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Aspects of Economic Development in Substate Regions

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There are very few industries which don't bring in some new dollars. An example of one which doesn't is the local newspaper. As long as it sells advertising space to local firms and sells newspapers to residents of the community, it does not capture any outside income. However, if the newspaper accepts a contract to print materials for a firm located outside the area, then it begins to be a primary income earner.

The Multiplier Effect

A developed economy does more than earn new primary income. It also must generate, internally, secondary income from each new dollar of primary income. This phenomenon has been defined by economists as the "income multiplier effect." The multiplier ranges in value from one to some value greater than one Each multiplier has two components. The initial new dollar of income is the first component, and the remaining amount generated by the expenditure of the first component is the secondary effect.

Thus, a multiplier of 1.75 can be divided into:

Primary effect	=	1.00
Secondary effect	=	.75
Total effect	=	1.75

In this example, a local resident earns one new dollar. After he spends that new income, other local residents receive an additional 75 cents in income. The total income produced by that new dollar is $1.75.

The remainder of this publication will be devoted to explaining the major factors that affect the amount of secondary income generated locally.

New income must be spent locally for the secondary income effect to occur. Otherwise, money leaks out of the region to become income to some other region. Once it is spent locally, other residents have an opportunity to receive a portion of that income.

More value should be added to locally produced goods before they are exported. This can be done when the raw products originate locally and then are sold to local processors, then to wholesalers, and finally are shipped out as finished consumer goods to distant markets. Thus, the increases in value of the material as it passes along a production path all add to the wealth of the community.

Allied with the concept of value added is the concept of backward and forward linkages. A linkage, in economic terms, is a purchase or a sale by one firm to another. Thus, a backward linkage is the purchase of a firm retailing lumber to another firm which builds houses. As more linkages develop in an economy, more money passes through the hands of residents and less leaks out in the form of purchases of items from firms located in other regions.

In summary, the income multiplier measures the total income effect on any new source of money to local businesses and residents. Every type of industry has the potential for earning primary income, but some have the potential for earning a much larger amount than others. Therefore, concerned citizens considering the impact of expanding various industries such as amusement parks, manufacturing, mining, and shopping centers must consider what size income stream will be earned by such an investment. Then they must consider how much secondary income will be created by the multiplier effect.

Finally, the essential consideration in making decisions to speed up and direct the economic development process is to invest in ways which overcome the most limiting constraints to development. If, for example, the skill level of a county's labor force is well known to be below average, a decision to set up vocational training programs may advance that county's development faster than any other single action. This is why the previously discussed five factors which lead to economic development are so important to keep in mind. Community leaders analyzing what is retarding the development of their community will discover it within one of the following five areas:

1. A shortage of various resources
2. An out-of-date level of technology
3. A stagnant or dwindling market for goods and services produced locally
4. The high cost of overcoming geographic distances
5. Institutions needed to use local resources efficiently are ineffective or do not exist.

Recommended Readings

For the interested reader who desires more information of economic development, the following publications are recommended.

"As Your Community Grows: Some Economic Considerations," by John Gordon and Glenn Nelson. EC-446, Cooperative Extension Service, Purdue University, West Lafayette, Ind.

"Attracting New Industry," by H. A. Wadsworth. EC-396 Cooperative Extension Service, Purdue University, West Lafayette, Ind.

"Some Characteristics of an Ideal Industry to Promote Your Community's Economic Growth," by David Darling. EC-466, Cooperative Extension Service, Purdue University, West Lafayette, Ind.

"Choosing Economic Goals for Your Community," by David Darling. EC-471, Cooperative Extension Service, Purdue University, West Lafayette, Ind.

"Bringing in the Sheaves," by John R. Fernstrom. Oregon State University Extension Service, 1973.

The Industrial Invasion of Nonmetropolitan America, by Gene Summers et al. New York: Praeger Publishers, 1976.

Micropolitan Development, by Luther Tweeten and George L. Brinkman, Ames, Iowa: Iowa State University Press, 1976.

This publication is one of a series available through the Cooperative Extension Service at Purdue which accompany an Extension program aimed at helping citizens plan the economic development of their community. See your county Extension agent for more information.

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ASPECTS OF ECONOMIC DEVELOPMENT IN SUBSTATE REGIONS

Economists have been studying economic development at least since Adam Smith, who published **The Wealth of Nations** in 1776. Many theories of how economies develop are now available, yet little has been written which allows non-economists to put to work this knowledge to solve economic problems at the substate level. The purpose of this publication is to present a set of alternative ways through which economic development can take place at the county or community level.

The information presented here is addressed to community leaders, elected officials, and planning staff of county and regional agencies concerned with planning economic change.

Economic development is defined here as a generalized process of capital accumulation leading to the enhanced economic welfare of the residents of the region. Capital is defined here as a produced means of production such as machines, tools, human skills, money and other things not "God given" such as land. The process of economic development leads an economy from a position where there exists a relatively small stock of various forms of capital to a situation where there exists a large capital

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stock which is growing at a rate fast enough to improve the capital/labor ratio. The process also leads an economy from a position where weak and inefficient means of capital accumulation exist to a state where strong and efficient means exist.

Key Factors Affecting Economic Development

Economic theory suggests five key factors which can help bring about economic development.*

1. An economy can develop faster when the amount of resources made available is increased and put to work productively. Investment capital, for example, is one resource often lacking in small rural economies. This can be the result of a lack of attractive investment opportunities or a lack of investment money being generated locally. Federal and state governments have a variety of programs to provide loans and grants to public and private entities.

2. An economy can develop faster when the level of technology used in producing goods and services can be advanced, resulting in a more efficient use of local resources. For example, when hybrid corn varieties combined with chemical fertilizer, insecticides, and herbicides were developed and then adopted by farmers, corn yields rose dramatically. A new invention or innovation can make the difference between an investment opportunity that yields a 5 percent return and one which yields a 50 percent return. This idea may be a new way to bale hay or a new way to manufacture roller bearings. The important factor is that the technological breakthrough gives local industry a new market advantage over other competing industries located in other regions, and this results in an expanded income source for the local economy.

* Dr. Clark Edwards sets out these five factors and explores them in his article entitled, "The Political Economy of Rural Development: Theoretical Perspectives," **American Journal of Agricultural Economics,** December 1976.

3. An economy can develop faster when new or expanded markets are discovered for goods and services produced locally. In a timber producing area, for example, the location of a new pallet company with its large demand for low-grade timber has meant that landowners now can sell logs to the pallet maker for $5.00 per ton rather than to the paper mills which only pay 50 cents per ton. In a corn producing area, the establishment of corn sweetener manufacturing plants has meant a new market for that crop. As the price rises for a major commodity produced locally, such as wood or corn, this stimulates a chain reaction of economic activity. Producers realize a higher return which provides capital to reinvest in machinery, buildings, and tools. These purchases provide more business for others in the area. And the results add up to an expanded economy.

4. An economy can develop faster when the costs of conquering space diminish at a relatively faster pace than costs are decreasing in other regions. An example of the cost of conquering space is transport costs of goods to market. The Erie Canal made a dramatic difference in the cost of shipping wheat from the Midwest to the East Coast. The telephone system in the United States has provided a valuable communication service which has lowered the cost of conducting business. A new highway through a region may lower the trucking cost for local industry enough to either increase their market share of traditional markets or allow penetration of new markets in other regions of the country. Thus, decreasing the cost of doing business over wide geographic areas can lead to more sales of locally produced goods.

5. An economy can develop faster when efforts are made to build institutions to facilitate a more efficient or more socially desirable use of resources. The public school system is an example of an institution which has made it possible for every child to have access to an education. This has resulted in a much more productive labor force because people have the basic understanding and skills necessary to be technically trained for specific jobs. Another important institution is the stock exchange. The stock exchange makes it possible for firms to raise capital by selling interests in their corporation to anyone with investable cash who wishes to take the risk. Through this institution, capital in the hands of a Texas investor can flow to a corporation that is developing lignite mines in North Dakota. Thus, capital can be much more productive because of the existence of a stock exchange, and people can be much more productive because of the education received in public schools.

All five factors need to be present to facilitate the economic development process. However, just one factor alone can be the catalyst which hastens the process. When you think about what needs to happen in your local economy, the critical question to answer is what action would give the biggest "bang for the buck" and result in the best type of stimulation of the local economy. It may be the construction of a sewage system, or it may be the attraction of a new industry to town.

Industrial Development

If the decision is to stimulate the economy through industrial development, there are three alternatives. The first one is for existing industry to expand operations. The second way is for new firms to be started. The third alternative is for a well-established company to open a new plant in town.

The first alternative is often the most promising and should be investigated before considering the other two. The second alternative is often overlooked, but every major company in the country was started somewhere by an ambitious entrepreneur. The third alternative is the one every Chamber of Commerce considers at one time or another. The competition is tough, particularly for manufacturing plants, because the number of manufacturing jobs in the United States reached a peak four years ago.

A Classification of Industry

All economic activity can be classified as either bringing new dollars into the economy or circulating money within it. The following five industries are usually thought of as prime income earners for an economy because they usually sell to markets that are located in other regions of the country:

Agriculture
Forestry
Fisheries
Mining
Manufacturing

However, other industries in certain situations also can bring in outside dollars. The following is a list of these, with examples of when the industry can be a primary income earner.

	Industry	Examples
1.	Construction	Building a power plant with borrowed capital from distant money markets
2.	Transportation	A port facility
3.	Utilities	A power plant
4.	Wholesale	A regional center with warehousing facilities
5.	Retail	A regional shopping center
6.	Finance	A concentration of banks serving a larger region
7.	Insurance	A regional office processing claims for a wide area
8.	Government	All state, federal or regional offices*
9.	Business and personal services	A resort hotel or a convention center
10.	Professional services	Medical center such as Mayo Clinic
11.	Entertainment services	Amusement parks, theaters

* All transfer payments from federal and state governments are primary income sources to local residents. These include Social Security payments, aid to dependent mothers, food stamps, Medicare, and so on.