Quality of Life, Nontraditional Income, and Economic Growth New Development Opportunities for the Rural West

Areas with high levels of natural amenities have enjoyed growing populations and income levels in the past decade. Much of this growth has come from the inmigration of people with income from self-employment or investments. These new migrants are usually well-educated and often work as executives or professionals or in such industries as finance, insurance, and real estate or business services. Communities may find that policies that enhance the quality of life (better schools, environmental protection, etc.) can attract more of these people who are in a financial position to act upon their residential preferences. This in turn can stimulate economic development.

ver the last 10 years, the value of stocks held by investors has grown substantially, and recently, this growth has skyrocketed as employerprovided 401k plans and mutual funds have become increasingly popular investment tools. Small business development has concurrently proliferated, and the entrepreneurial spirit associated with such startups has brought dynamism to many local economies. These economic developments, however, are often overlooked when communities plan development strategies. Interest and dividend income generated from the rising tide of investments represents basic income to a local economy. When an individual buys shares of a company on the stock market or through a mutual fund, earnings from such investments can generate "new money" for the local economy. In a similar fashion, small businesses can and do generate basic income for community economies. When an investment advisor living in the San Juan Islands of Puget Sound receives a commission for a sale to a client in Seattle, money flows from Seattle into the San Juans. Export-oriented services are becoming increasingly important in advanced economies, and as technological developments reduce the costs of doing business from remote locations, these services are likely to expand in nonmetro areas.

Investment income and self-employment income are concentrating in coastal and mountainous areas of the Western United States, noted for their high levels of natural amenities. The migration stream to these areas indicates a strong association between the influx of young professional migrants and rapid expansion in both investment and self-employment income. Areas attracting younger migrants with higher levels of education have the strongest competitive advantage when it comes to generating these nontraditional income sources. Therefore, while it is impossible to create coasts or mountains in any given community, policymakers may be able to create conditions that are attractive to a mobile segment of the population associated with the expansion of nontraditional income. As areas attract these younger and welleducated migrants, it is likely that nontraditional income sources will continue to grow.

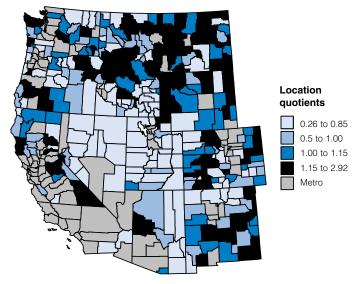
Nonmetro counties with concentrations of nontraditional income have enjoyed robust population and economic expansion since the late 1980's. These income and growth trends suggest an alternative rural development strategy. Instead of recruiting big businesses to bring jobs to an area, an area may grow and develop if it is able to create conditions conducive to generating investment and selfemployment income. But, what are the conditions that lead to or attract this income? Where are these nontraditional income sources lagging? Are they concentrating in a few high-amenity areas or dispersing throughout the countryside? And, are factors other than location-specific amenities, such as migration characteristics, associated with expansion of these income sources?

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Figure 1

Concentration of investment income, 1994

Investment income is concentrated in geographically distinct areas



Source: Regional Economic Information System Database, www.lib.virginia.edu/socsc/interactives.html.

Nontraditional Income Is Increasingly Concentrated in Areas With Natural Amenities

Rapidly growing nonmetro counties have higher than average concentrations of investment and selfemployment income (see box, "Data and Methods"). Concentrations of investment income mark geographically distinct areas, such as the Pacific coast of the Olympic Peninsula in Washington (fig. 1). Investment income is also concentrated in the mountainous parts of the West, especially along the Rocky Mountains in Colorado and in the Northern Rockies along the Idaho-Montana border. Further concentrations appear around the Yellowstone and Teton National Parks and in the California Sierras. Higher than average concentrations of investment income on the plains of eastern Montana and Wyoming—areas heavily dependent upon extensive agriculture—are likely to be the product of local land-renting practices.

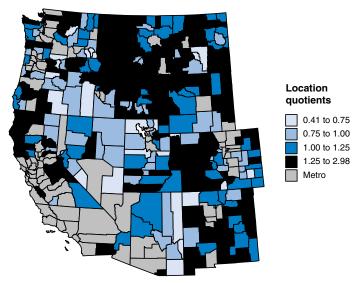
Self-employment income patterns are quite similar (fig. 2). Coastal and mountainous areas display even more pronounced concentrations of this income source. In addition to coastal Washington, the coast of northern California and southern Oregon also have relatively strong concentrations of income from self-employment. This source of income is further concentrated in virtually all of Idaho and Montana when compared with the United States as a whole. The widespread concentration of nonfarm self-employment income in eastern Montana and Colorado may be a result of the growing tendency for farm households to engage in some nonfarm economic activity to supplement household income, which is a phenomenon not unique to the West. Shift-share analysis is used to highlight areas with a competitive advantage/disadvantage in a chosen socioeconomic measure (see box, "Data and Methods"). In this study, shift-share analysis identifies nonmetro areas that demonstrate a competitive advantage in the growth of both investment and self-employment income. These two income sources have been the most strongly linked to recent development trends. If a county has a competitive advantage in generating either or both types of income, it will likely be positioned to generate economic and population growth.

The same coastal and mountainous areas that have high levels of investment income (fig. 1) also have high *growth* of this income due to some competitive advantage (fig. 3). The most competitive counties are found once more within coastal Puget Sound, the Colorado Rockies, the Yellowstone-Teton region, and the northern Rockies along the Idaho-Montana border. This result suggests a mutually reinforcing relationship between investment income and economic development. Economic and demographic growth is most rapid in areas with high concentrations of investment income; such areas also have a competitive advantage generating this source of income. Thus, competitive advantage leads to further concentrations (as opposed to evening out differences across space), positioning these areas for continued growth in the future.

In a similar fashion, growth in self-employment income (fig. 4) overlaps with areas where it is most concentrated (fig. 2). The Colorado Rockies, Yellowstone-Teton region, northern Idaho, and western Montana all have strong and rapid growth in self-employment income, as do eastern Montana and eastern Wyoming. Once again, growth and

Figure 2

Concentration of self-employment income, 1994 Self-employment income is concentrated in coastal and mountainous areas

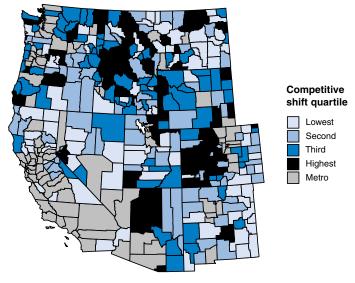


Source: Regional Economic Information System Database, www.lib.virginia.edu/socsc/interactives.html.

Figure 3

Competitive shifts in investment income, 1990-94

Growth in investment income is more rapid in coastal and mountainous regions



Source: Regional Economic Information System Database, www.lib.virginia.edu/socsc/interactives.html.

concentration are mutually reinforcing. An exception is the coastal areas where a concentration of self-employment income has failed to sustain a strong positive competitive advantage in attracting such income. Perhaps a different dynamic is taking place in these areas, related to local economic specialization such as forestry.

The tendency for concentration and growth in investment and self-employment income to be mutually reinforcing is problematic for policymakers. If these income sources are tied to contemporary growth and development, it would be beneficial for variations across space to even out over time. The data suggest exactly the opposite. Concentrations are becoming more marked as growth in nontraditional income is most rapid in the areas where it is concentrated. Areas without such concentrations continue to suffer. Lea County, NM, provides an example of such a stagnating county. Lea County has very low relative levels of investment and self-employment income, and investment income actually declined nearly 18 percent in the late 1980's and early 1990's. Likewise, the county suffered through employment loss and very slow population growth. In fact, all the population growth between 1990 and 1995 is due to natural increase, as the county lost nearly 3,100 persons due to net outmigration. There are many other counties with experiences similar to Lea's.

Nontraditional Income Growth Follows Young, Well-Educated Professionals in Service Industries

Migration and the changing motivations of migrants play a pivotal role in recent rural development trends. Increasingly, household decisions to move to new places are not based on strictly economic considerations, such as wage levels and employment opportunities, but rather on perceived improvements in the quality of life the new residences offer. The promise of better schools, less congestion, less crime, and scenic beauty attract relatively welloff individuals and families that are in a financial position to act upon residential preferences. When these people move to an area, they bring with them both financial and human capital that can stimulate local economic development. A strong relationship exists between inmigrant characteristics and the competitive growth in selfemployment and investment income.

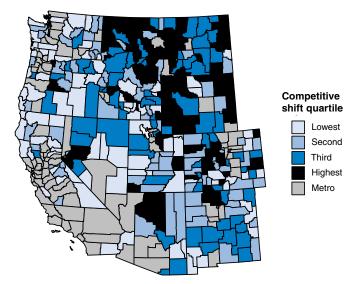
Migration during a previous period can lead to a current competitive advantage in certain economic development characteristics. The inmigration of relatively well-off people results in more rapid growth than would be expected in investment and self-employment income. Areas with marked competitive advantages in self-employment and investment income attract more migrants working in executive or professional specialty occupations when compared with other areas (figs. 5 and 6). Likewise, these areas have higher shares of migrants employed in finance, insurance, and real estate (FIRE) or other business service industries.

The educational characteristics of migrants show the strongest relationships with the two income sources. Areas with a disadvantage in these income sources have slightly less educated inmigrants. But, as the competitive advantage in both investment and self-employment income increases, so too does the educational attainment of the migration stream. This trend is most pronounced

Figure 4

Competitive shifts in self-employment income. 1990-94

Areas with natural amenities have competitive growth in selfemployment income



Source: Regional Economic Information System Database, www.lib.virginia.edu/socsc/interactives.html.

for migrants with a bachelors degree to areas with high investment income (fig. 5).

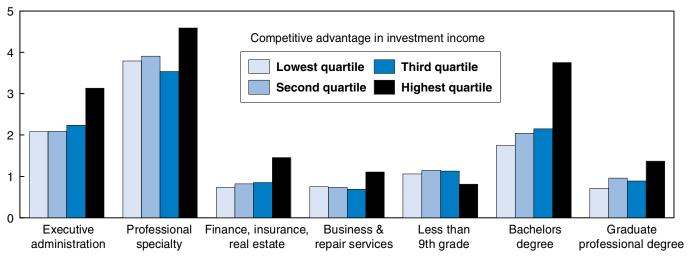
There also appears to be an age dynamic in the relationship between the growth of nontraditional sources of income and migration. Intuition would suggest that investment income is related to the inmigration of retirees. The analysis supports this statement, but explaining the growth of investment income is far more complex than simply crediting retired migrants. At the upper end of the age range (ages 55+ in fig. 7), areas with stronger competitive growth in investment income do have higher levels of older inmigrants. However, this relationship holds for all age categories, and is more pronounced for the younger age groups. Thus, the presence of both young and old migrants alike is associated with competitive growth of investment income. Areas with a competitive advantage in self-employment income show more differences across

Figure 5

Inmigration rates by migrant characteristics and area investment income

Areas with competitive advantages in investment income had higher concentrations of educated and professionally employed inmigrants

Percent of all residents



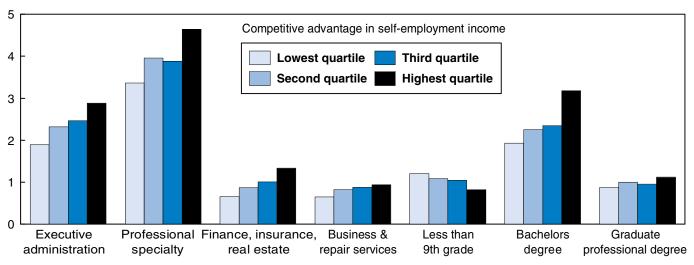
Source: 1990 County to County Migration Files, Regional Economic Information System.

Figure 6

Inmigration rates by migrant characteristics and area self-employment income

Areas with competitive advantages in self-employment income had higher concentrations of inmigrants working in finance, insurance, real estate, and other business services

Percent of all residents



Source: 1990 County to County Migration Files, Regional Economic Information System.

age groups, attracting higher levels of younger or middleaged inmigrants (fig. 8).

Enhancing Quality of Life Offers Alternative Economic Development Strategy

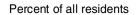
Growth and development in the nonmetro West are linked to new sources of income. While employment levels in traditionally important sectors (mining, farming, forestry) of the nonmetro West's economy have been stagnant, other sources of income such as investment and selfemployment are becoming increasingly important in many nonmetro economies. These sources of income appear to be concentrated in areas with a certain level of natural amenities, such as mountains or coastlines. Areas where this income is concentrated are also the areas where investment and self-employment income are growing most rapidly. Thus, these places appear to have some competitive advantage.

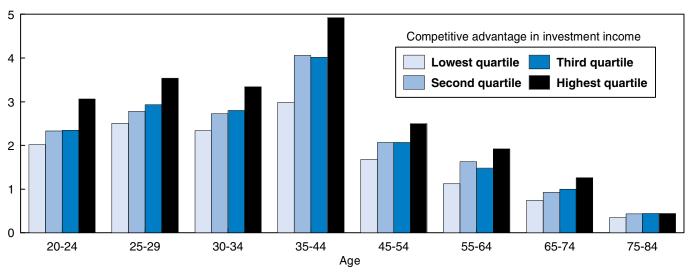
The results from this study indicate that a polarization is developing where certain areas enjoy self-reinforcing growth while other areas suffer. Self-employment and investment income is growing most rapidly where it is

Figure 7

Inmigration rates by age of migrant and area investment income

Areas with competitive advantages in investment income attracted both old and young migrants alike





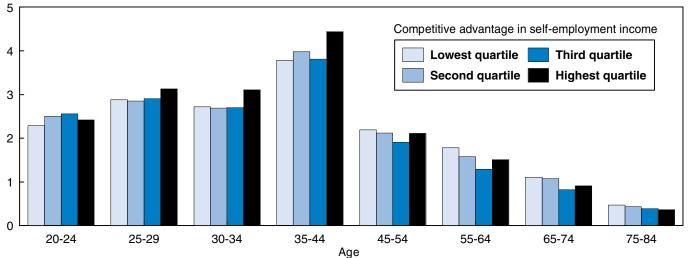
Source: 1990 County to County Migration Files, Regional Economic Information System.

Figure 8

Inmigration rates by age of migrant and area self-employment income

Areas with competitive advantages in self-employment income attracted younger inmigrants

Percent of all residents



Source: 1990 County to County Migration Files, Regional Economic Information System.

Data and Methods

Income Data Sources. Income data are taken from the Regional Economic Information System maintained at the University of Virginia (www.lib.virginia.edu/socsci/interactives.html). Income generated by dividends, interest, and rent was used for investment income. Proprietor income is divided into two categories, farm and nonfarm proprietors. In this analysis, only nonfarm proprietor income was used, so self-employment income refers explicitly to earnings from self-employment outside of farming. These data were used to calculate location quotients that show relative concentrations of the income at the county level. The location quotients were indexed with the United States as the benchmark; therefore, a location quotient (see figs. 1 and 2) greater than one indicates that a particular county has a relative concentration of a particular source of income compared with the Nation as a whole. A location quotient less than one indicates a relative lack of income. These data were also used in the shift-share analysis.

Migrant Data Sources. Information about inmigrants to the nonmetro West comes from the U.S. Census County-to-County Migration Files, and is used in conjunction with the competitive shift data (see methods below) to find relationships between migrant characteristics and income growth. The counties were divided into quartiles based on the values of competitive shifts (see below), with the highest quartile representing those counties with the largest positive competitive shift and the lowest quartile representing those counties with negative or very small positive competitive shifts. The migration data were used to quantify the presence of migrants with particular characteristics in each county relative to the resident population. Age, income, occupational, educational, and industry of employment information was taken from the County to County Migration Files, and measures of relative concentration were calculated for each county's 1990 population was made up of migrants with a graduate or professional degree that had moved to the county in the last 5 years.

Using Shift-Share Analysis To Examine Income Growth. Shift-share analysis is used to analyze growth. This is a fairly straightforward technique that breaks down gross change in some measure (typically employment growth) into components. The growth component is simply how much employment would expand if growth had followed overall growth patterns for some benchmark (often the Nation or State). The industry or income mix component is the difference between the expected growth component and the expected change, taking into consideration different growth rates for different industries. For example, if national employment grew 3 percent between 1990 and 1995, and employment in the insurance sector grew 5 percent nationally, you would expect employment in the insurance sector in the State of Washington to grow 3 percent (growth component) plus an additional 2 percent (industry mix component). Areas with concentrations of certain industrial sectors can experience positive industry mix values if those industries enjoyed robust growth in the benchmark region. Finally, the difference between actual amount of growth observed and that predicted by combining the growth component plus the industry mix component provides the competitive shift. The competitive shift can best be interpreted as a relative competitive advantage/disadvantage in a sector in an area. For example, if the actual observed growth of insurance in Washington was 8 percent, 3 percent of that growth would be the competitive shift.

already the most concentrated, leaving less favored areas (such as Lea County) behind. Areas with a higher share of young, well-educated migrants working in certain occupations and certain industries have significantly stronger competitive advantage in generating investment and selfemployment income. Therefore, policy measures designed to enhance the attractiveness of communities to these types of individuals may serve to boost local economies. Such policy will nurture current nonmetro residents as well as lure potential migrants. Instead of mortgaging a community's future by rolling back taxes and providing cheap land in an attempt to land a single large employer, communities may benefit by focusing on improved quality of life (investment in schools, environmental protection, "greenbelts," parks, and social infrastructure). Thus, quality of life offers an alternative to traditional "smokestack chasing," and by pursuing such a development strategy, communities may be able to build a more solid foundation for years of growth and development.

For Further Reading . . .

William Beyers and David Lindahl, "Lone Eagles and High Fliers in Rural Producer Services," *Rural Development Perspectives*, Vol. 11, No. 3, 1996, pp. 2-10. John Cromartie and Mark Nord, "Migration and Economic Restructuring in Nonmetro America, 1989-1994," Staff Report No. 9615, Economic Research Service, USDA, 1996.

Peter Nelson, "Migration, Sources of Income, and Community Change in the Nonmetropolitan Northwest," *The Professional Geographer*, Vol. 49, No. 4, pp. 418-430, 1997.

Peter Nelson and William Beyers, "Using Economic Base Models to Explain New Trends in Rural Income," *Growth and Change*, Vol. 29, No. 3, pp. 321-344, 1998.

Thomas Power, *Lost Landscapes and Failed Economies*, New York, Island Press, 1996.

Raymond Rasker, "A New Look at Old Vistas: The Economic Role of Environmental Quality in Western Public Lands," *University of Colorado Law Review*, Vol. 65, No. 2, pp. 369-397, 1994.

Raymond Rasker, *A New Home on the Range: Economic Realities in the Columbia River Basin*, Bozeman, MT: The Wilderness Society, 1995.

Raymond Rasker, *The New Challenge: People, Commerce, and the Environment in the Yellowstone to Yukon Region,* Bozeman, MT: The Wilderness Society, 1998.