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*Economics of Welfare,  
Rural Development,  
and Natural Resources  
in Agriculture,  
1940s to 1970s*

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**PART II. Rural People, Communities, and Regions**

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## Rural People, Communities, and Regions: Introduction

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Concern with rural development dates back almost to the beginnings of agricultural economics as a profession and stems from many of the same impetuses. The changing emphasis in research related to rural development reflects both a growing progress and sophistication of techniques and an evolving economic scene. In the chapter on the basis for regional growth by Edwards, the extensive models and hypotheses now available for understanding economic growth are critiqued. The chapter by Jansma et al. analyzes policy and behavioral considerations that affect rural development, bringing in externalities, public choice, and many other concepts. In the chapter on migration by Graves and Clawson, recent and emerging patterns of rural to urban migration (and, increasingly, urban to rural migration) are documented, and emphases and concepts being used to understand migration are elucidated.

The three chapters have as their common theme a focus on an entire economy or part of an economy in a spatial setting. This basic characteristic makes the approaches in these three chapters different from those in the related chapter on rural poverty, which deals with people and households and not with region or economy as such. Whereas rural development and poverty used to be lumped in a catch-all category having to do with nonfarming considerations in rural parts of the economy, the two areas of inquiry have become increasingly differentiated. Poverty is by no means gone in rural America; like the rural population in general, much of it has migrated to

urban areas. Meanwhile, whereas the problems of lagging and depressed regions used to be problems that were most pronounced in largely rural regions such as Appalachia and the Ozarks, increasingly these problems are found in the traditional urban regions of the country. Regional development has been affected by changes in demands and lifestyles as well as transportation and technologic changes favoring the growth of rural areas. The emphasis has reversed from a concern with stemming the tide of decline in rural areas to a concern with how best to capitalize on favorable trends.

In the future, emphases will almost surely change further with changing events, and, more important, tools of analysis will be further developed. Of importance are developments and needs in regional and urban economics. These fields are advancing and coming together, a process which should be speeded in the interest of further improving ways to understand and analyze rural economic development.

At first glance it might appear that urban economics would have little to offer to the analysis of rural development. Urban economics has tended to be dominated by a model of residential location in a city with a single center. Yet in recent years, less narrow concepts have been introduced. These include introducing amenities as a residential choice variable, a greater concern for effects of governmental behavior, deeper analysis of industry and commercial location, and the beginnings of attempts to explain analytically the existence of cities with several subcenters (a phenomenon which has come to be the rule rather than the exception). These subjects dealing with the spatial structure of activities of metropolitan areas have implications for rural development, because much rural development still is related to proximity to larger metropolitan areas. A significant part of the increase in the rural population is undoubtedly explained by people living in a rural area and commuting to a job in an urban area, a situation explained by the seeking of residential amenities which were formerly neglected but which are now receiving more attention in residential location analysis. Much of the job growth in rural parts of the economy taking place just beyond the boundaries of politically defined metropolitan areas is part of the overall spatial configuration of industry and business location for the metropolitan areas. It reflects tradeoffs between rents and proximity to labor supplies, material supplies, and customers, all of which are determined by interrelations for the metropolitan areas as a whole. The growth of some rural centers can be explained as the beginning of their development as subcenters of larger metropolitan areas.

The analysis of rural development in proximity to larger metropolitan areas can benefit by use of the more diverse concepts coming into urban economics. In addition, with regard to rural areas wherever they may be

located, the newer concepts from urban economics throw light on the diverse factors affecting spatial configurations within a local economy.

Although urban economics has much to offer to the analysis of rural development, the potential contribution is not as central as that of regional economics. If there is a basic question in rural development, it is the same question that is basic to regional economics: What determines the size and nature of an economy that is part of a larger economy? The chapter by Clark Edwards gives a comprehensive review of major elements that can underlie an explanation of regional growth, and it contributes a classification and critique of the literature from this point of view. The five elements are: resource availabilities, technology, markets, the conquest of space, and institutions. A clear implication of Edwards's work is that a fuller integration of these elements is needed.

The fact that the five elements still need to be integrated is accompanied by the fact that regional economics has received less attention from the mainstream of economics than perhaps any other subfield. A major challenge is to apply the tools of economics more fully to regions, at the same time retaining the breadth of vision necessary to encompass the five elements identified by Edwards—a breadth which is often lacking in the use of the tools.

What would the needed comprehensive framework for the analysis of regions be like? At the center is an explanation of firm behavior. Firm behavior determines decisions to locate, the supplies of goods and services produced in the region or local economy, and the demands made on the factors of production. The firm decisions in turn depend most importantly on production relations as can be summarized in a production function. In using input-output analysis allowing for the use of goods in further production as well as the traditional inputs of labor and capital, regional economics has been ahead of much of the rest of economics. On the other hand, this type of analysis remains bound by the fixed coefficient assumption that needs to be relaxed to allow for the great differences that can occur between different locations in the way inputs are combined. The second of Edwards's five elements, technology, enters in the specification of the production function. Changes in time in production functions that affect competitive advantage are of particular importance in explaining regional change. The location of industry has received most attention in the descriptive work of economic geography. The power of formal model specification and econometric techniques is beginning to be brought more fully to bear in this area, a development which surely deserves to be encouraged.

Given the existence of production relations, the decision about where to locate and how much to produce is importantly affected by resource availabilities, which is another of Edwards's five elements. In attempting

to construct a rigorous and comprehensive framework, a broad interpretation of resource availabilities is needed. Regional endowments, or land broadly construed, may consist not only of agricultural land and land oriented to other resources but also of man-made capital such as water, rail, truck, and air transport facilities. The inevitably limited supplies of regional resources play a role in ultimately limiting regional size, but they do so only in the context of the total equilibrium of the region interacting with supplies of other factors of production, demands, and prices.

As with other regional resources, the human resources used in production in a region are affected by supply behavior and responses to incentives. Supplies of different skills of labor often need to be recognized as limiting growth, and the supply of entrepreneurial talent may clearly be of importance. Unlike the other regional resources, the human resources are not fixed to the region but instead will be in the region only if bid to be there. Differences in the prices of local goods and services, which cannot be expected to be equalized across regions, as well as climate and other amenities, affect the terms on which people supply themselves to a region. Recognition of these factors is giving greater insight on labor flows and appears capable of explaining the more rapid rates of growth and development in such favored areas as the Sunbelt and some rural areas.

It is likely that any comprehensive framework for understanding regions will give attention to the distinction between traded and nontraded goods. Regional multipliers implicitly recognize this distinction by obtaining a total effect on region employment resulting from an increase in export output because of induced increases in the demand for locally produced goods and services. The nature of the supply conditions for the two types of goods should be given greater attention. Expansibility of their production affects the magnitude of local multipliers, which may in some cases be substantially different from the multiplier values estimated by traditional methods. A key consideration is that the prices of traded goods are determined in national markets and tend to be given to the region, whereas the prices and availability of nontraded goods are determined locally. As a region grows, the production of nontraded goods may be inhibited by rising supply costs, environmental disamenities, and the extent to which various public facilities are provided, ultimately putting a brake on the region's growth.

In addition to the regional resources and the terms on which human resources are bid into a region, export and import prices in a region affect the size and nature of the regional economy. A region favorably situated with low import prices of goods that can be used to make further goods and with high export prices and proximity to large markets will tend to have conditions favorable to production, and these may lead to magnified effects as still



further export goods using the initial goods are produced there. Explanations of the great differences in numbers of people and activity in different regions begin to emerge.

Through transportation costs and transportation facilities, as they affect export and import prices, regional growth depends on markets and the conquest of space, which are third and fourth elements identified by Edwards. Using these elements within a general framework, we can gain further understanding of the effects on rural development of a number of transportation phenomena including energy prices, the interstate highway system, railroad policy, and transportation regulation. It is possible that a great deal of rural development can be explained by reductions in transportation costs prior to the rise in oil prices which made it possible for many people to realize their desires to live away from large metropolitan areas, a hypothesis which illustrates the need to consider transportation in connection with the other elements of a regional development framework.

The framework that emerges consisting of production functions, factor supplies, and product demands for an economy that is part of a larger economy has similarities to an international trade model, but there are fundamental differences. As in an international trade model, there is trade in commodities, and comparative advantage is a determinant of production and specialization. Local goods, only recently receiving attention in international trade, play a key role.

A model of a region is more complicated than an international trade model in several ways. Labor is mobile between the economy in question and other economies. Among the implications, the location of demand is endogenous. In addition, as noted above, money wage differences are explained in part by prices of local goods and amenities, and these in turn will affect industry location decisions. Another complication is that an adequate representation of a region almost certainly will require attention to transport costs and the role of transportation networks in determining specialization, which are matters often neglected in international trade.

Adequate models with these complications, appropriately specified, broadly, are yet to be developed fully, but they represent a direction in which thinking is progressing. A large body of partial and general equilibrium models for empirical implementation could be built by expanding on these ingredients.

Edwards's fifth element, institutions, offers a connecting point with the chapter by Jansma et al., as well as providing a primary way for policies affecting regions to enter formally into the analysis. While policies can directly affect any of the elements, e.g., there can be a direct input subsidy lowering regional input costs, more general forms of policies affect

institutions which in turn affect any or all of the behavior relations that make up a regional model.

The contribution by Jansma et al. accomplishes a fundamental systemization and is suggestive of the need for further work. Local government behavior deserves special mention. Externalities should provide an ongoing area of inquiry, particularly *institutional* externalities through which taxes, expenditures, and other government actions affect the extent to which benefits and costs coincide. The Tiebout hypothesis that people vote with their feet, though naive in its initial formulation, continues to be provocative in work on the provision of local public goods. The wider field of public choice in a local setting could prove to be only in its infancy. Most public choice analysis focuses on one facet of behavior, such as median voter behavior, and is thus quite partial. Only a small part of public choice effort has been devoted to models in a spatial setting. Strategic and interfacing behavior, both between different levels and between governmental units at the same level, seems to be in particular need of attention.

The chapter by Graves and Clawson makes clear that migration is more than a simple process of responding to differences in money incomes between regions, but rather is part of job search and career development in a family and life cycle context as affected by amenities and other difficult-to-measure characteristics. The view of migration suggested by Graves and Clawson has a number of implications for rural development. Most fundamental, it implies that migration is far from a passive agent in rural development. People do not just respond to exogenous job income opportunities. For retirement and related nonjob motives, they may be in a region for reasons unrelated to employment opportunities. Furthermore, people supply themselves according to local conditions. Industry will find it profitable to locate where the price of labor is lowered because people supply themselves plentifully in areas that appeal to them. As suggested earlier, people's desires for a congenial and attractive place to live constitute one of the factors helping to explain the resurgence of rural development.

It would be useful to integrate the analysis of migration more fully into the analysis of regional and rural development. Migration concerns flows of people, whereas the labor supply concept figuring in a general framework of regional development is a stock rather than a flow concept. A possibly intriguing line of inquiry is to treat the stock of people in an area, rather than flows to and from the areas, as a dependent variable—considering migration explicitly in a way it has not been considered previously, namely as a stock adjustment process in which the equilibrium stock of people is determined by broader regional development considerations.