Ohio Farm Household
Longitudinal Study*

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OHIO FARM HOUSEHOLD BALANCE SHEETS
January 1, 1987

This is the second in a series of brief reports summarizing results of a telephone survey of Ohio farm operator households conducted by Ohio State University during 1987. A principal object of the survey was to identify a broad profile of household characteristics and to observe changes in them over time.* Financial characteristics were particularly important. This article reports some of the relationships between debts and assets that existed January 1, 1987, among these representative households. Balance sheets are summarized in Table 1.

This report emphasizes commercial family farm households: those with gross annual sales between 20,000 and 500,000 and who represent nearly one half of all farm operators and two-thirds of all farm output in the United States. As of January 1, 1987, about one-third of these farms were experiencing financial difficulty.

Debt-to-asset ratios can provide an idea of the 'leverage' that a typical farm is under. Generally as the ratio (leverage) rises, so does risk and the threat to an operation's survival. Farms with leverage (debt) exceeding 40 percent (of assets) are regarded as higher risk by lenders. But the vulnerability of an enterprise varies, by type of farm and other factors. A dairy operation can carry a higher debt load because of the steady cash-flow that comes from a monthly milk check, whereas cash grain operators usually receive income payment for their crops only during the few months when they are harvested and sold. Also, government program payments soften the effect of leveraging. Leveraged farms that participate in available government programs have an improved capacity for weathering economic hardships than can those where no programs are available, e.g., cow-calf operations. January 1, 1987, debt/asset ratios for these households are summarized in Figure 1. Notice that about one-third of the larger farms (> $100,000 annual sales) have debt-to-asset ratios of .4 or more .

There are also interesting variations in assets among farm operator households (Figure 2). Notice that non-farm assets are most common (proportionately) among the smallest farms. These farms are least committed to commercial agriculture. But non-farm assets often have the highest liquidity, meaning that they are easier to convert to cash, than are farm machinery or real estate which are difficult to rush onto the market without value sacrifice. Also notice that non-farm assets are least common (proportionately) among commercial farms and that non-real estate farm assets are most common. Machinery, equipment and livestock are the big items here. Livestock has excellent liquidity, but as agriculture specializes fewer farms have livestock. Machinery and equipment tend to be illiquid, and its financing often creates cash flow burdens.

Most commercial-size farms are commited to farming and this contributes to their vulnerability; they have less non-farm

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income than smaller farms, they are minimally invested in nonfarm assets (Figure 2), and cash grain operations are more vulnerable than farms with high-liquidity livestock that can be drawn upon when necessity insists.

Not only are commercial cash grain operations less protected from adversity than other farm enterprises, but these are often the ones most driven to risky exposure, motivated far less by greed-without-planning than impelled by a competitive necessity to adapt to technological change or quit. Perhaps nowhere in recent agricultural history has technological change been more swift than in farm machinery. In a decade, post-WWII equipment and capacity were made obsolete by vastly improved horsepower and performance at significantly lower costs per acre. Those who would adopt would gain a significant competitive cost advantage. But the technology was costly; its great promise was accompanied by great price.

Not only must one obtain expensive equipment with terrific capacity for work, but one must also access enough land to keep equipment fully employed. A frightening dilemma presents itself to families with long traditions on the land - 'get in or get out.' Among the options beyond simply borrowing money that must be considered in order to make this commitment work are to (a) cash in the non-farm assets, (b) cash in the livestock enterprise (and tear out fences) (c) be a custom operator with a narrow line of equipment, (d) be fully employed by accessing additional land, most often by renting because capital has been invested in equipment, (e) buy land (an appreciating asset) if possible, and (f) find non-farm employment for family labor.

These options are considered in an uncertain environment created by changing world trade patterns, interest rates, and technology. But farm operators do not create these changing conditions; they merely respond to them. Usually, these responses involve more than just adjustments in the farm business. For example, farm operators, their spouses, and other family members look to off-farm sources of income. The next article will examine off-farm income and its sources among Ohio farm operator households.

Table 1: Farm Operator Household Balance Sheet
U.S. and Ohio Estimates
January 1, 1987

Sales Class	U.S. Farm Operators			Ohio Farm Operators		
	Assets	Liabilities	Equity	Assets	Liabilities	Equity
	---$1,000---					
Under $10,000	144	15	129	207	14	193
$10,000 to 19,999	192	21	171	237	33	204
$20,000 to 39,999	228	36	192	265	40	225
$40,000 to 99,999	327	76	252	356	58	298
$100,000 to 249,999	508	140	368	549	147	402
$250,000 to 499,999	838	261	577	976	321	655
$500,000 or more	2,019	617	1,402	1,380	407	973
All farms	300	65	235	326	59	267

FIGURE 1

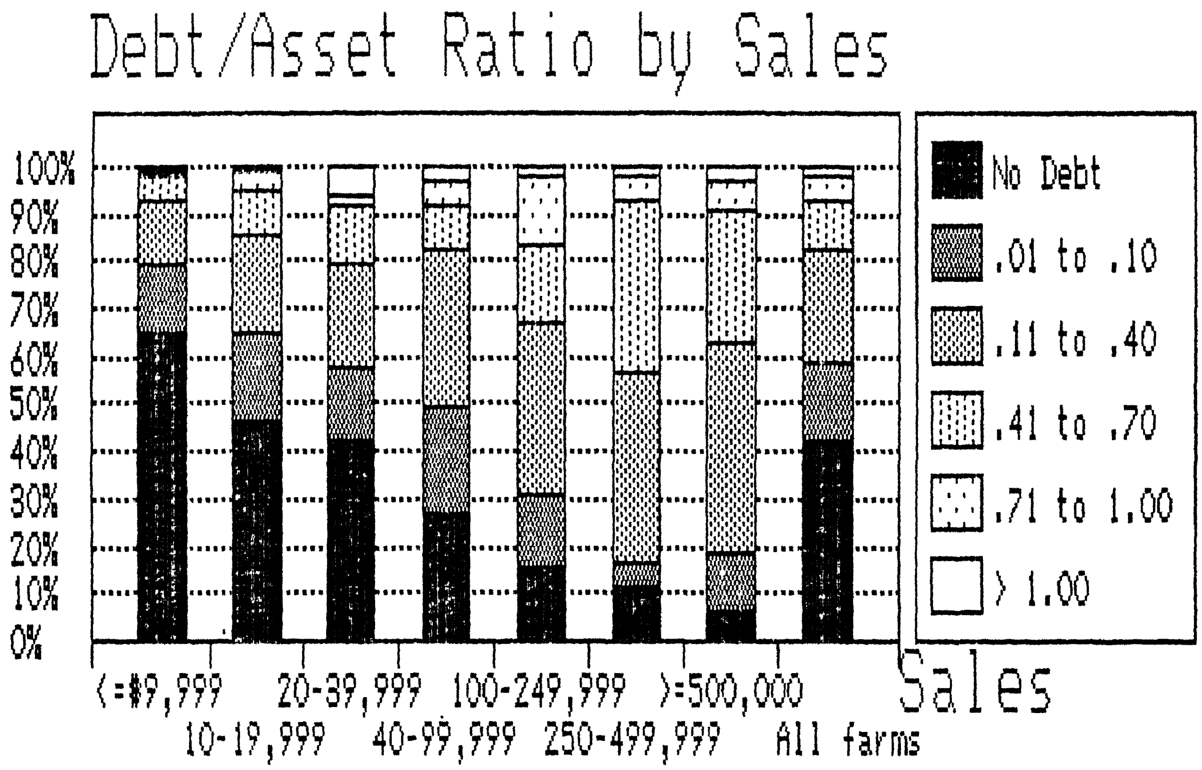
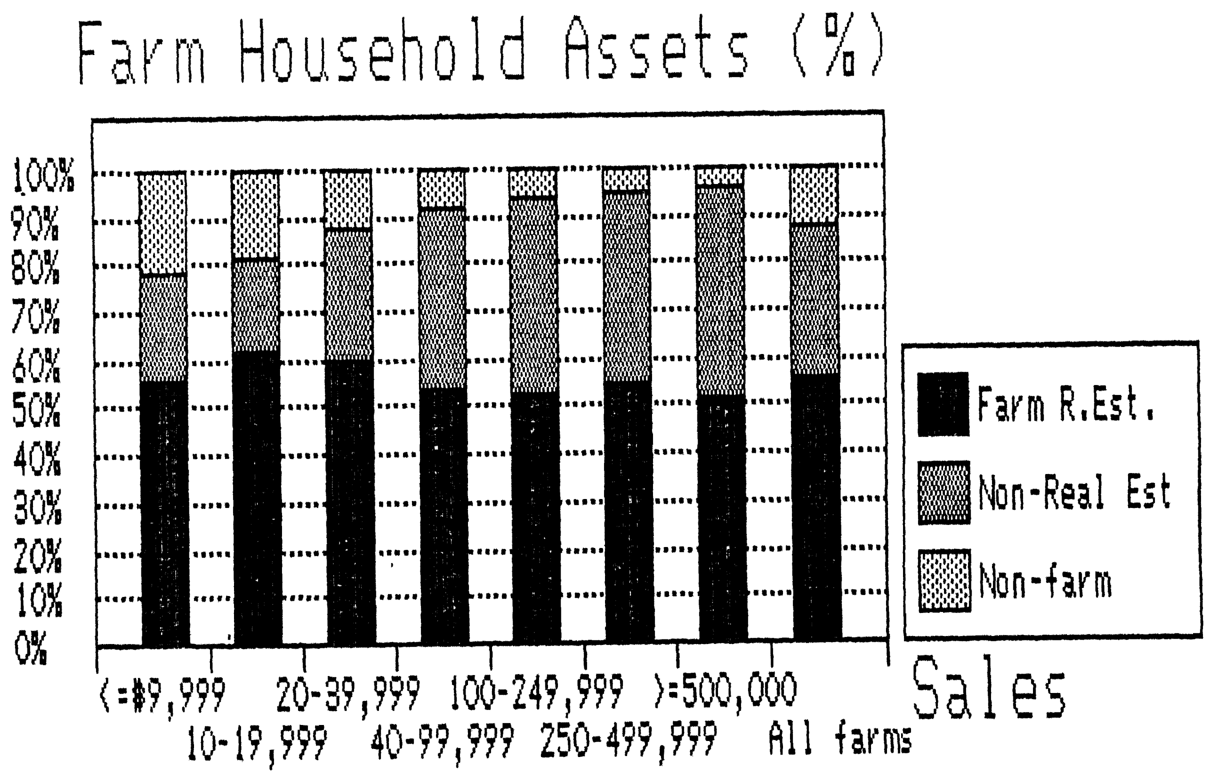


FIGURE 2



Farm Real Estate includes land and buildings.

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