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Low-Skill Employment and the Changing Economy of Rural America

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Low-skill jobs have continuously been declining as a share of U.S. jobs throughout the 20th century, and rural areas are no exception. In 1900, two-thirds of all workers were employed in agriculture and manufacturing, mostly holding manual or routine jobs in the field or factory. By 2000, less than 40 percent of the U.S. workforce was employed in low-skill occupations. Today, most rural low-skill workers are employed in the growing service sector, in which a typical job demands higher skills than a typical job in goods-sector industries such as manufacturing, mining, and agriculture. In addition, new production methods in many industries are raising occupational skill demands and contributing to the decline in the low-skill share of rural employment.

The decline in the low-skill share of employment affects the well-being of rural workers and the economic development of small towns across America. Jobs requiring more skill tend to pay more and offer better benefits, leaving rural workers and their families better off and possibly reducing demand for Federal and State support services. High-skill jobs also make rural communities less vulnerable to international competition and more attractive to high-wage employers. Understanding the factors driving changes in job-skill levels could help rural areas choose more effective development strategies and ensure that all groups benefit from economic growth.

What Is the Issue?

The impact of the industrial shift from goods to services in rural America has been subject to some debate. The ongoing industrial shift may be inhibiting the growth of good jobs in rural America. Although many service-sector jobs are high-skill and pay well, some observers believe rural areas may lack the density of population and infrastructure to attract those jobs. As a result, the rural service sector would generate more low-skill jobs, and because low-skill service jobs pay less on average than low-skill jobs in the goods sector, workers would be worse off economically. Others observe that, as capital investments have grown, many rural labor markets have been able to attract and retain high-skill service jobs. Further, these observers argue that occupational shifts within industries, brought on by technology and productivity change, have more impact on skill levels than does the transition to services.

ERS examined the relationship between employment trends and industrial and occupational shifts by addressing the following questions: 1) Did low-skill jobs continue to shrink as a proportion of the rural economy as quickly in the 1990s as in the past? 2) Did large-scale shifts from goods production to service provision play a decisive role in these changes, or did shifts to more skilled occupations within these industries become the key factor? 3) Did skill trends benefit rural workers economically, particularly those historically more prone to low-skill employment?

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What Did the Project Find?

The nonmetro low-skill job share fell 2.2 percentage points from 1990 to 2000—from 44.4 percent to 42.2 percent—compared with a 5-percentage-point drop between 1980 and 1990. The movement of jobs from the goods sector to the services sector in the 1990s contributed to a decline in low-skill employment shares, but the largest source of decline was the shift from lower skill to higher skill occupations within both sectors.

As expected, low-skill employment rates are higher for workers who are younger and have less education, for minorities, and for men. Rural women and Blacks experienced the largest drop in low-skill employment rate during the 1990s, while Hispanics saw an increase.

Rural workers experienced real earnings growth on average during the 1990s. Despite some concerns about the implications of a shift from goods to service employment, this shift had almost no impact on earnings change. In fact, most of the gain occurred “across the board,” in numerous occupations in both the goods and service sectors, rather than because of the employment trends analyzed in this study.

The findings suggest that encouraging new technology that creates high skill work opportunities, as well as investing in education and training, may be effective in raising skill levels of jobs in the rural economy.

How Was the Project Conducted?

Data used in this report come from the earnings files of the 1980, 1990, and 2000 Current Population Survey (CPS), a national sample of 50,000-60,000 households. Information on hourly and weekly earnings, age, sex, race/ethnicity, education, labor force status, industry, and occupation is collected on every adult member of the survey household.

We identify low-skill occupations using seven skill dimensions from the Dictionary of Occupational Titles, produced by the U.S. Department of Labor. Each dimension measures a different aspect of the intellectual or physical complexity of an occupation. These seven measurements are then added to produce a single numerical index. Low-skill occupations are those that fall below the median index value for the occupations considered. Unlike commonly-used measures such as educational attainment, this approach emphasizes the skills embodied in the jobs rather than the workers, who may be in jobs below or above their potential.

Shift-share analysis is used to test whether changes in rural industrial composition or occupation mix within industries explain more of the decline in low-skill employment share in the 1980s and 1990s. The relationships between demographic attributes and the probability of low-skill employment were assessed using a logistic regression analysis.