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Effect of agricultural policy on regional income inequality among farm households

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Abstract

Policymakers are under constant pressure to alleviate financial stress, mainly associated with farm business income, on farm households through government farm program payments. The 1996 FAIR Act signaled the end of these payments and Congress decided that agricultural policy should be more market oriented. Using the Gini coefficient concept and a large farm-level dataset, this study investigates the impact of government payments on income inequality among farm households in nine farming resource regions of the U.S. Results indicate that distribution of income among farm households in the Fruitful Rim region was above the level of dispersion for all U.S. farm households; however, income inequality in the Heartland region was below the level of dispersion for all U.S. farm households. Finally, income from government farm programs helped reduce total income inequality in the Heartland and Northern Great Plains regions, while income from off-farm wages and/or salaries played an important role in reducing total income inequality in Basin and Range and Fruitful Rim regions of the U.S. farm sector.

JEL classification: D31; Q12; Q18

Keywords: Income inequality; Off-farm income; Government farm program payments; Adjusted Gini coefficient; Farm resource regions

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Nearly seven decades ago, farm subsidies were promoted by concerns for the chronically low and highly variable incomes of U.S. farm households. A key stimulus for legislative action was disparity between incomes of farm and nonfarm households (Gardner, 1992; Houthakker, 1967). In the 1990s, a major farm bill was passed, the 1996 Federal Agricultural Improvement and Reform (FAIR) Act, which greatly changed U.S. farm policies for its term and subsequent farm bills. The FAIR Act allowed producers greater flexibility in cropping decisions, but also a fixed-but-decreasing production flexibility contract (transition) payment over the next 7 years (Hoppe, 2001). The Act[3] also provided nonrecourse marketing assistance loans with marketing loan repayment (MLA) and loan deficiency payments (LDPs) for selected crops.

In 2002, the Farm Security and Rural Investment (FSRI) Act was signed into law and largely extended the policies of the FAIR Act. While the marketing loan program and direct payments continued, a new "countercyclical payment" was introduced. According to critics, the new farm bill suffered the same shortfall as the previous one: large farms continued to receive a disproportionate share of payments. Martin (2002) adds that government payments, particularly since FAIR, have allowed large farms to become even larger when payments were used for land purchase. This and the argument that FSRI shifted support further toward landowners (via higher land values and lease rates) and away from farmers with no landholdings are apt to raise concerns on the impact of government payments on the distribution of farm household income.

The U.S. has witnessed increased economic growth over the last decade, with increased stock prices, consumer spending, and trade, yielding low unemployment and inflation as well as growing income inequality. Mishra, El-Osta, Morehart, Johnson, and Hopkins (2002) find greater income inequality in farm compared to nonfarm households, as well as regional differences: income inequality is highest for farm households located in the South and Northeast regions and lowest in the North Central region.

A system of economically viable, midsized, owner-operated family farms contributes more to communities than systems characterized by inequality, larger numbers of farm laborers with below average incomes, and little ownership or control of productive assets (Hassebrook, 1999). Farm income inequality negatively impacts: (1) economic well-being, including farm family health; (2) farm technology adoption; (3) agricultural productivity; and (4) agricultural sector growth. It is important to understand the role government farm program payments have played in income inequality among farm households. Regional differences are of interest.

The objectives of this paper are to determine: (1) the dimensions of income inequality among farm operator households, (2) the sources of income inequality, particularly the role of government payments, (3) differences in farm household income inequality by region (Fig. 1), and (4) the contributions of sources of household income to inequality. We use a national farm-level database with a larger, more representative sample than previous studies on this subject.

1. Sources and trends in farm household income

Total farm household income is defined as income from both the farming operation and off-farm sources. Table 1 shows the composition of farm household income. For majority of U.S.

[3] Under FAIR, a farm was eligible for production flexibility contract payments if it had at least one crop acreage base in a production adjustment program for any of the crop years 1991 through 1995.