Trends in Farm Household Income and Assets

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Farm Household Income Has Increased Over Time

Note: nominal dollars have been deflated using the GDP Implicit Price Deflator Series (GDPDEF)

Average annual growth rate since 1991
- Farm Households: 2.3%
- U.S. Households: 0.1%

Median Farm Household Income Projected to Decline then Rebound in 2016

Sources: Agricultural Resource Management Survey 2014, ERS Forecasts
Take-Away Points from the Farm Sector Forecast

• U.S. net cash farm income expected to decrease slightly in 2016

• Net cash income projections:
  – Up slightly for most crop farms
  – Down or flat for most livestock farms

• Additional stress on certain leveraged farms

• 2014 Farm Bill changed farm government payments

Farm households rely on farm income to varying degrees

Farm Income = Net Cash Farm Income – Depreciation
Households exhibit varying degrees of dependence on net farm income

Three main types of farms:

• Farming Not Primary Occupation
  – Referred to as “Residence Farms”
  – 1.22 million households
  – Typical household loses money on farm

• Farm Businesses
  – 851,000 households: 75% Intermediate, 25% Commercial
  – Intermediate households (<$350,000 in gross cash income)
    • Derive <10% of income from farm business on average
  – Commercial households (>$350,000 in gross cash income)
    • Receive three-fourths of income from farming
Commercial Farms Generate the Majority of Farm Income

Source: Agricultural Resource Management Survey, 2014, ERS Forecasts
Residence and Intermediate Farms Derive More HH Income from Off-farm Sources

Source: Agricultural Resource Management Survey, 2014
Government Payments (Crop Farms)

Note: Does not include residence farms
Source: Agricultural Resource Management Survey, 2014
Government Payments (Livestock Farms)

Note: Does not include residence farms
Source: Agricultural Resource Management Survey, 2014
Dairy Farms Households Receive Least Income from Off-farm Sources

![Bar chart showing income by source for different crops and livestock.]

Source: Agricultural Resource Management Survey, 2014
Fruit and Tree Nut Operators Work Least Hours On Farm

Source: Agricultural Resource Management Survey, 2013
Mean Household Assets have Grown Faster for Crop Farmers

Source: Agricultural Resource Management Survey, 2004-14
Average U.S. Farm Real Estate Values have risen sharply since 1970

1970-2004
1.7% average annual growth rate

2004-2015
5.7% average annual growth rate

Source: United States Department of Agriculture, Economic Research Service (ERS) and National Agricultural Statistical Survey (NASS)
Median Asset Holdings Highest for Cash Grain Farmers

Source: Agricultural Resource Management Survey, 2014
Farm Household Income Is Volatile

New analysis shows that farm households are considerably more volatile than non-farm households

- 66% of farm households had a median income change of 50% or more. Only 9% of all U.S. households
- Crop farms are slightly more volatile than livestock farms
- Larger farms experience more income volatility

But...farm households rely on government payments and off-farm income
Household Income Varies from Year to Year

Second Period Income for Farms with Total Household Income between $75,000 and $125,000 in Year 1

Distribution of Farm Income

Distribution of Off-Farm Income

Income Component Variability

• Farm Household Income is variable
  – Want to see how different components enter into overall variance of household income

• Examine changes in income from:
  – (a) Farm Income
  – (b) Agricultural Payments
  – (c) Off-farm wage income
  – (d) Other off-farm income

• Decompose the total variance into contributions from each source.
Decomposition of the Total Income Variability by Income Components

<table>
<thead>
<tr>
<th>Income components</th>
<th>Net farm income</th>
<th>Agricultural program payments</th>
<th>Off-farm wage income</th>
<th>Other off-farm income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net farm income</td>
<td><strong>1.069</strong></td>
<td><strong>-0.124</strong></td>
<td>-0.088</td>
<td>-0.090</td>
</tr>
<tr>
<td>Agricultural program payments</td>
<td>-0.124</td>
<td>0.175</td>
<td>-0.012</td>
<td>-0.009</td>
</tr>
<tr>
<td>Non-farm wage income</td>
<td>-0.088</td>
<td>-0.012</td>
<td>0.230</td>
<td>-0.025</td>
</tr>
<tr>
<td>Other non-farm income</td>
<td>-0.090</td>
<td>-0.009</td>
<td>-0.025</td>
<td>0.223</td>
</tr>
<tr>
<td>Component shares, $CS(y_i^j)$</td>
<td><strong>0.767</strong></td>
<td>0.030</td>
<td>0.105</td>
<td>0.098</td>
</tr>
</tbody>
</table>

Conclusions

• Many farm households have diversified income sources; most work off-farm

• Farm household assets have grown
  – 51 to 68 percent of assets are in farm and non-farm real estate holdings

• Farm household income is volatile
  – But, off-farm income and government payments reduced overall volatility

• Price-related government payments may be even more effective at reducing income volatility

Source: Agricultural Resource Management Survey, 2013
Contact Information

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- Household Data Pages
Sharp Decline Forecasted in Dairy Farm Household Income

Source: Agricultural Resource Management Survey, 2014, ERS Forecasts
Livestock Farms at Greater Risk of Default

Farms with positive farm income. Percent of income from farming. [median income]

Distribution of Debt-to-Asset Ratios

Source: Agricultural Resource Management Survey, 2014