Findings and Future Directions

This report provides some basic information useful in understanding farm exits and how they can restructure agricultural production. Simple exit rates vary by sales class of the farm and age of the operator. They decline as sales increase but are still 6 or 7 percent per year for large farms, those with sales of $250,000 or more. Exit rates also decline with age until farmers become 45 years old and then increase, peaking at 12 or 13 percent for farmers 65 years old or older. The same age- and sales-related patterns also apply to exit probabilities generated by the base model. At the national level, exit probabilities by age and sales class are fairly stable over time. Not even the farm financial crisis of the 1980s had much effect on exit probabilities.

The life cycle of farm operators is important in understanding farm exits because most U.S. farms are fairly small family businesses and the life of the farm is correlated with the life of the farmer. The correlation is not 100 percent because the farm may continue as a business after an elderly operator leaves, if operation of the farm as a separate business continues under another operator, such as an adult child.

As farm operators become elderly, however, they often stop farming and rent or sell their land to other farmers who incorporate it into their operations. In this case, life-cycle changes do result in farm exits. These farm exits may trigger productivity gains. The older, exiting farmers tend to downsize their operations and disinvest as they age. The farms that absorb their land—either recent entrants or surviving farms—are more likely to employ newer technology and a more efficient mix of capital and labor.

Farms at least 14 years old with operators currently less than 65 years old have particularly low exit probabilities. The lower exit probabilities for these large, well-established farms may help explain the growing concentration of production among fewer farms, particularly if these farms are passed on to other family members.

Additional operator and farm characteristics—such as race, gender, off-farm work, and farm specialization—also influence exit probabilities. Combining farming with some off-farm work slightly decreases the probability of exit, most likely by providing the operator household with another source of income. Farms with female or Black operators are more likely to exit than farms with male or White operators, although Black/White differences declined during the period examined here. Finally, farms specializing in beef are less likely to exit than are those specializing in hogs or cash grains, probably because cattle operations mesh well with off-farm work.

The list of farm and operator characteristics considered in this report is not exhaustive. We focused on basic farm and operator characteristics likely to affect exits. Other characteristics, including land tenure, receipt of government payments, and urban influence, may also affect exit probabilities and may warrant examination. Additional topics that could be examined include the dynamics of livestock subsectors. For example, the longitudinal file could be used to determine whether operators of small hog farms switch to other enterprises or exit farming entirely. The file could also be used to

examine land acquisition/disposal as operators age. For example, how much land do 35-year-old farmers add to their operations over a 5-year period, and how much land do 65-year-old farmers give up?

As this report was being written, the 2002 Census of Agriculture was released. NASS is creating the 2002 Census of Agriculture Longitudinal File by matching data from 2002 Census data to the existing 1997 file. Now is a logical time to consider future research directions using the 2002 longitudinal file. Despite the information presented here from the 1997 file, we still have much to learn about farm dynamics.

We plan to use the 2002 file to examine the exit and entry of farms with sales of $1 million or more. We will ask such questions as the following:

- What are the exit and entry rates for farms of this size?
- How many started as small farms?
- How many started as large commercial farms?
- How many entered with sales of $1 million or more?
- How long does it take smaller farms to grow to the $1 million level?

Focusing the analyses on "million-dollar" farms may seem restrictive because only 28,700 farms were that large in 2002, accounting for slightly more than 1 percent of all U.S. farms (USDA, NASS, 2004, p. 8). However these farms accounted for 48 percent of farm sales. Understanding the dynamics of very large farms is important because of their large share of production.