

Are Bankruptcies Behind the Drop in Farm Numbers?

The number of farms in the United States has declined by two-thirds over the past seven decades, from a historic high of 6.8 million in 1935 to 2.2 million in 2002. While this decline is commonly associated with high rates of farm bankruptcy, a new study by ERS and the University of Arkansas finds the link between dwindling farm numbers and farm bankruptcies to be weak.

Farm bankruptcy rates spiked to unusually high levels twice during the past century. From 1920, with the post-World War I decline in the farm economy, through the Great Depression of the 1930s, farm bankruptcy rates were double to triple those of previous years and peaked at 13.7 per 10,000 farms in 1925. During that time, farmers had three bankruptcy options available to them. Fifty years later, during the farm financial crisis of the early to mid-1980s, farm numbers declined to about 2.3 million, and the rate of bankruptcy filings rose to 23.1 per 10,000 farms in 1987. By this time, a new bankruptcy category had been established by Congress and had become a frequently used option of farmers who declare bankruptcy.

Though comparisons of bankruptcy data across time are complicated by periods of incomplete data (there are no data from 1980 to 1986) and changes in the filing options available to farmers, comparisons of bankruptcy rates against data on farm numbers show no direct relationship. Most of the decline in farm numbers occurred between the 1940s and the 1970s, when bankruptcy filings were at relatively low levels and available filing options were stable. Farm numbers have even risen when bankruptcies have been relatively high or rising, such as during the early 1930s or the early 1990s.

Not all bankruptcies result in farm exits, and most farm exits involve other factors, such as retirement. Bankruptcies are only one phenomenon within a broader set of changing economic circumstances—including rising agricultural productivity and expanding off-farm job opportunities—that influence the size and structure of the farm sector. *W*

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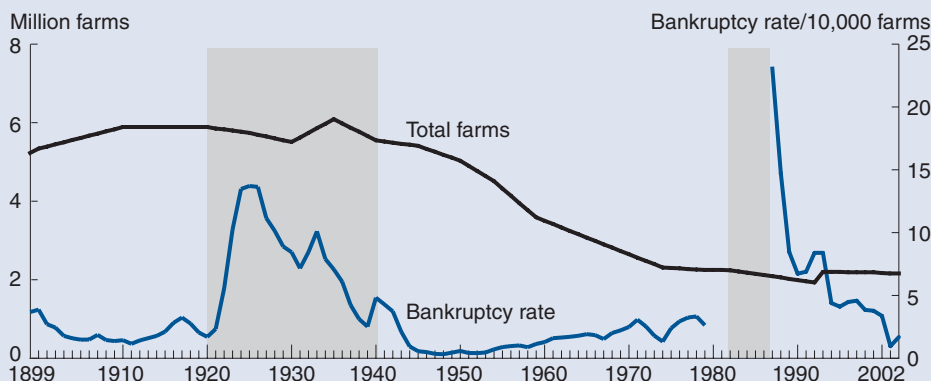
This finding is drawn from . . .

Farmer Bankruptcies and Farm Exits in the United States, 1899-2002, by Jerome M. Stam and Bruce L. Dixon, USDA/ERS, AIB-788, March 2004, available at: www.ers.usda.gov/publications/aib788/

The ERS Briefing Room on Bankruptcies:
www.ers.usda.gov/briefing/bankruptcies/

Grant Heilman/Grant Heilman Photography

Farm-sector financial stress during the 1920s, 1930s, and 1980s led to higher bankruptcy rates but had little effect on farm numbers



Note: Shaded areas indicate general periods of farm financial stress. All applicable bankruptcy chapters were included for the 1899-1979 data; data for 1987-2002 are for Chapter 12 only. Data for 1980-86 are not reported due to changes in the bankruptcy law. Farm data exclude sharecroppers.

Sources: Administrative Office of the U.S. Courts and U.S. Census of Agriculture.

Is Carbon Sequestration in Agriculture Economically Feasible?

Comstock

Increased atmospheric concentrations of carbon dioxide and other "greenhouse" gases have contributed to the gradual rise in global temperatures over the last 50 years. Two options for reducing the amount of carbon in the atmosphere are to increase the amount of land planted with permanent grassland or forest vegetation and to reduce the frequency or intensity of tillage operations. Either option would store—or sequester—additional carbon on the affected lands. In February 2002, the White House announced a plan to reduce the growth of U.S. greenhouse gas emissions, in part by developing incentives for farm and forestland owners and operators to adopt land uses and management practices that extract carbon from the air and sequester it in soils and vegetation.

U.S. agricultural soils have lost, on average, about one-third

of the carbon they contained before wide-scale cultivation began in the 1800s. Soil science studies suggest that changes in land use and land management practices could increase the carbon content of crop and grazing land soils by 104-318 million metric tons per year. Forestry studies suggest that afforestation of cropland and pasture could add another 91-203 million metric tons per year.

While the U.S. farm sector's technical potential to store carbon is important to know, it is really the economic potential for storing carbon that is most directly relevant to policymakers. Using different incentive payment structures, ERS researchers analyzed the economic feasibility of increasing carbon levels in soils and vegetation by providing various levels of payments to convert croplands and pasture to trees, shift cropland to permanent grasses,

and/or increase the use of conservation tillage systems.

At payment levels below \$10 per metric ton of additional permanently stored carbon, landowners find it more cost-effective to adopt conservation tillage practices, as compared with other changes to land use and management practices. At higher payment levels, converting cropland to trees becomes more cost effective. For payments equal to \$125 per metric ton of additional permanently stored carbon, farmer adoption of conservation tillage and afforestation of crop or grazing land could yield 72-160 million metric tons of carbon, enough to offset 4-8 percent of gross U.S. emissions of greenhouse gases in 2001. Converting cropland to grass did not prove to be a cost-effective option at any payment level analyzed.

The economic potential, even at the \$125-payment level,

is much less than the technical potential suggested by soil science and forestry studies because activities that are technically feasible are not always economically feasible. Furthermore, the share of the technical potential that is economically feasible varies greatly across activities because of the wide variation in the costs farmers would incur in adopting different carbon-sequestering land uses and practices. \mathbb{W}

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This finding is drawn from . . .

Economics of Sequestering Carbon in the U.S. Agricultural Sector, by Jan Lewandrowski, Mark Peters, Carol Jones, Robert House, Mark Sperow, Marlen Eve, and Keith Paustian, TB-1909, USDA/ERS, April 2004, available at: www.ers.usda.gov/publications/tb1909/