1

Introduction

What will the transition to a service economy mean for America's communities? A quick review of academic and popular press accounts points out widespread speculation about who will be the winners and losers in our rapidly evolving information economy.

> Tomorrow's big city is no longer going to be the office center. The exodus is already underway. Insurance companies are rapidly shifting their labor-intensive work to the outskirts of metropolitan areas. Equally important, clerical work increasingly will become "uncoupled" the way much physical office work—cleaning, maintaining equipment, running the cafeteria—already had been. Big companies of tomorrow are almost certain to keep their management people—at least their senior ones—where other senior management people are: in the city. This means that big cities will be the purveyors of specialized skills and knowledge. But even those people will have their office work done outside the city. (Paraphrased from Drucker 1989)

> "Data processing facilities of large business (notably banking and insurance) may increasingly be attracted to nonmetropolitan locations because advances in communications allow them to operate at a distance from the central office, and advances in data processing permit the employment of relatively low-skilled clerical labor, which is found almost everywhere." (Stanback and Noyelle 1982)

> Philanthropy is saving a community. The president of Philadelphia-based Rosenbluth Travel saw an opportunity to help a devastated region and simultaneously meet his firm's back-office data entry needs. A Rosenbluth team picked Linton, North Dakota, a town of 1,430 population located in the south central area of the state to open a facility to handle data processing activities. Within a matter of months, the company had hired 40 part-time workers and opened a telecommunications office for data processing in an empty farm implement dealership. (Paraphrased from *The Dallas Morning News*, April 28, 1991)

> While telecommunications improvements increase a rural community's access to information and make it possible for rural business to more easily serve non-local markets, they can also make it easier for firms located in urban areas to serve rural markets via branch offices or through the telecommunications systems. (Kirn, Conway, and Beyers 1990)

> "Despite the revolution in communications and information technology, rural officials should not yet conclude that traditional urban services are on the verge of loosening their ties to population centers and moving to rural areas." (Miller and Bluestone 1988)

Are service industries next in line, like their predecessor manufacturing, to decentralize to America's peripheral areas? Peter Drucker's view emphasizes the role of telecommunications in freeing services to locate down the urban hierarchy. Similarly, Thierry Noyelle, a noted expert on services, focuses on the relentless march of industry toward maturation. He predicts that services will follow the path of manufacturing, moving into rural areas to minimize costs. As the example notes, rural community's experience suggests that some decentralization is occurring, bringing desperately needed jobs to economically vulnerable small towns. In contrast, another interpretation suggests that urban service firms are likely to displace local rural establishments as telecommunications reduces distance costs and allows urban firms to penetrate isolated markets. Finally, from the U.S. Department of Agriculture's Economic Research Service, inadequate infrastructure, a declining skill base, and the growing cost competitiveness of less developed countries for routine service operations may all diminish rural areas' ability to attract export service activities.

Predictions about services and peripheral regions' economic development are numerous, yet we know surprisingly little about the structure and function of services outside of urban and suburban places. The purpose of this book is to fill in this gap in our understanding of contemporary services industries and the circumstances governing rural services development. Through an analysis of national-level data and detailed case studies, we assess the importance of services in the economies of rural areas. Focusing on a subset of states, we examine the organizational structure of service firms and clarify the extent to which service industries may be filtering operations into rural communities as manufacturing did in previous decades. Case studies of exporting service industries identify whether rural areas are in competition for more sophisticated service sector growth.

In this book we provide a glimpse into the spatial behavior of service industries. Models of services decentralization drawn from the experience of manufacturing ignore existing service functions and the powerful role of new technologies and new institutional arrangements that decouple services from prior modes of industrialization. Caught between old and new paradigms, peripheral regions of developed countries are being cut loose from established patterns of industrialization to traverse uncharted territory. We focus on "rural" because in an important sense peripheral locations are the first to feel any breaks between old and new trends in economic development. Peripheral regions have largely been seen as recipients of larger industrial processes or extensions of the urban economy. Thus, our assessment seeks to verify the magnitude of these changes. The trends we will describe seem a harbinger of what is yet to come in an era of globalization.

Why a Concern about Services Now?

The service sector is claiming center stage in rural development for three reasons. First, services have grown rapidly over the post-WWII period, and until very recently seemed immune to economic recession. Second, with the decline of traditional industries, rural and peripheral areas are grappling with uncertain futures. Services are seen as both a potential source of export activity and a component of modern infrastructure critical to future development. Finally, a reexamination of the development path of rural areas of the 1970s and 1980s suggests that places outside the influence of metropolitan areas have made little progress toward measures of economic opportunity and human well-being. Like the nation's central cities, a decade of neglect is beginning to show on the face of rural America. What role services can play in this period of uncertainty rests in large part with the underlying basis for services growth.

For some readers, renewed concern about rural development problems may come as a surprise. In the mid 1970s, headlines boasted regularly of a rural turnaround based on renewed growth of small communities (Beale 1975). Factors that contributed to the rural renaissance of the late 1960s and 1970s are by now well known. Rural manufacturing, which had been decentralizing since the 1950s, drew population to rural counties for the first time in decades. High energy prices stimulated demand for new petroleum reserves and petroleum substitutes, stimulating growth in rural mainstay industries. Nonmetropolitan fertility rates were higher compared with those of cities. Growth in government—federal, state, and local—contributed to renewed population levels and employment growth. This growth provided funds for education, highway construction, and new government installations—both military and civilian. The first large cohort of social-security-supported and wealthier retirees began to leave urban areas in search of a more relaxed, lower-cost lifestyle.

By the end of the 1980s, many formerly declining urban manufacturing centers were experiencing economic recovery based on the growth of services. The same was not true for rural communities. While the nation's cities moved toward an information economy, rural America remained wedded to a manufacturing growth strategy—a tactic that had made sense while manufacturing decentralized. Nevertheless, despite serious local economic development efforts, rural communities' old sources of export-led development—manufacturing, natural resources, and agriculture—stagnated. Combined with macroeconomic policies, the twin recessions of the decade wreaked havoc on rural communities' economies. Job growth in many nonmetropolitan areas came to a halt; many communities actually lost ground during the 1980s.

For agriculture, the bedrock of rural America, falling interest rates, increasing self-sufficiency of former grain importing countries, and the continuing consolidation and mechanization of farms precipitated a renewed exodus of people out of rural areas, particularly in the corn belt of the Northern Great Plains states. The mining sector—another rural mainstay—suffered a triple insult. Failing mineral and energy commodity prices were due to the 1982 recession. This was matched with an absolute reduction in the volume of commodities used to produce goods such as automobiles. Combined with the deteriorating control of world energy prices by OPEC countries, the results were devastating.

Manufacturing, once considered the savior of rural America, fell on hard times as urban firms slowed the filtration of branch plants to nonmetropolitan areas, and an overvalued U.S. dollar accelerated the simultaneous shift of manufacturing to foreign locations. Manufacturing employment growth was effectively capped. To counter the effects of intensified foreign competition, firms raised productivity by increasing capital investments, further reducing employment. Although manufacturing re-established its trend toward decentralizing to rural areas in the late 1980s, rural communities are now painfully aware of manufacturing employment's cyclical sensitivity.

Yet, rural manufacturing's decline has proved to be more than just a periodic response to the 1982 national recession. Rural America's traditional comparative advantage—cheap labor, a lax regulatory environment, and probusiness culture—

was no longer competitive. By the late 1980s, even though rural manufacturing had begun to grow again, job levels had fallen far below those of the 1960s (Majchrowicz 1990).

The 1970s may well have been an anomaly due to a unique confluence of events favorable to rural areas. However, contemporary research is beginning to question the significance of the turnaround associated with the perceived rural renaissance of the 1970s (Fuguitt 1991). Measurement of this change depends heavily upon the geographic unit of analysis studied. Just what constituted rural America in the 1950s–1980s decades is open for dispute. A pre-1970s definition of rural places using a constant area approach that specified metropolitan and nonmetropolitan county designations at the beginning of each decade shows that rural communities had indeed experienced a turnaround. Using a definition of rural that allows counties to shift from nonmetropolitan to metropolitan status as population changes, however, the 1970s decade represented more of the past—with population outmigration reaching levels of 10 percent over the decade. The greatest share of rural population growth in the decade was concentrated in the counties redefined in the 1980 Census as urban.

Definitional issues aside, the most critical effect of the perceived rural turnaround was the precipitation of a sharp reduction in the concern about rural communities. Rural advocates were so effective at proclaiming rural America's recovery that policy makers turned their attention toward more intractable concerns—the nation's inner cities.

Had the lens of analysis been more discerning, and had rural enthusiasts observed the growing importance of suburbanization, then comparisons between urban and rural might have been jettisoned in favor of comparisons of rural and suburban growth rates. Had rural been compared with suburban instead of an urban amalgamation that included deeply troubled urban centers, then rural concerns might not have evaporated from federal and state policy debate.

A more precise characterization of the changing American urban landscape would have uncovered the startling fact that the majority of Americans no longer lived in densely settled urban areas. Since the 1950s, Americans and their employers have been moving to the suburbs (Noyelle 1987). The evolution of the American spatial economy importantly depended upon the growth of services. With the failure of policy makers to recognize this broader trend, concerns about rural areas faded into the background.

By misidentifying the progressive movement toward a service-based economy, and assuming that services could play no more than a passive role in economic growth, rural areas remained wedded to manufacturing. Rural development policy still hinges on the attraction of manufacturing, a sector in which employment levels (not to be confused with output) have been declining nationally. Rural areas must now broaden their model of development. The future for rural manufacturing is not assured. The trends toward increasing capital intensity of production, recentralizing pulls associated with new inventory practices stressing rapid delivery, and increasing competition from third world countries call into question the prospect for further manufacturing decentralization.

The Transformation of the Structure of the U.S. Economy

By the early 1950s, the services sector had emerged as the largest source of jobs in the U.S. economy. Manufacturing continued to contribute the lion's share of total national output. But, due to the increasing complexity of the nation's economy, rising consumer incomes, the growing service component in manufactured goods, and the creation of unique service products, the service sector became the nation's major employer.

The 1980s proved to be a watershed decade for services. Over the ten years, services were the only effective job generator in the national economy. More than 17 million service jobs were created. Ronald Reagan's tremendous popularity owed much to the persistent growth of services which helped offset declines in other sectors. The longest economic expansion since World War II was based on the growth of services. As we entered the decade of the 1990s, most Americans were employed, the unemployment rate was at 6 percent, and 71 percent of Americans held jobs in the services sector.

The pattern was the same for rural economies. The fastest growing rural industries since 1969 have been in services and construction. In the 1980s, services accounted for *all* net new jobs created (Reid and Frederick 1990).

The structure of the national economy has fundamentally changed. The nation's employment base is no longer comprised primarily of goods-producing industries, and instead has become dependent upon information and services.

A closer examination of the restructuring to a service-based economy suggests that the experience is not all roses. Unlike previous decades, when growth in employment virtually guaranteed greater opportunity, the transition to a service economy did not produce an increasing standard of living for everyone. Although a large share of the nation's work force is currently employed, it now takes two wage earners to maintain a middle-class lifestyle (Bluestone and Harrison 1988; Gorham 1991; Levy 1988). This new labor market reality reflects the unfortunate fact that personal income levels have been stagnant since 1973. Whereas services industries did create millions of new jobs, many were part time, and a large portion of these jobs provided few fringe benefits. Low wages and part-time work characterize about 20 percent of total services employment (Christopherson 1989). Americans are now working longer hours for less pay (Schorr 1991). Hence the quality, not just the quantity, of jobs must be questioned. This dilemma has received relatively sparse attention.

Far more emphasis has been placed on the fast-growing producer services sector, activities that are intermediate goods to other business (see, for example, Noyelle and Stanback 1983; Daniels 1985; Marshall, Damesick, and Wood 1987). Producer services industries exhibit high growth rates, they pay relatively high incomes, and they employ highly skilled workers. In important instances these sectors also demonstrate significant export potential. It is no wonder that wooing producer services has become a major goal of local economic development policy. Whereas high-tech industries were the coveted prize of economic development circles a decade ago, today's targets are increasingly producer services, and the service sector more generally.

The growth of services has not been the result of a single or a profound shift in national economic circumstances. Rather, services growth is attributable to many factors, both overlapping and distinct. The early stages of internationalization forced American firms to massively restructure. Old patterns of intensive vertical integration gave way to externalization of non-core corporate functions. As firms' market niches became more competitive and more narrowly defined, demand for producer service inputs such as consulting, marketing, and sales became critical. Reorganization was made possible by the diffusion of computers and information technology that precipitated the formation of new firms providing producer services. The advent of new technology allowed the unbundling of functions previously performed by firms inhouse. In addition, new service products were created to assist American firms' participation in a global economy.

Residential consumption patterns were also changing, largely in response to the growing number of dual income households and rising female participation in the labor force. This new labor market reality fostered an increase in service activities such as eating and drinking establishments as more families bought services in the private economy that had previously been performed as unpaid work in the home.

The social compact forged between labor, capital, and government in the post-World War II period accelerated the expansion of another major service employment sector—health care. The existence of private health care benefits, an aging population covered by medicare, advances made in medicine, and the increasing fragmentation of health service activities (previously performed in a doctor's office or at the local hospital) contributed to an expanded medical sector.

Education also emerged as a major services employer. Demographic trends, in particular the move of "baby boomers" through the school system, liberal student loan policies, and the growing need for new technical training to satisfy the nation's insatiable appetite for electronically literate workers, boosted employment in both public and private education. Chapters 3, 4, and 7 in this book detail the expansion of services sectors over the 1974–1985 decade.

Without a doubt, the economic changes that came to a head in the 1980s elevated the services sector out of its former dependency status (a strict dependence on consumption) to that of wealth-creating, and along with this came the potential to facilitate regional development.

The Role of Services in Rural America: An Outline of the Book

As the introductory citations illustrate, there is a diversity of opinions about the locational behavior, and therefore the regional development potential, of services. Early academic research likened services location to that of manufacturing, in which competition is intense, products are standardized, and market share depends on being the lowest-cost producer. In these instances low-skilled labor is sufficient to carry out production, and wage differences across space become a critical determinant of industry location. The cycle of decentralization is by now well known: initial urban concentration during the early life of a product when access to skilled labor dictates a central location; a first phase of relocation to suburbs as firms search for markets and large pools of both white- and blue-collar workers; and, finally, decentralization to rural areas where wage rates, unionization levels, and taxes are lower. The extent that services mirror this pattern is a major concern of this book. By way of preview, we sketch out our own model of service industry location.

In this book we emphasize the relationship between industry locational tendencies and economic development potential. Economic development based on services depends upon the functional relationship between services and income growth. Economic base theory separates industries into two categories: basic and nonbasic. According to this theory, workers in basic sectors receive income based on the sales of goods produced in the local community and sold to the outside world. Nonbasic sectors grow as this externally derived income is spent locally. The theory posits that growth of total income is a function of the export base.

This model implies two modes of services-led growth for a rural economy—either through expansion of export-oriented services or by means of import substitution. Import substitution is the local purchase of previously imported services. In the vernacular of economists, import substitution increases the local multiplier, thereby raising local incomes as dollars circulate in the local economy. In framing the issue of rural services, it is worth distinguishing between import substitution in the goods-producing and the consumer sectors—because we believe a different set of dynamics are at play for each. Our justification for each of these three categories is discussed briefly here.

Traditionally, services were considered strictly dependent upon local demand generated by the spending of export-based earned income. Exports, according to this view, were products of the agricultural, mining, and manufacturing sectors. The growing importance and changing nature of the services sector has necessitated a reconsideration of the role services play in growth, however. We now recognize that services can be a source of growth in their own right. Some export-oriented service firms create tangible and tradable goods that can be shipped (e.g., software); other services are those that can be exported by moving production to the point of consumption (e.g., consulting), and services that can be exported by moving consumers to the point of production (e.g., tourism, health care). How has the growth of exportable services played itself out in rural America, and what potential do export services hold for rural development strategies?

Over time, an increasingly diversified local economy is expected to include growing numbers of establishments providing a complex array of goods and services previously traded in from the outside. This model of development equips us with a basis to explore the pull between the goods-producing sectors and their service providers. On a more concrete level, is the decentralization of manufacturing to rural areas pulling services in tandem? Are changes in the structure of farm ownership patterns making farmers more or less likely to purchase their inputs from local sources? The rural future may hold less promise if traditional rural exporters rely on urban centers as the source of producer service inputs.

The development literature has virtually ignored consumer and retail services' role in economic growth. Whereas their function has been assumed to be passive, these traditional services may fortify or frustrate efforts at local economic revitalization. The more vital a local retail and consumer services sector, the greater the share of local consumer dollars spent in the rural economy, and the greater the level of local income. Conversely, when a community loses its retail base, the spiral of decline accelerates.

Whereas economic growth theory provides a valuable framework for the analysis of rural services, data sources and the complexities of real life are not so accommodating. Therefore, it is not always possible to exercise this model through analysis. Data are not neatly divided into export or residentiary services, and although researchers have used SIC-based industrial categories to denote residentiary and producer services, not all firms (much less industries) fall neatly into one or the other category. Moreover, a service industry may behave as an export activity in an urban economy, but in fact be a residentiary or a consumer service in a rural economy. For example, as we show in Chapters 4 and 6, although banking and insurance tend to be exportable services for the nation as a whole and for urban America, employment trends in rural banking reflect import penetration on the part of urban banks rather than growth in rural export services.

Within our three-way categorization, the issue of external versus local control is an underlying theme. Even in instances where aggregate employment is stable or growing, a rural economy can be adversely affected by the displacement of locally owned services by externally controlled firms.

Issues surrounding external control are complex. Aggregate growth statistics may hide changes in who controls rural services firms. When services formerly provided by locally owned establishments are replaced with services provided by firms distantly headquartered, rural incomes are affected. No better example exists than that of the Walmart Corporation, a full-service retailer, which has formulated its growth strategy around locating stores at the crossroads of many small communities. Walmart sells into geographic locations with highly dispersed population bases. By spreading sales across many small population concentrations, the firm ensures the necessary market size and sales volume to provide a variety of consumer nondurable goods at a low price.

This successful strategy comes at a price. Rural merchants who once enjoyed a spatial monopoly that allowed them to offset the costs associated with distance from suppliers and lower sales volumes can no longer compete. Rural residents exchange lower individual costs of goods for reduced levels of local profit circulation. This intensification of retail trade is illustrated in Chapter 7, where we show that the commonly cited Walmart example is more than an anecdote. Retail employment in rural communities is stable, but the share of employment in independently owned enterprises is declining dramatically.

In chapter 2 we set up the rest of the book. We begin by reviewing the growing literature on service industry development and location. This analysis exposes considerable disagreement about the very definition of services—let alone their measurement. A detailed review of the literature suggests that the 1980s concern about producer services growth overshadowed the influence of services as a form of derivative development.

In Chapter 3 we evaluate the extent to which rural services mirror national trends. Whereas export services may suggest promising new development potential, the vast base of rural services are dependent on existing sources of income. This reveals the pervasive dependence of services on other forms of development. In this chapter we also clarify the importance of the underlying economic base and the existence of producer services. Most urban-based services research suggests economic base differentiation is coupled with a varied service base. On the contrary, the composition of services in peripheral areas are remarkably similar regardless of the local economic base.

In Chapter 4 we take up this issue through an examination of existing research on producer services. While highlighting the considerable debate about what constitutes tradable services, we also add our assessment of the spatial location of tradable services. On this account, we focus specifically on producer services—those sectors considered intermediate products to other industries.

Producer services industries are heavily dependent upon telecommunications technology. The expansion of this component of the services sector is tied to the increasing information content of modern industry. By some estimates, 50 percent of the American work force is involved in the creation and dissemination of information (Dillman and Beck 1987). Information technology is a key to the nation's transformation from a goods- to a service-producing economy. Access to telecommunications technology and skilled labor govern the location of producer service firms.

A growing body of literature documents the spatial tendencies of producer service firms. These sectors are predominantly found in large metropolitan areas where markets, skilled labor, and advanced technologies are found. Producer services are therefore fundamentally metropolitan in character. Unlike manufacturing firms, which decentralized branch plants to rural areas, service firms exhibit a tendency to sell into remote markets as demand develops. Service branch plants rarely leave the confines of suburban America.

Although there is some evidence that producer services are decentralizing to rural communities, it is necessary to clarify the importance of establishment ownership in this context.

As suggested in the case of import substitution services, the penetration of nonlocally owned establishments into markets with stagnating population and income growth brings a loss of local profits. The development consequences of service branches also differ from those that are associated with locally owned firms.

In Chapter 4 we examine producer services using both aggregate statistics of producer services among the nation's counties, followed by a more in-depth assessment of producer services in six states. In Chapter 5 we present a case study which examines branch plant filtering in data processing industries. Although we, too, find modest evidence of filtering, these establishments are very much tied to urban areas for markets and are vulnerable to foreign competition. The data processing industry also appears to be in a state of significant transition. Most rural data processing firms start out like urban firms—small. While some grow larger and fill momentary niches in labor-intensive computer processing, most have little more to offer than low wages. This cost-based market niche is eroding as lower-cost and international centers emerge as competitors. Rural areas appear as little more than momentary stopping off points as firms search for lower-cost alternatives.

For rural areas, service branch plants present similar challenges to those associated with manufacturing branch plants. Although jobs are created initially, service branch plants rarely bring with them the requirements for a full complement of skills. Instead, branches buy complex administrative functions from the parent. Moreover, expansion of the firm does not necessarily translate into increased numbers of jobs in existing branch locations. Service firms are market-oriented, and expansion usually results in growth near sources of new demand. Yet, our research also shows that rural communities are particularly disadvantaged even in those instances when upturns in demand require labor force expansion. Rural labor markets are often quickly exhausted. Consequently, service firms are forced to set up additional branches rather than expand in place.

In Chapter 6 we continue the analysis of producer services' role in rural development by examining the changing structure of the banking sector. This analysis shows that banks are consolidating and altering the labor process at the same time. In the future rural communities can be expected to have more difficulty accessing funds for business development. Jobs in banking are also being consolidated as regional banks shift certain tasks to regional centers in an effort to achieve economies of scale in service delivery.

An important contribution of our study is the analysis of service firms headquartered in rural communities. This type of establishment tends to create a full complement of skills, and thus is likely to encourage the expansion of rural communities' competencies. Profits circulate locally, and demand from these establishments forms the basis for import substitutes which may stimulate growth in other industries. Nevertheless, comparisons of rural and urban firms in the data processing industry point out significant limitations in the technical sophistication of rural service firms.

In Chapter 7 we look carefully at services traditionally dependent on other sources of income. We note two important findings. First, traditional sectors such as retail, once thought to be dependent on population concentrations, are changing spatial distribution patterns. As income-dependent sectors become regionalized due to technological innovations in the distribution sector, once sacrosanct services such as retailing are moving up the spatial hierarchy. Regional centers of consumption are accumulating demand and unlocking former spatial monopolies. For consumers the benefits in terms of lower costs and greater variety are real, but this trend may spell doom for small town Main Streets and necessitate longer journeys to purchase.

Throughout this book we highlight the distinctions between the formation of rural services establishments that are income-dependent, import substitutes, and export-oriented. On the basis of these distinctions, we offer evidence about the extent that rural and urban services differ.

The Current Rural Situation

This book is written at a time when rural fortunes have taken a decided turn for the worse. Despite major advances in population and employment growth in the 1970s, rural America still lags behind the nation's cities on a number of important measures. Almost half of rural counties lost population in the 1980s. Although by the end of the decade rural unemployment rates had fallen to within a half of a percentage point of urban rates, this did not translate into tangible growth in income. Per capita income levels in rural areas remain at 72 percent of those in urban areas, and although poverty rates have fallen from the post-recession high of the early 1980s, more than 16 percent of rural families still live in poverty. More disturbing, poverty levels are much worse for rural black and female-headed families, hovering at 40 percent. Thus, the dramatic growth of jobs nationally—primarily service jobs—did not translate into better quality of life for many rural Americans.

Researchers are now beginning to suggest that conditions in rural America are turning back toward those of the 1950s, when a great divergence existed between life in urban and rural areas. Calvin Beale (1991), the nation's undisputed expert on rural America, is quick to point out, however, that conditions in rural communities today are a far cry from those found in the 1950s. At the end of the 1940s, almost 50 percent of the rural housing stock had no running water or indoor toilets. Most lacked electricity. Two-thirds of rural adults had never been beyond grade school, and about three-fifths of rural roads were unpaved.

Yes, conditions are markedly improved from three decades ago, but we cannot ignore the fact that rural America is in danger of losing the progress gained in the 1960s and 1970s. Perhaps more crucial, evidence is mounting that serious problems are forming dark clouds on the horizon of rural America. The following statistics from the U.S. Department of Agriculture capture the basis for future problems in rural America:

Rural America now has about 50 percent of the nation's low-skilled, low-wage manufacturing jobs. (Bloomquist 1987)

Only 59 percent of rural workers have finished high school, compared with 69 percent in urban areas. More worrisome, only 11.5 percent of today's rural workers have completed college, compared with 18 percent in urban areas. And disparities in levels of educational attainment between urban and rural areas, once converging, now appear to be widening, according to some measures. (Teixeria 1991)

The 1982 recession accelerated rural communities' loss of college educated people. Net outmigration of college graduates averaged two percent per year between 1986 and 1989. (McGranahan and Ghelfi 1991)

The skill levels of new rural manufacturing jobs have declined by 50 percent in key areas such as data handling, verbal aptitude, and GED requirements. (Teixeria 1991)

Studies have shown that for rural areas, the historic link between education and employment and earnings growth has considerably eroded. (Killian and Parker 1991)

Forty-two percent of rural workers receive earnings at or below the nation's poverty level for a family of four. (Lichter 1991)

Rural workers between the ages of 16 and 24 are particularly disadvantaged. Fewer than 50 percent receive more than poverty-level wages. (Gorham 1991)

Twenty-four percent of rural workers work part-time involuntarily, compared with 7 percent of urban workers. (Lichter 1991)

Rural workers experienced a 30 percent difference in returns to education. (McGranahan and Ghelfi 1991)

Rural workers are more likely to experience a longer duration of unemployment after job loss than urban workers. (Swaim 1990)

These solemn statistics add up to one undeniable fact. Rural workers are working harder, for less pay, in less stable and often unfulfilling jobs than are urban workers. If the American economy is truly becoming one that produces information rather than goods, then it is critical that rural communities are able to compete effectively in this new environment. If America is to benefit fully from the emerging global economy, then every citizen must have the opportunity to participate in our better future.

National attention has been riveted on the plight of urban America, in which pockets of poverty persist and whole communities are at risk of being left behind, but the same can be said of many rural communities where hard work no longer guarantees a living wage. It is vital that we know the extent that services can augment traditional sectors which are now in a state of decline.

As we enter the decade of the 1990s, it is important and necessary that we understand the potential of services to create jobs and wealth in rural communities. The evidence in this book is one attempt to fill existing gaps in our understanding of this prospect. The results presented here clearly show that there is considerable room for constructive, carefully tailored policies to help rural America achieve its potential.