. Bendick, and L. Ledebur, "A Methodology for Selecting Economic Development Incentives," *Growth and Change,* January 1984, pp. 18-25.

(20.) For example, see MDC Panel on Rural Economic Development, "Shadows in the Sunbelt," MDC Inc., Chapel Hill, N.C., May 1986.

(21.) For a description of specific programs, see International Trade Commission, *The Export Trading Company Guidebook,* U.S. Department of Commerce, March 1984, pp. 77-80.

(22.) See Judi Hackett, "Agriculture and Rural Development," mimeo, Center for Agriculture and Rural Development, Council of State Governments, Lexington, Ky.

(23.) For a discussion of program effects, see Charles Leven, "Regional Development Analysis and Policy," *Journal of Regional Science,* Vol. 25, No. 4, November 1985, p. 574.

5

Rural America in the 1990s

Mark Drabenstott, Mark Henry

A decade of profound economic and social change is ending for rural America. With the close of the 1980s, attention now turns to the 1990s and the prospects it holds for rural America. Will the 1990s bring a rural renaissance or further economic hardship? The answer is still years away, but current events may point to some broad directions that rural America may take in the coming decade.

Clearly, the resource adjustments being made across the rural landscape are forming a smaller but more profitable base for the rural economy of the 1990s. Population and capital resources are shifting out of many parts of the rural economy. Traditional segments—those dependent on farming, mining, and manufacturing —are downsizing. The ascendant segments—those dependent on retirement and government—are gaining population, infrastructure, and economic momentum. Unless current trends reverse, rural America is likely to remain sharply divided in the 1990s. The large traditional segment may stabilize due to the difficult reductions in resources, but any growth in this segment will be from a smaller base than in the past. Meanwhile, the new rural America, while remaining a relatively small part of the rural economy, will continue to grow at a healthy pace.

Rural Economic Outlook

What is the outlook for specific types of rural counties? Agriculture, the classic rural industry, looks to make moderate gains in the 1990s, after the wrenching problems of the early and mid-1980s. But gains for the farm economy will depend on two critical factors. The first priority for U.S. agriculture is to restore demand for U.S. farm exports. Without strong demand abroad and competitively priced U.S. farm products, the United States could have a persistent surplus problem through the year 2000. A second and related challenge for the farm economy will be to wean itself from unprecedented levels of government subsidy. Thus, agriculture is likely to find itself searching for stronger markets as government support declines, at least in real terms. To prosper, agriculture may have to take even more of its resources out of production, especially if the productivity advances from biotechnology breakthroughs outstrip improvements in world food demand.

The evolution of agriculture to ever larger farms will continue to reverberate change across many rural communities. Smaller farm communities will wither while larger farm trade centers may grow at solid rates. More and more part-time farming will take place near metropolitan centers that offer employment opportunities.

Rural manufacturing may have a difficult decade again in the 1990s. Rural manufacturers will continue to face unrelenting competition from foreign firms. To compete more effectively, the labor intensive factories now scattered across rural states will face the choice of updating their plants, relocating, or shutting down. At best, rural employment in manufacturing may increase slightly. At worst, rural factory jobs could erode further and substantially.

The energy industry can be expected to remain volatile in the 1990s, creating still more turbulent economic cycles for resource rich rural areas. Oil prices will continue to respond to a range of largely unpredictable political factors. Overall, uncertainty about future prices may be a greater deterrent to exploration and development than prices themselves. The persistent surplus of other extractive resources, such as coal and metals, may not be reversed until well into the 1990s. Thus, business conditions in rural counties depending on energy and mining may be comparatively weak, and any growth that does occur will be from a comparatively small base.

Retirement-dependent rural counties should continue their robust growth in the 1990s. The aging U.S. population will result in an ever growing number of consumers seeking retirement amenities. As Americans live longer, the demand for retirement services in rural areas will increase. Rural communities with natural amenities and adequate infrastructure appear likely to continue their rapid growth, serving as the real front runner in the rural economy.

Government-dependent counties also appear likely to remain strong. Despite possible reductions in federal spending in the 1990s, state and local government services will probably keep expanding. Moreover, any cutbacks in federal spending may not mean sharp cutbacks for rural areas. If anything, rural areas may be spared the brunt of cuts because of the increasing popularity of rural development in Congress.

Trade-dependent rural counties will probably do well in the 1990s. Consolidation of communities across traditional rural America will give rise to trade centers serving broader market regions. These trade hubs may be small—in some cases, remote—compared with metropolitan trade centers, but they will be viable centers of economic activity. The centers may not necessarily be county seats. In fact, one town may serve as the business and financial center for several counties, especially in farm regions. The rise of trade centers in rural America will continue to blur county lines. Consolidation of county public services will remain a difficult local policy question in the 1990s. In sum, the rural economy will continue to have winners and losers. In the long run, traditional rural industries—farming, manufacturing, and mining—will benefit from the resource adjustments of the 1980s, but some economic problems are likely to remain. Any growth in the traditional rural economy will happen from a smaller base than in the past. The "new" rural economy—dependent on retirement, government, and trade—will find continued success in the 1990s. Demographic and economic trends will contribute to solid, uninterrupted growth in this quarter slice, but growing, segment of rural America.

Rural Policy Outlook

Rural America's economic future depends in large part on the rural development strategies policymakers craft. Fortunately, policymakers now attach a great deal of interest to the formulation of rural development policy. Will that interest give rise to serious policy initiatives? If so, what forms are the initiatives likely to take?

There are two schools of thought on the form that rural development policy may take in the 1990s. One school holds that rural growth problems are a byproduct of the economy's response to foreign and domestic economic forces that have reduced the vitality of the traditional economic bases in rural America. According to this view, policy should facilitate the reallocation of resources from rural to urban areas and within rural America. Retraining programs, improved labor market information to facilitate job searches by displaced rural workers, and relocation assistance are examples of programs that can be used to implement this policy. Innovative approaches to implementing these kinds of programs are already evident in many states.

But should policy do more than ease the rural adjustment to the economy of the 1990s? The second school of thought embraces the belief that market forces, left alone, will produce greater economic disparity between the nation's urban and rural areas. This view suggests policies designed to strengthen rural America's resource base and to narrow the economic gap between urban and rural areas. Emphasis is given to long-term development programs designed to improve the quality of the rural resource base and, therefore, the ability of rural areas to compete in the markets of the 1990s.

The role of the federal government in rural development will likely be much the same in the 1990s as today—a grab bag of programs that offer assistance for basic infrastructure investment in roads, water, sewers, and the like. Unless there is a major change in the rural development activities of agencies like the USDA, there seems little chance of creative programs or large infusions of federal funds targeted at rural development problems.

On the other hand, state government and other institutions are likely to play a more important role in nurturing economic growth in rural areas. There seems to be a growing awareness among state leaders that they will have to take an active role in bringing their rural constituents into the mainstream of their state economies. Some states already have devised tax incentives to lure new employers into rural areas. In the 1990s, more states are likely to focus rural growth efforts on the retention and expansion of existing businesses rather than chasing elusive branch plants of major corporations. Also, it will be necessary for states to give more attention to attracting service-based activities to rural areas.

Scarce funding in the 1990s will force states to carefully target infrastructure investments. Policymakers sometimes distribute funds unevenly to gain broad-based support for development programs. As a result, the areas most in need and the areas with the greatest likelihood of economic success fail to receive proper funding. Coordination of development efforts on a regional basis within states also will improve the effectiveness of public infrastructure investment. Moreover, states should gear infrastructure investments to match its strengths and weaknesses.

States may use their universities, especially the land-grant universities, as more active agents for economic development.(1) This new approach may involve new forms of cooperation between the private sector and universities in research and development. Those effects may focus particularly on "value-added" agricultural industry, such as food processing, where location factors could favor rural sites. Efforts may also be made to establish entrepreneurial centers at universities. Through their extension services, land-grant institutions are in a unique position to assist in the dissemination of information about marketing and management techniques that may be vital to the growth of new businesses in rural America. For these types of initiatives to be more widely used, a reordering of priorities at these institutions may be needed. Many land-grant institutions now emphasize agricultural programs. That focus will have to shift if broader rural development programs are to be effectively implemented.

Finally, rural states should continue to reexamine their commitment to provide better educational opportunities. Many states have already undertaken programs to raise education standards in elementary and secondary schools. Educational improvements for rural residents are likely to be the key to long-term rural development. Without a well-educated and a well-trained rural workforce, most other programs for development will be largely ineffective. Short-term job growth might be achieved with rural tax incentives or infrastructure investment, but the rural-urban development gap is likely to widen over the long run if rural residents do not receive a quality education.

Conclusions

Rural America looks forward to a more stable decade in the 1990s. The resource adjustments that reshaped rural America in the 1980s will remain as painful memories for many rural residents. But these adjustments should lay the foundation for some steady rural economic gains. Rural growth opportunities may spring from current policy initiatives and long-run recovery of rural industries. Current interest in rural development policy appears to be more than a passing fad. Well-defined policy could leave a sound legacy of rural economic progress in the 1990s. It is still possible, however, that legislative interest could wane, as it did in the 1960s. Traditional rural industries could rebound cyclically in the 1990s. The fortunes of agriculture could brighten if world food trade strengthens markedly. Rural manufacturing could benefit if the value of the dollar remains weak. But in any case, rural industries must still face a basic lesson of the 1980s. Seemingly remote, the rural economy is inextricably tied to extremely competitive international markets. And that competition promises to remain keen in the 1990s.

Notes

(1.) For a discussion of the programs universities are undertaking to stimulate state economies, see Tim Smith, Mark Drabenstott, and Lynn Gibson, "The Role of Universities in Economic Development," *Economic Review,* Federal Reserve Bank of Kansas City, November 1987.