

Highlighting New Poverty Research

by Anita Alves Pena

"Poverty, Legal Status, and Pay Basis in U.S. Agriculture," Working Paper produced for the West Coast Poverty Center, February 2009. Available at <http://www.wcpc.washington.edu/news/spotlights/spotlightPena2009.shtml>

Anita Alves Pena is Assistant Professor of Economics at Colorado State University. She was a Western Poverty Scholar with the West Coast Poverty Center in 2007-08.

The West Coast Poverty Center's **POVERTY RESEARCH FLASH** highlights new research by Center faculty affiliates and others on causes, consequences, and effective policy responses to poverty, with an emphasis on changing labor markets, demographic shifts, family structure, and social and economic inequality. More information about the West Coast Poverty Center is available from our website: www.wcpc.washington.edu

February 2009

Poverty, Legal Status, and Pay Basis in U.S. Agriculture

Background. Agricultural workers, many of whom are undocumented immigrants, are some of the poorest workers in the country. There is substantial variability in earnings among these workers. Some of these differences may be the result of whether workers are paid timerate (hourly) or piecerate (based on performance). In the literature, piecerate pay has been associated with higher average earnings, but also with greater variability, in part because some very productive workers may choose piecerate employment while less productive workers opt for timerate pay. A worker's nativity and legal status may shape his or her opportunities for work offering piecerate or timerate pay if employers systematically offer immigrants jobs with particular pay structures, or if immigrants seek different types of work than do native-born agricultural workers.

Methods. In a recent working paper, WCPC Western Poverty Scholar Anita Alves Pena explores whether the relationship between wage contract structure and poverty is the same for illegal immigrants, legal immigrants, and native-born workers. Pena uses data on over 46,500 workers from the 1989-2006 waves of the U.S. Department of Labor's National Agricultural Workers Survey, a nationally-representative sample of employed farmworkers, to model relationships among pay structure and poverty for workers in various legal status groups. Pena uses maximum likelihood treatment effects regressions to estimate wages and hours worked while controlling for selection into piecerate employment, as well as for education, tenure, experience, legal status, and other demographics.

Findings. Among the workers in the sample, roughly 80 percent were paid timerate and 20 percent were paid piecerate. Nearly three-fourths (73 percent) of the sample reported being of Mexican origin and 42 percent reported having illegal immigration status. Illegal immigrants made up a larger percentage of piecerate workers than of timerate workers (57 percent vs. 46 percent).

Pena finds that naturalized citizens were less likely to be in piecerate employment than native-born workers, but that green card holders, workers with other work authorization, and illegal workers were more likely to be in piecerate employment. Controlling for selection, piecerate workers were estimated to earn the equivalent of 23 percent more per hour worked than timerate workers and illegal workers were estimated to earn 3 percent lower hourly wages than native-born workers with like characteristics. With respect to hours, however, workers paid piecerate were estimated to work roughly 9.5 hours less per week than timerate workers. For California, the effect of piecerate pay on wages was similar to the national effect estimated from the full sample, but piecerate work was associated with almost 17 fewer hours of work per week, much higher than the national effect. For the Northwest, wage and hours effects were comparable to national ones.

Payment structure was associated with poverty status. If annual income was imputed based on hourly earnings and hours worked in agriculture alone, piecerate workers appeared to have lower poverty rates than timerate workers. Based on self-reported measures of total annual family income, however, piecerate workers have much higher rates of poverty than timerate workers (52 percent vs. 36 percent). This difference could be the result of seasonal employment (i.e., inconsistent earnings over the year) or differences in the contributions of other family members. Although many workers appear to be choosing piecerate employment, because many such workers are immigrants without legal status, it is unclear whether this is the preferred form of employment or the only type of work available. Because poverty rates among these workers are higher than among timerate workers, Pena suggests that public policy intervention, such as decreasing wage variability through labor market regulations, could be warranted to address these disparities.

Poverty Research Flash

The West Coast Poverty Center serves as a hub for research, education, and policy analysis leading to greater understanding of the causes and consequences of poverty and effective approaches to reducing it in the west coast states. The Center, located at the University of Washington, is one of three regional poverty centers funded by the U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation (ASPE). More information about the West Coast Poverty Center is available from our website: www.wcpc.washington.edu

Poverty Research Flash 2009-02

Poverty, Legal Status, and Pay Basis in U.S. Agriculture

New research from Anita Alves Pena

Key Findings

- Among workers in a sample of 46,500 agricultural workers, roughly 80 percent were paid timerate and 20 percent were paid piecerate. Nearly three-fourths (73 percent) reported being of Mexican origin and 42 percent reported being of illegal status.
- Illegal immigrants made up a larger share of piecerate workers than of timerate workers (57 percent vs. 46 percent).
- Controlling for selection into piecerate employment, piecerate workers were estimated to earn the equivalent of 23 percent more per hour than timerate workers. However, piecerate workers were also estimated to work 9.5 fewer hours per week.
- With respect to poverty, if annual income was imputed based on hourly earnings and hours worked in agriculture alone, piecerate workers appeared to have lower poverty rates than timerate workers. Based on self-reported measures of total annual family income, however, piecerate workers have much higher rates of poverty than timerate workers (52 percent vs. 36 percent).