FRBSF WEEKLY LETTER

November 25, 1988

Why Do Regions Grow?

It is obvious even to the most casual observer that different regions grow at different rates. Sometimes the reasons are clear, such as the tendency of Alaska's economy to follow trends in oil prices. Likewise, changes in technology or even national and international politics may cause dramatic changes in growth patterns. OPEC's cohesion and the accompanying higher oil prices accounted for Alaska's most recent boom period. The advent of economical air conditioning undoubtedly played a role in Arizona's rapid rise during the past twenty years. These types of events cause bursts of rapid growth.

But after these growth spurts are over, why do some areas continue to prosper while others stagnate or decline? In many cases, the reasons for differences among states' growth rates are not as clear. Why is Nevada booming now, while Arizona's growth rate is slowing? This *Letter* explores some of the possible explanations for differences in regions' growth rates. The most important factors seem to be industrial mix and access to labor, raw materials, and markets. The business environment created by taxes and public spending tends to have a much smaller effect.

Industry mix

One of the most obvious and compelling reasons that regions' growth rates differ is differences in their dependence on growing and shrinking industries. For example, states with defense-oriented economies performed quite well through most of the 1980s, as federal spending for weapons systems and military supplies rose. For example, California received 23 percent of the nation's defense contract awards in 1984. Thus, it is not surprising that California's employment growth averaged 2.5 percent per year between 1980 and 1987, compared with average growth of 1.8 percent nationally.

In contrast, regions that depend heavily on industries that are shrinking tend to perform poorly. The fates of Alaska and Texas, which together account for half of U.S. oil production, provide particularly vivid examples. In the two years following the oil price plunge of early 1986, employment fell 7.6 percent in Alaska and 2.3 percent in Texas. In addition, sharp declines in property values in both states caused problems for local financial institutions.

From these examples, one might conclude that a region's growth rate can be projected from forecasts of growth for specific industries, weighted by each industry's importance to that region. In practice, however, this approach would not be effective. The apparel industry provides an example. Growth in the apparel industry nationwide was virtually nonexistent during the 1970s and 1980s. In fact, employment actually fell by 6.8 percent between 1975 and 1985.

The industry mix approach would lead one to conclude that states where the apparel industry is important should have experienced slower growth. In the Northeast, the traditional center of the industry, apparel industry employment did fall by 21.3 percent between 1975 and 1985. However, quite the opposite occurred in the Southeastern states, where apparel actually accounts for a greater proportion of total employment. In these states, the number of workers in the apparel industry *grew* by 10.3 percent during those same years!

There are countless other examples of industries that have fared poorly in one region and at the same time have grown at a robust pace in other regions. Thus, although industry mix does explain some of the observed differences among regions, other factors clearly also play a role.

Business environment

One such factor may be differences in the "business climates" among regions. According to this view, some regions are receptive to new businesses, and offer them favorable operating environments, while other areas have features that businesses find less attractive.

This argument has some appeal. For example, a city that has easy access to a large market is likely to be an attractive location for many types of enterprises. A port, a railroad or major highway running through town, or an airport that is equipped to handle large cargo planes, can be an important asset for a firm that needs to transport supplies and finished products from one place to another. By the same token, an up-to-date telecommunications infrastructure can be crucial for a financial company that seeks to service its accounts from a distance.

But one business environment may be attractive to some firms and not to others. This is why the published "business climate" rankings differ so much from each other. Different rankings place emphasis on different characteristics, some of which are attractive to some types of firms, and others of which are attractive to others.

Consider, for example, two manufacturing industries, aerospace and apparel. These industries are very different from each other, and consequently have very different needs. An aerospace firm would want to locate its plant in an area that has an adequate supply of highly-skilled and mechanically-trained workers, as well as highly educated engineers. A good educational system also would be important to such a firm because it ensures a future supply of well-educated workers. Production would be impossible without highly trained workers, and since production is relatively capital intensive, other issues, including taxes and labor and land costs, would be relatively less important.

Apparel manufacturing, in contrast, is highly labor intensive. Consequently, the cost of labor is a critical consideration for anyone seeking to set up an apparel manufacturing plant. A highly-skilled local work force is less critical than a work force that will work for low wages. Because profit margins are narrow, low land costs and low taxes also would be advantageous for apparel manufacturers.

In the eye of the beholder

These examples suggest that, although virtually all firms are interested in the characteristics of a region's labor force, the list of "desirable" characteristics varies depending on the production process. Morevover, other factors, including land costs, taxes, and public spending, are more important for some producers than they are for others.

These differences explain much of the wide disagreemeent among rankings of business climate. Some rankings place the greatest weight on costs. According to these rankings, the best places to locate are those with low labor and land costs, and low taxes. Other rankings place greater weight on the education and skill levels of workers, and on amenities which might make the location a desirable place in which to live. These rankings suggest that the best places to locate have educated work forces, well developed educational systems, and cultural and natural attributes that attract educated residents, even though such areas also tend to have higher labor and land costs, and high taxes. Thus, these two sets of priorities lead to rankings that are diametrically opposed to each other!

Economists who have studied the effects of taxes and government spending on business location decisions generally have found that these factors have little effect on the location decisions of firms. This is particularly true at the state level. There are too many other, more important differences among states. However, taxes and government spending patterns may be significant when firms are deciding among competing jurisdictions within a single metropolitan area, since land and labor costs vary less among such jurisdictions.

In general, however, these considerations suggest that there is no such thing as an ideal business climate. The characteristics that are attractive to some firms frequently are the same characteristics that deter others. In fact, Professor Skoro of Boise State University has compared regional economic projections based on various published business climate rankings with projections based only on the region's past economic growth. Skoro found that past growth yielded better forecasts than did any of the published business climate rankings.

This suggests that localities can have only a limited impact on the attractiveness of their locations to firms. They can spend tax dollars wisely, and minimize waste. A region with a well developed school system and a highly educated work force would do well to focus its recruiting efforts on industries that seek these characteristics. In contrast, a region with a relatively unskilled work force might be more successful if it concentrated on attracting firms for which low costs are advantageous. Thus, the most effective economic development policies are likely to be those that focus on taking advantage of what the region already has to offer, rather than attempting to change the economic base of the area.

National economic growth
Another factor that affects economic growth in virtually all regions is the condition of the national economy. Regions tend to grow when the nation as a whole is growing. There are exceptions, such as Alaska, which has boom-bust cycles that seem to be completely uncorrelated with national cycles. Although most states' economies are associated with the nation's, the way in which that association manifests itself varies considerably from state to state.

One important difference is in the extent of "comovement." In essence, this describes the extent to which knowing about the national economy provides information about the regional economy. A state with "high comovement" is one that follows the nation fairly closely. California is a good example of a high comovement state. That is, knowing that the national economy is experiencing a boom suggests that California probably is experiencing a boom as well. At the other end of the spectrum are "low comovement" states, such as Alaska. Even knowing exactly what is happening in the national economy does not provide a good picture of the condition of Alaska's economy. Most states fall between these two extremes, depending on the diversity and industry mix of their economies.

Population movements
Another factor that frequently is associated with regional economic growth is population growth, but it is not always clear whether the population movements cause economic growth, or whether economic growth attracts population growth. In most cases, it probably works both ways.

It makes sense, for example, that a state experiencing rapid population growth would have a fast-growing economy. The economy of Arizona during the mid-1980s provides a vivid example of rapid economic growth associated with in-migration. As population grows, demand grows. Construction activity booms as demand for housing grows. In addition, the need to provide services to the larger population stimulates growth in such enterprises as grocery stores, restaurants, gas stations, and laundromats.

At the same time, a growing economy tends to attract migrants. During the oil boom years, people flocked to Texas and Alaska in search of jobs. Until recently, Arizona's rapidly growing economy provided a strong magnet for further in-migrants.

Many factors
This discussion suggests that many factors help to determine why some regions grow more rapidly than others do. Technological change, industrial mix, access to transportation and markets, and the health of the surrounding economy are all important. Compared to these factors, government efforts to make a particular location more attractive to business generally are relatively unimportant.

Carolyn Sherwood-Call
Economist

Editorial comments may be addressed to the editor (Barbara Bennett) or to the author. . . . Free copies of Federal Reserve publications can be obtained from the Public Information Department, Federal Reserve Bank of San Francisco, P.O. Box 7702, San Francisco 94120. Phone (415) 974-2246.

Research Department

Federal Reserve
Bank of
San Francisco

Alaska Arizona California Hawaii Idaho
Nevada Oregon Utah Washington