

Farm Program Payments and Rural Economic Development: A Historical Perspective

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Introduction

When the *Agricultural Adjustment Act of 1933* was enacted, it could be argued that agricultural policy was also rural policy. Over the years, many political observers have been wrong by asserting that bolstering rural areas through federal commodity programs was ever a goal of the farm bills. Since 1933, assisting rural communities through commodity payments has not shown up as an explicit goal of any of the 14 farm bills passed by the U.S. Congress.

The United States population became majority urban sometime between the 1910 and 1920 censuses. At that time, most of the population living in rural areas also lived on farms. Hence, what was good for agriculture was also good for rural America.

Since that time, the percentage urban population has increased, and simultaneously, the percentage of rural residents living on farms has decreased. The most recent estimates are that 49 million Americans, or 17 percent of the U.S. population, reside in the four-fifths of the country which is classified as non-metropolitan (Economic Research Service June 15, 2006). In 2000, nationally only 1.9 percent of the employed labor force worked in agriculture and 20 percent of the non-metropolitan counties were considered farming-dependent (Dimitri *et al.* 2005).

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In the United States, there were approximately 2.1 million farms in 2002. Only 311,388 farms had sales of \$100,000 or greater (National Agricultural Statistics Service 2004). While it is a controversial subject, the majority of farm program payments go to the largest farms (Economic Research Service June 19, 2006; Williams-Derry and Cook 2000). This result should not be surprising as “by design” the programs provide more assistance to farmers with more acreage. The annual federal expenditure on farm programs has ranged between \$10 billion and \$30 billion from 1998 to present (National Agricultural Statistics Service 2006). However, it is still unclear as to what impacts farm program payments currently have on rural economic development in America.

The Early Empirical Evidence

The causes and timing of the initial transformation of rural America from “agricultural” to “non-metro” are debatable. Not until the later part of the 20th century did economists begin to suggest and examine the potential impacts of such a transformation. One thing appears clear, by that time the transformation was well underway.

Pulver and Rogers (1986) were among the first to recognize in the literature the growing importance of non-farm income to rural areas. Using 1979 data, they related that the 307 most heavily farm-dependent counties identified by USDA averaged only 28 percent of their income from farm earnings. The remaining income sources for those counties were: 17 percent from dividends, interest and rents; 13 percent from transfer payments; and 42 percent from non-farm sources.

The Pulver and Rogers findings suggested that the linkage between “rural” and “agriculture” had lessened. That realization was soon empirically reflected in the

literature. In 1988, Jones stated, “For the first time in U.S. history, rural and agriculture are no longer synonymous.” It was also recognized that, “While farm programs are designed to bolster farm income and prevent decline in farm numbers and agribusiness activity, they are not rural development programs” (Jones 1988). Researchers began to use the designations, “metro” and “non-metro” instead of “urban” and “rural” to classify inhabited areas.

A further acknowledgement came in the 1992 publication of *Sacred Cows and Hot Potatoes* and a chapter entitled “Never Confuse Farming with Rural America.” While most policy observers would accept and understand that this publication comes with its own biases, it is important to understand the shift in thinking about rural-urban issues. The chapter relates that contrary to pastoral farm images that most Americans have of rural America, trailer parks and factories were far more typical for most rural people. The book reads, “The myth of rural dependence on farming is not only inconsistent with the socioeconomic realities of most rural areas; it also serves as an obstacle to the emergence of nonfarm rural development programs. Continuing the myth affords legitimacy to commodity programs that have little impact on most rural people. It also hides or plays down the existing transformation of the rural economy and society” (Browne *et al.* 1992).

Recent Research

While many researchers had surmised that farm programs were not rural development programs, others began to look at the linkages between the two. The following pages review recent literature about farm program payments, rural

development and rural agricultural employment. They are presented chronologically rather than topically to illustrate the progression of thought on the topic.

Goetz and Debertin (1996) studied the linkage between government payments to farmers and rural population changes during the 1980s. The study used population changes as a proxy for rural economic development. This method controlled for other economic variables, as well as births and deaths, in order to better isolate the effects of government payments.

The analysis attempted to reconcile two conflicting views of how program payments affect rural populations. First is the idea that program payments create a surplus of money, which is typically spent on labor saving capital equipment or more land, thus contributing to consolidation and rural out-migration. The second view is that program payments are capitalized into fixed assets, which lead to higher land prices, less consolidation, smaller farms, and less farm labor out-migration (Johnson 1991).

Both of these scenarios can be true, but Goetz and Debertin (1996) conclude “that federal farm commodity programs have not only failed to stem population out-migration from rural areas, but that these payments were associated with higher rates of population loss than may have occurred in their absence.”

Gardner (2000) addressed the question of the role of farm program payments and farm household incomes. The study used change in real household income as a measure of economic gains. Gardner (2000) reported that in 1991, approximately 10 percent of farm families fell below the official U.S. poverty line (about 200,000 farms), compared to 11.5 percent of nonfarm families. However, while farming households below the poverty line report average income of \$4,800, they reported average consumption expenditures of

\$19,700, and an average net worth of \$509,000. About 1 percent of farm families are “poor” under this triple criterion. The study concludes that farm policies may be having negligible effects on most farm households, since there appears to be limited evidence that agricultural policies contributed to the growth of farm incomes or the reduction in farm poverty.

The reviewed work by Gundersen *et al.* (2000) does not explicitly address rural economic development, but it does analyze four, new, hypothetical approaches to farm safety-nets, which may affect rural economic development. The results of the Gundersen *et al.* (2000) research are based on the Social Welfare Function model, which indicates that society gains utility whenever income is shifted from wealthier people to poorer people. They assert that the economic definition of “safety net” is to guarantee some minimum standard. All those above the minimum level of certain measures of economic well-being would receive nothing under the proposed changes. The work establishes a broad precedent for shifting farm payments away from wealthier farmers and toward poorer farmers, since most other U.S. social welfare programs operate in this manner. One important element of the Gundersen research for those who favor farm policy, is that it establishes a precedent for the support of social programs solely offered to specific subsets of the population.

The Gundersen research is unique in this review in that it offers specific alternatives to the current structure of farm assistance payments. While the alternatives appear to have some merit, they also raise some interesting questions/concerns. Assuming that current policy fosters consolidation and economies of scale, and these proposed changes would tend not to; one must wonder which is better for the global

competitiveness of U.S. agriculture. Are rural economic development and global competitiveness conflicting goals of farm policy? Gundersen *et al.* also found that on larger farms, the farmer and spouse tend to work three times as many hours farming than farmers on “limited resource farms.” This finding is logical since the other research presented indicates that smaller farmers are more likely to derive most of their income off-farm. However, one can only conjecture if farm policy began shifting more government payments to small farmers, then they might become less dependent on off-farm work. Hence, they might spend more time farming, which theoretically could increase U.S. supply, thus decreasing price.

In 2001, Goetz and Debertin published research which used a utility model in order to incorporate non-monetary benefits of farming and being self-employed in general. The study notes that, not all rural counties had reductions in farm numbers over recent decades. In fact, some counties gained farms.

The specific hypothesis tested by the study was that off-farm work facilitates the transition of farm proprietors out of production agriculture. This hypothesis contradicts the traditional way of thinking, which is that off-farm income acts as a stabilizer, which helps keep farmers in business. Goetz and Debertin recognized that off-farm income could be viewed as an income stabilizer that allows farmers to keep farming, but that part-time off-farm employment could also reduce the costs associated with moving to full-time off-farm employment, thus actually leading to more farms going out of business. Their results indicate that off-farm employment has two effects. It lowers the odds that a county will be a net loser of farms, but off-farm work accelerates the loss of farmers once a county is in a net loss state. Government payments were found to have

the same effects on farm numbers, perhaps making it easier for remaining farmers to buy other farmers out (Goetz and Debertin 2001).

Hopkins (2001) used data from the 1999 Agricultural Resource Management Survey (ARMS) to determine the level of farm profitability and household income without program payments and how payment gains are distributed. The study determined that government payments boost farm profitability and household income. Also, low and high income farms enjoyed the largest gains from payments. The study explains that, “Although the payments sharply improved the financial standing of the worst-off program participants, the absolute level of improvement quickly leveled off for farms in the mid-range levels of profitability and household income.”

Huang *et al.* (2002) modeled population growth in 306 Southern and Midwestern rural counties from 1950-1990. Huang *et al.* (2002) found that “farm incomes do not raise nonfarm populations and vice versa.” This is consistent with the results of Goetz and Debertin (1996). The study also notes that, “political proponents of government agricultural subsidies frequently contend that farm incomes have strong multiplier effects in the non farm rural economy. These claims are not supported by the data” (Huang *et al.* 2002).

Gardner (2003) dealt with the connections between agricultural growth and rural economic growth. The study considered two views about the causes of real income growth in rural areas: 1) Agriculture as the economic engine, and investment in agriculture generating real income growth overall, and 2) Economy-wide demand for labor as the engine of growth in agriculture, with a rising real wage sufficient for rural household income growth. The results of the study favored the second model described

above, in which a growing nonfarm, rural economy causes more off-farm employment, which increases the marginal value of labor of those who remain in farming. The study concluded, “Even when agricultural productivity grows, it is apparent that rural household incomes may not grow.”

Roberts and Key (2003) revisited the Hopkins (2001) study and re-examined the relationship between farm program payments and farm household well-being. Roberts and Key (2003) indicated that Hopkins’ (2001) finding (using household income, large and small farms receive the greatest benefit from farm program payments) was really a reflection of natural fluctuations in farm business income of larger farms. Due to their size, larger farms as a group had the highest farm income gains and the greatest losses. Since the ARMS data reflected national conditions, many of the smaller income farms were actually large farms with losses during the recorded period, but in all other respects were economically well off. For this and other reasons, household income was a poor measure of well-being for farm families. The Roberts and Key (2003) study also concluded that, “even after adjusting for land tenancy, government payments are allocated disproportionately to farms with the highest consumption expenditures and net worth. The least well-off farm households received relatively little government payments.”

Monchuk *et al.* (2005) use a logarithmic regression model in an attempt to explain county income growth between two points in time. The study uses change in real county income as a measure of economic gains. The model can be viewed as an extension of the work done by Huang *et al.* (2002). One difference among many is that the Huang model

uses temperature and rainfall as measures of local amenities, while the Monchuk model uses actual amenity numbers such as number of swimming areas.

Monchuk *et al.* (2005) use 22 explanatory variables to explain county economic growth. Of the 22 variables, “percentage of county income from farming” was the most statistically significant variable affecting county economic growth, and the two had an inverse relationship. However, the Monchuk model did find that increased livestock receipts had a positive relationship with county income growth. They also recognized that rural recreational amenities are also positively linked to rural economic growth.

Except for farmers, people tend to rank landscapes dominated by farmland relatively low in appeal, especially cropland. While irrigated pasture may be considered a rural amenity, cropland may not be. It is conceivable that if rural amenities draw people, then jobs could follow (McGranahan and Sullivan 2005).

Drabenstott (2005) asks, “Like other farm bills before it, the current bill assumes that raising farm incomes will promote rural economic growth. Does that assumption still hold?” The study limited its analysis to the 783 most farm dependent counties based on farm payments as a percentage of personal income. Of those counties, 461 had declining populations, and 483 had job gains below the national average, for the decade ending in 2002. However, approximately 130 of those counties had above average employment growth and 88 had population gains. The study concluded, “farm payments are not yielding robust economic and population gains in the counties where they should have the greatest impact. The study cautions that its analysis can not answer as to whether growth would have been less without farm program payments. Furthermore, it

notes, “farm payments appear to create dependency on even more payments, not new engines of growth.”

Gonzalez *et al.* (2005) estimated the economic impact of a reduction in farm payments on two rural California counties. They did so by integrating two types of economic models. They first use a “calibrated production function” model to estimate shifts in the acreage for major crops when federal farm payments are eliminated. Secondly, they used a “social accounting matrix” to calculate the effect of one additional dollar in crop production on county economic output and employment. The model included changes in input usage as growers shifted acreage from one crop to another, and incorporated economic multipliers.

Gonzalez *et al.* (2005) found that reductions in farm assistance payments can have very differing impacts between two farming-dependent counties. A primary factor is whether or not the natural resource base (soil type, etc.) will allow producers to move from producing program crops to other crops. The study sheds light on the fact that certain acreage would simply not be economically feasible to farm without government assistance. The results suggest that in the short-run, counties with greater crop diversity and economic diversity could actually increase economic activity given a reduction in farm assistance, while other counties could see large drops in economic well-being as a result of reductions in payments. These effects are all dependent upon the crop mix in the studied counties.

Using the IMPLAN input-output model, Outlaw *et al.* (2005) estimated the business activity, labor income and jobs created by various farm program payments to 32 U.S. Congressional districts in Texas for 2004. Statewide, the combined \$812 million in

farm program payments generated \$978 million in business activity, \$254 million in labor income and \$198 million in other income. The study estimated 14,962 jobs in the state were a result of farm program payments. No distinction is made, between business activity and jobs in the agricultural sector and those in the larger rural economy. The Congressional districts with the greatest estimated benefits were in the agriculturally-dependent Texas Panhandle.

Discussion

While never an explicit goal of farm previous farm bills, failure in rural economic development is often cited as a reason to discontinue commodity programs. What most people fail to realize is that in many cases, production agriculture is no longer the economic engine in most rural U.S. counties.

Rural diversity calls into question the effectiveness of nationally administered rural development policy. Traditional rural occupations such as agriculture and mining are not the answer in sustaining rural economic growth. “The most effective rural policies for the 21st century will recognize the increased importance of nonfarm jobs and income as the main drivers of rural economic activity” (Whitener and McGranahan 2003).

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