



AgEcon SEARCH

RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.

Economic conditions



WITHDRAWN

PROCEEDINGS

Twenty-Third Annual Pacific Northwest Regional Economic Conference

April 26-28, 1989



Corvallis, Oregon

Published by the Pacific Northwest Regional Economic Conference,
the Northwest Policy Center of the University of Washington,
and the Western Rural Development Center

MIGRATION, ECONOMIC GROWTH, AND THE QUALITY OF LIFE

by

W. Ed Whitelaw*

and

Ernest G. Niemi

* W. Ed Whitelaw, University of Oregon Professor of Economics, is President of the Economic Policy Institute Northwest (EPI), heads his own consulting firm, ECO Northwest, and is a member of the Oregon Economic Development Commission.

Ernest G. Niemi, Vice President of ECO Northwest, is a principal investigator at the Economic Policy Institute Northwest.

We gratefully thank John Tapogna and Bill Strange for their assistance. Any errors remain our responsibility. This paper was partially funded by a grant from the Northwest Area Foundation. An earlier version of this paper was published in *Old Oregon* magazine.

WHITELAW/NIEMI

One hundred years ago, a crossroads on the way West was marked with a sign reading "Oregon Trail" to the north and showing a pot of gold to the south. Legend has it that only the pioneers who could read followed the trail all the way to Oregon."

Oregon Historical Society

When the first pioneers reached Fort Bridger, Wyoming, on the Oregon Trail, they had to make their choice. The southern spur seduced the weary travellers with a chance to strike it rich. The northern route countered with fertile soil, clear lakes, and scenic vistas. From the beginning the Pacific Northwest enticed the immigrant with its pristine environment. Time only increased the value of our unsullied quality of life, as the orange groves and palm trees of California made way for parking lots and subdivisions. Now in a highly-competitive global economy, it's time to examine what role our original comparative advantage will have in augmenting the region's economic growth into the 21st Century.

Well into the 20th Century, when agriculture and forestry dominated the economic landscape, the economies of the Pacific Northwest's small rural communities remained isolated. Basic industries dependent on extracting goods from the environment (e.g., timber, apple, and potato industries) provided the stimulus for economic growth by creating jobs that, in turn, attracted people and led to the creation of secondary industries. Towns like Oakridge, Rupert, and Chelan were born, and thrived, on that process. Some researchers, including Greenwood and Hunt (1989), argue that the same "jobs-first-then-migration" process is still dominant.

However, numerous economists believe that the times are changing. Today markets are linked internationally, factors of production are highly mobile, and incomes are higher. The result: local economies can grow only if they can attract and retain entrepreneurs, laborers, and consumers. The economic-development process is increasingly characterized, not by jobs-first-then-migration, but by the reverse. Steinnes (1984) was among the first to derive a model illustrating the two-way causality (i.e., employment affects residence and residence affects employment). He points to the growing number of office developments in our suburbs as evidence. His argument becomes increasingly persuasive with a visit to Bellevue or Lake Oswego. Given the recent national shift from manufacturing jobs to knowledge-based professional employment, this migration-first strategy is becoming increasingly effective. In short, attract the people to the setting first. The people and the setting will attract the firms.

In this dynamic economy, the Pacific Northwest must carefully consider how it can compete while bordering an economic heavyweight. At first glance it appears the Pacific Northwest will have to enter the ring with one hand tied behind her back. Per capita incomes in Washington, Oregon, Idaho, and Montana are at or below the national average. In 1986, Washington's per capita income was the best in the region at \$15,009 or 2% above the national average. That's the region's good news! The bad news is that Idaho with a per capita income of \$11,223 ranks at the bottom with Mississippi, Louisiana, Arkansas, West Virginia, and Utah. Meanwhile, California's per capita income is a whopping 13% above the national average (United States Department of Commerce [1988]).

In light of these figures, how can the Pacific Northwest especially the areas outside Seattle, attract and retain skilled entrepreneurs and workers? Only by offering fringe benefits not available in the highly-developed regions to the south. In a competitive market, if one region offers a unique amenity, that amenity serves as a fringe benefit; therefore, the region is able to attract workers with lower cash wages. As long as the worker values the fringe benefits more than the reduction in cash wages, he or she will migrate to the region. In equilibrium, the wage differential exactly compensates the worker for the differences in amenities. That is, the regions that do not have amenities must pay their workers higher cash salaries.

The most valuable fringe benefit the Pacific Northwest has to offer is its environment, or at a minimum its reputation for environmental quality. This reputation gives the Pacific Northwest a distinctive economic advantage relative to its neighbors. We all are or know about, for example, Californians who moved here

because they no longer could tolerate their polluted and congested quality of life. Frequently these immigrants bring businesses and jobs with them. Aster Publishing, Intel, Siltec, and Hewlett-Packard are a few examples.

How large are these environmental fringe benefits? Detailed analysis of them has not yet been completed, but several studies offer important insights (see Knapp and Graves [1989] or Mendelsohn et al. [1988] for a literature review). One approach tries to quantify the linkage between migration rates and interregional differences in economic, social, and physical characteristics. The other tries to explain the persistent interregional differences in wages and rents. Neither approach has focused on outdoor recreation or other aspects of the natural environment.

There are some clues, however. For example, various studies of sport fishing in the Pacific Northwest (see Mendelsohn et al. [1988], Whitelaw [1988]) have found that a day of fishing is worth between \$20 and \$75 and that each fisherman makes about 20 trips per year. By these measures, the value of the fishing component of the environmental fringe benefits is between \$400 and \$1,500. Given this annual figure, fish alone are important enough to attract a number of avid anglers to the region.

Most studies of interregional differences in wages and rents (see Meyer and Leone [1977], Getz and Huang [1978], I. Hoch [1977], S. Rosen [1979], M. Cropper [1981], V.K. Smith [1983], and Cropper and Arriaga-Salinas [1980]) have focused on symphonies, sporting events, and on community-service amenities, such as the crime rate, and have not looked at the role of environmental amenities other than the weather. After isolating these cultural and community-service benefits, the most thorough of these studies (Roback [1982]) found that there exists a residual fringe benefit, equal to 3.5% of monetary wages present in the western states. Some researchers (Mendelsohn et al. [1988]) believe most, if not all, of this residual is attributable to environmental amenities. It's as if each worker receives, in effect two paychecks, one denominated in dollars and the other in the region's clean air, clear streams, scenic vistas, forested mountains, and publicly-owned beaches.

To give some perspective of the potential magnitude of the value of the environment, let's take Oregon as a case in point. In 1987 personal income in Oregon from all sources totalled \$38.25 billion (Oregon Executive Department [1988]). If Oregon's environmental fringe benefits equalled 3.5 percent of this amount, their value was \$1.34 billion, or approximately \$500 per Oregonian. This represents more than one-quarter of the total payroll paid by all manufacturing firms in the state during 1987 [\$4.96 billion] and only slightly less than the total payroll, \$1.58 billion, paid by the lumber-and-wood-products industry [Standard Industrial Classification 24]. Oregon's state officials are beginning to recognize the economic importance of the environment, giving top priority to a lengthy list of land-use and conservation goals in the state's first strategic economic plan (Oregon Economic Development Department [1989]). If these state officials put their words into practice, Oregon will be well on the road to strengthening its environmental advantage.

If, on the other hand, we in Oregon and elsewhere in the Pacific Northwest squander our environmental comparative advantage, California is waiting with high wages, non-stop sunshine, and Disneyland. The Pacific Northwest's environmental comparative advantage is weakened with every gallon of toxic sludge dumped into the Puget Sound, every clearcut visible from a highway or a hiking trail, and every boxcar of radioactive waste that the federal government wants to store in Idaho. Imagine the outcry if zealous real estate developers decided to demolish Space Mountain. Yet we in the Pacific Northwest commit similar acts when we degrade, either in reality or in perception, the physical quality and the appearance of our waterways, forests, and airsheds.

If environmentally spendthrift industries continue their indulgence to the point where the people in other industries see that the benefits derived from living in Portland or Boise are not much larger than those of San Francisco or Los Angeles, these people will not choose to live here. And they will take their jobs with them. That is, if the Pacific Northwest allows widespread air pollution from field burning, degraded streams and diminished fishing from logging, congested highways from poorly planned urban development, and nasty

WHITELAW/NIEMI

surprises from business practices that generate hazardous waste, it is unlikely we will realize rapid growth in such sectors as high-tech manufacturing, international trade, and health services.

And our neighbors, the anglers, hikers, and skiers, will move on to greener pastures.

BIBLIOGRAPHY

- Cropper, Maureen, and A. Arriaga-Salinas. (1980). Intercity Wage Differentials and the Value of Air Quality. *Journal of Urban Economics* 8:236-254.
- Cropper, Maureen. (1981). The Value of Urban Amenities. *Journal of Regional Science* 21:359-374.
- Getz, Malcolm, and Y. Huang. (1978). Consumer Revealed Preferences for Environmental Goods. *Review of Economics and Statistics* 60:449-458.
- Greenwood, Michael J., and Gary Hunt. (1989). Jobs versus Amenities in the Analysis of Metropolitan Migration. *Journal of Urban Economics*. 25:1-16.
- Hoch, Irving. (1977). Variations in the Quality of Urban Life Among Cities and Regions. In L. Wingo and A. Evans (Eds.), *Public Economics & The Quality of Life*. Baltimore, MD: Johns Hopkins Press.
- Knapp, Thomas A., and Philip E. Graves. (1989). On the Role of Amenities in Models of Migration and Regional Development. *Journal of Regional Science*. 29:71-87
- Meyer, John, and Robert Leone. The Urban Disamenity Revisited. In L. Wingo and A. Evans (Eds.), *Public Economics & The Quality of Life*. Baltimore, MD: Johns Hopkins Press.
- Mendelsohn, Robert, W. Ed Whitelaw, and Ernie Niemi. (1988). *Economic Analysis of Selected Fish Issues: Final Report*. Prepared for Northwest Power Planning Council.
- Oregon Economic Development Department. (1989). *The Oregon Strategic Plan for Economic Development: Draft Report*.
- Oregon Executive Department. (1988). *Oregon Economic and Revenue Forecast, December 1988*.
- Roback, Jennifer. (1982). Wages, Rents and the Quality of Life. *Journal of Political Economy*. 90:1257-78.
- Rosen, Sherwin. (1979). Wage-Based Indexes of Urban Quality of Life. In Peter Miezkowski and Mahlon Strazheim (Eds.), *Current Issues in Urban Economics*. Baltimore, MD: Johns Hopkins Press.
- Smith, V. Kerry. (1983). The Role of Site and Job Characteristics in Hedonic Wage Models. *Journal of Urban Economics* 13:296-321.
- Steinnes, Donald N. (1984). Business Climate, Tax Incentives, and Regional Economic Development. *Growth and Change*. 15:38-47.
- U.S. Department of Commerce. (1988). *Statistical Abstract of the United States, 1988*.
- Whitelaw, W. Ed. (1988). *Evaluating the Role of Fish in the Development of the Pacific Northwest's Economy--Or Is It the Other Way Around?* Presentation to the Northwest Power Planning Council Salmon and Steel Roundtable, 30 June 1988.