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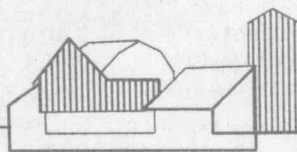
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Farm sector balance sheet continues to recover

Recently revised estimates and forecasts by the U.S. Department of Agriculture show that the balance sheet of the nation's farm sector continues to recover from the financial battering experienced earlier this decade. The latest numbers suggest that the value of farm assets rose 6 percent last year and are expected to rise another 4 to 5.5 percent this year. Outstanding farm debt retreated 3 percent last year, marking the fifth consecutive annual decline. The forecasted range for this year suggests that farm debt could either edge lower, or perhaps turn up modestly. The difference between assets and debts reflects farm sector equity, which rose about 8 percent last year and is forecasted to record a gain of at least 5 percent this year.

The USDA routinely provides two measures of the farm sector balance sheet. The narrower measure (and the one used in this discussion) focuses strictly on the combined, farm-related assets and debts of farm operators and farm landlords. The broader measure includes these items plus certain nonfarm-related assets and debts of farm operator households. In particular, the broader measure includes the value of, and the debt used to finance, such things as farm operator dwellings (including furnishings), vehicles used for nonfarm purposes, and certain nonfarm financial assets. For comparative purposes, the total value of assets included in the broader measure is about 15 percent larger than that for the narrower measure. Total debt in the broader measure is about 7 percent larger.

This year's projected strengthening in the balance sheet would mark the third consecutive year of recovery since the sharp setback experienced by the farm sector during the early- to mid-1980s. Moreover, the recovery has continued despite the last year's drought and the various weather problems that sharply lowered this year's harvest of winter wheat. Incorporating this year's projected gain, farm sector equity is expected to be up about a fifth from the 1986 low. But reflecting the steep drop earlier this decade, farm sector equity at the end of this year will remain far below the 1980 peak. Moreover, adjusting for inflation, the purchasing power of farm sector equity, while up some 8 to 9 percent from the 1986 low, will still be about 45 percent below the peak and more

comparable to the levels that prevailed in the early 1960s.

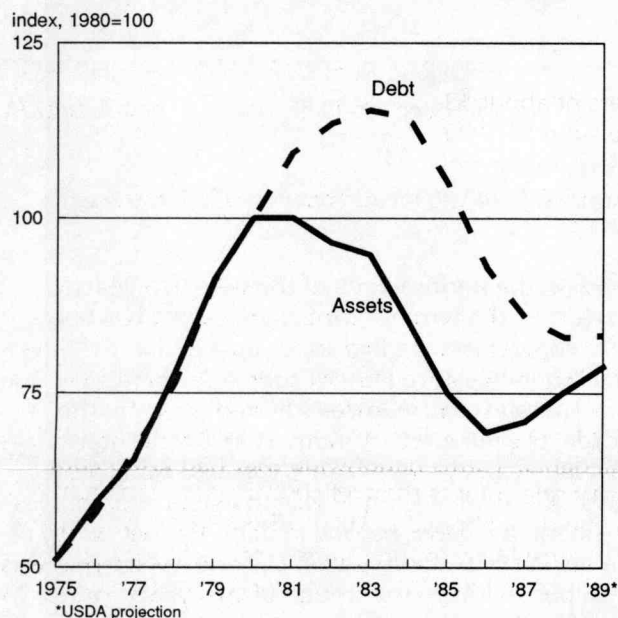
Based on the performance of the past two years, the recovery in the farm sector balance sheet has been more apparent in the five states included in the Seventh Federal Reserve District than elsewhere. Yet due to far more extensive losses suffered earlier in the decade, the net worth of farmers in District states lags the 1980 peak by more than is the case for all other states. Because of a larger gain in assets and, to a lesser extent, a steeper decline in debt, the net worth of farmers in District states as of the end of last year was up 26 percent from the trough of two years earlier. In comparison, the two-year rise in net worth of farmers in all other states was 12 percent. But despite the faster two-year rise, the net worth of the farm sector in the five District states at the end of last year still lagged the 1980 peak by 43 percent, more than double the lag report for all other states.

The asset side of the balance sheet, according to the revised estimates, was valued at \$748.5 billion as of the end of 1988. Real estate accounts for nearly three-fourths of the value of all farm sector assets. Over the past two years, the value of farm real estate assets has risen about 7.5 percent. The range forecasted for the ending 1989 value of farm real estate points to a further rise of some 6 to 8 percent this year. Of the \$546.0 billion value placed on all farm real estate assets as of the end of last year, about \$32.1 billion pertained to the value of buildings and other service structures (excluding operator dwellings). The remainder constituted the value of bare farm land.

There were some 994.5 million acres of land in farms in 1988, accounting for roughly 45 percent of the nation's total land area. Less than half of the total land in farms is considered as cropland that is used for crops, pasture, or idled under various federal programs. The remainder includes an assortment of permanent grassland, woods, wetlands, etc. Since peaking in the early 1950s, the amount of land in farms has drifted slowly downward. The annual rate of decline in land in farms since the mid-1970s (when the current definition of a farm was first implemented) has averaged one-half of one percent.

Farm assets other than real estate were valued at \$202.5 billion as of the end of 1988, up 11 percent from

Upturn in asset values and declining debt help strengthen farm sector balance sheet



the 8-year low set in 1986. About half (\$92 billion) of this amount represented the combined value of stored crops and livestock and poultry (excluding commercial broilers) owned by farmers. Because of volatile prices and year-to-year swings in the inventories of livestock and stored crops, these components of the balance sheet can fluctuate widely from year to year. The combined value of livestock and stored crops has risen 38 percent over the past two years, largely due to higher cattle and poultry prices and a surge in crop prices that more than offset the decline in the quantity of stored crops. But with lower crop prices this year, the combined value of livestock and stored crops on farms may drop back to about \$87 billion, based on the midpoints of the USDA latest forecasted ranges.

The remaining nonreal estate farm assets as of the end of last year encompassed \$74.7 billion in farm machinery and motor vehicles and \$35.9 billion in farm financial assets (cash, checking accounts, and the value of investments in farmer cooperatives). The value of farm financial assets has tended to rise slowly over the past several years, and a further modest rise is projected for this year. Alternatively, prior to last year's modest upturn, the value of farm machinery and motor vehicles declined 28 percent (from 1982 through 1987) as depreciation more than outstripped farmers expenditures on new equipment. With higher prices and a sizable pickup in unit purchases of new farm machinery and equipment this year, this component of the balance sheet is projected to edge higher again in 1989.

Farm debt declined for the fifth consecutive year in 1988, also helping to strengthen the farm sector balance sheet. At \$138.4 billion, outstanding farm debt at the end of 1988 was down 3 percent from the year before, down 28 percent from the 1983 peak, and the lowest in ten years. Of the total, \$76.7 billion represent farm debt secured by real estate while the remaining \$61.7 billion was lumped together as nonreal estate farm debt. Both components of farm debt peaked in 1983 and the subsequent declines over the past five years have been roughly comparable in percentage terms.

The multiple year decline in farm debt reflects several factors. Until recently, new borrowings by farmers were trending lower because of cuts in crop acreage, lower input prices, curtailed farm capital expenditures, and a reluctance by many farmers to take on new debt. Moreover, the surge in net cash farm earnings the past three years permitted more equity financing of operating and capital expenditures and accommodated a faster paydown on outstanding debt. In addition, the decline in farm debt also stemmed from a substantial amount of write-downs and write-offs as lenders struggled with the problem farm loans that emerged with the financial distress earlier in the decade. This experience by lenders has undoubtedly led to more rigorous lending standards that may also have contributed to the decline in new lending in recent years.

It is not yet clear whether 1989 will mark another year of decline in outstanding farm debt or the start of a possible upturn. USDA analysts, in general, are expecting that farm debt by the end of this year will be little changed. However, their forecasted ranges for both real estate and nonreal estate farm debt point to the possibility of either a slight decline or a slight increase. Some factors that would suggest farm debt might rise slightly this year include higher farm operating expenses (due to expanded crop plantings and higher input prices), a sizable pickup in unit retail purchases of major items of farm machinery and equipment, and prospects for a slight downturn in net cash farm earnings. But at the same time, the portfolio of farm loans held by the Farmers Home Administration, which accounts for nearly a sixth of all farm debt, could decline considerably this year. The likely decline in FmHA farm loans stems from further cuts in programs that lend directly to farmers and, more importantly, the Congressionally-mandated requirement for an extensive restructuring of the FmHA's backlog of problem farm loans. The USDA has suggested that, over time, as much as \$8 billion in FmHA farm loans could be written off. To the extent that those write-offs occur this year, the cut in farm loans owed to FmHA may offset gains in farm debt held by other lenders.

Available evidence on the trend so far this year in farm debt held by other major lenders is mixed. Farm debt owed to banks, which was the only component of major farm lenders to report an increase in outstanding farm loans last year, continued to rise during the first half of this year. As of June 30, farm debt owed to banks nationwide was up 4.0 percent from the ending 1988 level and up 3.6 percent from a year ago. Overall, banks account for nearly a third of outstanding farm debt. Among the five states comprising the Seventh Federal Reserve District, the amount of farm debt owed to banks as of mid year was up 3.0 percent from the year before. But the trends varied widely, ranging from comparatively large gains in Illinois and Iowa to slight year-over-year declines in Michigan and Wisconsin.

In contrast to the sustained growth at banks, farm debt owed to other major reporting farm lenders continued to lag during the early months of this year. Despite a first-half pickup in short and intermediate term farm loans, the total amount of farm debt owed to institutions within the Farm Credit System as of June 30 lagged the ending 1988 level by 2 percent and the year-earlier level by nearly 6 percent. Moreover, farm mortgages owed to life insurance companies as of the end of April were down nearly 2 percent from the year before. The Farm Credit System accounts for just over a fourth of all farm debt while life insurance companies account for 6 percent.

With the decline in farm debt and the recovery in asset values, the debt-to-asset ratio for the farm sector has declined considerably. The ratio (which reflects the proportion of the current value of farm assets that are financed with debt) retreated to 18.5 percent as of the end of last year, down from the 1985 peak of 23.5 percent. The ratio for the five District states was slightly higher, but at 20.1 percent was well below the recent peak of 27.5 percent. Among the five District states, the debt-to-asset ratios ranged from a low of 16.7 percent in Illinois to a high of 25.5 percent in Wisconsin. Relative to earlier highs, the most prevalent recovery in debt-to-asset ratios has occurred in Iowa. In that state, the debt-to-asset ratio has de-

clined from 31.7 percent in 1985 to 20.1 percent at the end of last year.

On a per farm basis, the ending 1988 balance sheet suggests that, on average, each farm nationwide has assets of about \$340,000, debts of \$63,000, and equity of around \$277,000. (It is important to remember that these figures combine the farm-related assets of both farm operators and farm landlords. Moreover, farm sector assets and debt are not evenly distributed among all farms.) Among District states, the averages per farm are roughly \$356,000 in assets, \$71,000 in debts, and \$285,000 in equity.

Although down considerably from earlier highs, all sizes of farms tend to have fairly large equity. This is partly because small farms tend to have comparatively small debts. Farms nationwide that had gross commodity sales of less than \$40,000 in 1988 had an average equity of about \$120,000. These farms, which are often considered "hobby" farms, account for over 70 percent of all farms but only 11 percent of the farms sector's gross cash earnings. Among what are typically considered to be "commercial" farms, the average equity per farm ranged from \$376,000 for those with annual commodity sales of \$40,000 to \$100,000 to \$1.53 million in equity for those with annual commodity sales of over \$250,000.

Gary L. Benjamin

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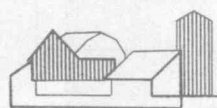
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Selected Agricultural Economic Indicators

| | | | Percent change from | | |
|--|------------------|-------|---------------------|-------------|------------------|
| | Latest period | Value | Prior period | Year ago | Two years ago |
| Prices received by farmers (1977=100) | | | | | |
| Crops (1977=100) | September | 143 | -0.7 | -1 | 12 |
| Corn (\$per bu.) | September | 127 | 0.8 | -6 | 21 |
| Oats (\$per bu.) | September | 2.29 | 1.3 | -12 | 54 |
| Soybeans (\$per bu.) | September | 1.35 | -7.5 | -47 | -9 |
| Wheat (\$per bu.) | September | 5.89 | -3.0 | -26 | 17 |
| | September | 3.78 | 1.1 | 1 | 49 |
| Livestock and products (1977=100) | | | | | |
| Barrows and gilts (\$per cwt.) | September | 158 | -1.9 | 3 | 4 |
| Steers and heifers (\$per cwt.) | September | 43.40 | -7.7 | 4 | -21 |
| Milk (\$per cwt.) | September | 71.40 | -3.4 | 0 | 5 |
| Eggs (¢per doz.) | September | 13.70 | 3.8 | 10 | 9 |
| | September | 71.0 | 0.0 | 12 | 22 |
| Prices paid by farmers (1977=100) | | | | | |
| Production items | July | 178 | 0.6† | 3 | 9 |
| Feed | July | 165 | 0.0† | 4 | 11 |
| Feeder livestock | July | 133 | -5.0† | -8 | 27 |
| Fuels and energy | July | 193 | 4.3† | 7 | 6 |
| | July | 188 | 1.6† | 11 | 14 |
| Producer Prices (1982=100) | | | | | |
| Agricultural machinery and equipment | September | 114 | 0.2 | 5 | 7 |
| Fertilizer materials | September | 118 | 0.3 | 4 | 8 |
| Agricultural chemicals | September | 95 | -0.1 | -5 | 5 |
| | September | 117 | 1.0 | 9 | 12 |
| Consumer prices (1982-84=100) | | | | | |
| Food | September | 125 | 0.3 | 4 | 9 |
| | September | 126 | 0.2 | 5 | 11 |
| Production or stocks | | | | | |
| Corn stocks (mil. bu.) | September 1 | 1,930 | N.A. | -55 | -60 |
| Soybean stocks (mil. bu.) | September 1 | 182 | N.A. | -40 | -58 |
| Beef production (bil. lbs.) | July | 1.89 | -6.6 | -5 | -6 |
| Pork production (bil. lbs.) | July | 1.11 | -12.6 | -2 | 2 |
| Milk production (bil. lbs.)†† | September | 9.75 | -3.8 | -2 | 0 |

†N.A. Not applicable.

††Prior period is three months earlier.
21 selected states.



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