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**GROWTH IN FARM DEBT** picked up slightly in 1981, but growth over the past two years was the smallest since 1974-75. Preliminary estimates indicate farm debt rose 11.5 percent in 1981, reaching nearly \$195 billion at year end. Last year's percentage increase was slightly larger than the 1980 rise of 10.6 percent, but fell well short of the 14 percent average annual rise recorded in the latter half of 1970s. Farm real estate debt rose a little more than 11 percent last year and surpassed \$102 billion. All other (nonreal estate) farm debt rose nearly 12 percent to an estimated \$92 billion.

These estimates of farm debt are based mainly on reports of institutional lenders that provide regular updates on their portfolios of farm loans. Reporting institutional lenders—comprising banks, the farmer-lending components of the cooperative farm credit system, life insurance companies, and government agencies—hold claims on nearly 80 percent of the outstanding farm debt. Their year-end reports provide a close approximation of the farm sector debt owed to reporting lenders at the end of 1981. The remaining share is aggregated in a category identified as "individuals and others". Farm debt owed to individuals and others lacks the routine benchmarking that is available in the reports of institutional lenders. The latest USDA estimates show that farm sector debt owed to individuals and others rose nearly 6 percent in 1981. However, forthcoming census reports may significantly alter the estimate of farm debt owed to individuals and others.

**Among reporting institutional lenders**, the growth in farm debt held by government agencies again outstripped that of other lenders. The Farmers Home Administration (FmHA), the Commodity Credit Corporation (CCC), and the Small Business Administration (SBA) are the government agencies that lend to farmers. Farm debt owed to these three agencies rose 28 percent last year to \$34 billion. Last year's rise capped a 10 year span in which farm debt held by government agencies rose six-fold, nearly double the rise for other reporting lenders.

Most of the growth was in nonreal estate lending.

Interestingly, the portfolio of nonreal estate farm loans held by government agencies surpassed that of production credit associations last year. Government agencies now account for 31 percent of the nonreal estate farm debt owed to reporting institutional lenders, up from 14 percent a decade ago. The bulk of the growth in earlier years reflected new and expanded emergency and disaster loan programs of the FmHA and the SBA. However, last year's growth was paced by a fourth-quarter surge in CCC lending. That surge reflected the record volume of grain that was placed under CCC price-support loan by farmers because of low grain prices.

**The cooperative farm credit system (CFCS)** recorded a 16 percent rise in their portfolio of loans to farmers in 1981. (The CFCS is a borrower-owned cooperative that raises funds by selling securities in national markets and lends those funds primarily to farmers.) The rise boosted farm debt held by the CFCS to \$66 billion, equivalent to nearly 43 percent of the farm debt held by all reporting lenders. Ten years earlier the CFCS share was 34 percent.

**Outstanding Farm Debt and  
Market Shares of Reporting Lenders**  
(December 31)

|   | 1971   | 1976    | 1980    | 1981*   |
|---|--------|---------|---------|---------|
| Total farm debt (bil. dollars)  | \$59.1 | \$102.6 | \$174.5 | \$194.6 |
| Real estate   | 32.2   | 56.6    | 92.0    | 102.3   |
| Nonreal estate  | 26.9   | 46.1    | 82.5    | 92.3    |
| Farm debt held by   |        |         |         |         |
| Reporting lenders (bil. dollars)  | \$42.1 | \$ 75.1 | \$136.5 | \$154.3 |
| Individuals and others (bil. dollars)   | 17.0   | 27.6    | 38.1    | 40.3    |
| Distribution of farm debt held<br>by reporting lenders (percent)                  |        |         |         |         |
| Banks   | 39.7%  | 40.1%   | 29.5%   | 26.8%   |
| Farm credit system  | 33.7   | 41.4    | 41.6    | 42.7    |
| Life insurance companies  | 13.2   | 9.9     | 9.5     | 8.5     |
| Government agencies   | 13.4   | 8.7     | 19.4    | 22.0    |
| Distribution of nonreal estate farm debt<br>held by reporting lenders (percent)** |        |         |         |         |
| Banks   | 57.2%  | 60.0%   | 44.4%   | 40.8%   |
| Farm credit system  | 28.9   | 32.5    | 29.3    | 27.8    |
| Government agencies   | 13.9   | 7.5     | 26.3    | 31.3    |
| FmHA and SBA  | (3.5)  | (4.8)   | (20.2)  | (21.9)  |
| CCC   | (10.4) | (2.6)   | (6.1)   | (9.4)   |

\*Preliminary estimates.

\*\*Nonreal estate farm debt owed to reporting institutional lenders totaled \$21.8 billion, \$38.8 billion, \$71.1 billion, and \$80.5 billion on December 31, 1971, 1976, 1980, and 1981 respectively.

Federal land banks (FLB)—the farm mortgage lending arm of the CFCS—led last year's rise for the CFCS. Farm mortgages held by FLBs rose to nearly \$43.6 billion at the end of last year, up 21 percent from a year ago and equivalent to 59 percent of the farm real estate debt owed to reporting lenders. Ten years ago the FLB's share of institutionally-held farm real estate debt was only 39 percent.

The remainder of the farm debt owed to the CFCS represents short-and intermediate-term production credit that has been extended to farmers primarily through production credit associations. At the end of 1981, such debt exceeded \$22 billion, up 7.6 percent from the year before and equivalent to about 28 percent of all nonreal estate farm debt held by reporting institutional lenders.

**Farm debt owed to banks** rose about 2.6 percent last year to \$41.4 billion. Of the total, nearly \$33 billion was nonreal estate farm debt and the remaining \$8 billion was real estate debt. Banks have experienced a substantial decline in market share of both real estate and non-real estate farm debt in recent years. In terms of institutionally-held nonreal estate farm debt, the share owed to banks has declined to 41 percent from 57 percent ten years ago. Similarly, banks' share of the farm mortgage debt held by reporting lenders has declined to 11 percent from 21 percent ten years ago.

**Life insurance companies**, whose lending to farmers is limited to farm real estate mortgages, have also experienced a declining market share in recent years. In 1981, farm mortgages held by life insurance companies rose only 1 percent and, at \$13.1 billion, were equivalent to 18 percent of all farm mortgage debt held by reporting institutional lenders. Ten years ago life insurance companies had a 27 percent share.

The drastic changes in farm debt market shares over the past decade reflect several factors. During the latter part of the 1970s, the market share of banks was undermined by their tight liquidity positions. More recently, their share has been reduced by the lending rate disadvantage that confronted banks with respect to other lenders. The disadvantage reflects banks' increasing reliance on interest-sensitive deposits, differentials in loan-pricing techniques with respect to the CFCS, and the typically subsidized lending rates offered by

government agencies.

Life insurance companies have lost market share in the farm mortgage market, in part because of the distortions that have emerged in all long-term, fixed rate credit markets. Moreover, their market share has been undermined by the surge in policy loan demand, dividend withdrawals, and cash-outs on life insurance policies. The FLBs' practice of pricing new loans on the basis of its average cost of funds has also resulted in a significant interest rate differential in the FLB's favor in recent years.

In looking ahead, all lenders face farm loan collection problems that exceed the norm. It would appear, however, that the problems facing government agencies are greater than the problems of other lenders. The loan collection problems of all lenders stem mainly from the impact on farmers' cash flows of record high interest rates and very depressed earnings. But the problems facing government agencies may have other significant underlying factors. To the extent that government agency loans to farmers have subsidized rates, borrowers are inclined to pay down their loans from higher priced creditors before repaying government agency loans. In addition, government agency borrowers have a greater incentive to utilize existing loans as a substitute for new borrowing in the current high interest rate environment.

The loan collection problems of government agencies also stem from their exceptionally rapid growth over recent years. Most of the government agency lending, by statute, is intended for farmers unable to obtain credit from commercial lenders. It probably is not coincidental that the surge in government agency lending occurred in a period when the long-term decline in farm numbers slowed appreciably and even leveled off. Had it not been for their expanded lending, the economic adjustments in agriculture in the 1970s might have been more comparable with the 1950s and the 1960s and government agencies would have a smaller market share and fewer loan collection problems today. Moreover, subsequent developments may prove that a more gradual acceptance of the economic adjustments would have been less disruptive to agriculture than what the current adjustments might ultimately entail.

Gary L. Benjamin

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**MILK PRODUCTION** rose to a new high of 133 billion pounds in 1981, exceeding last year's level by 3 percent. Another increase in output per cow coupled with the second year of higher dairy cow numbers contributed to the rise in production. Although milk sup-

port prices have not changed since October 1980, dairy farmers still enjoyed a fairly good earnings picture last year. The government's cost to purchase excess production also rose sharply in 1981. As a result, some adjustments are expected to be made to lower federal outlays.

Output per cow in 1981 rose to 12,147 pounds, up 2.2 percent from 1980. The increase continued the trend that has been evident since the late 1940's when output averaged about 5000 pounds. Milk cow numbers, which have been rising since the spring of 1980, were up 1 percent in 1981 from the year before. An increased number of heifers entering the milking herd more than offset cullings.

Increased production and higher prices for milk boosted gross earnings of dairy farmers in 1981. For the year, milk prices received by farmers averaged \$13.76 per hundredweight, a 6 percent increase over the year before. Cash receipts to dairy farmers in 1981 rose 9 percent to an estimated \$18.1 billion. In addition, feed and ration costs declined throughout most of 1981, such that net returns probably improved in recent months. Dairy ration costs were down a tenth in December from the year-earlier level.

In recent months the price received by dairy farmers has dipped below the year-ago level, a first since 1977. The support price for milk of \$13.10 per hundredweight, which was established in October of 1980, remains in force until October, 1982. As a result, the price-depressing effect of an imbalance between production and commercial disappearance has become much more evident.

As production has continued to outstrip commercial disappearance, substantial purchases of manufactured dairy products by the government have been necessary. Commercial disappearance of milk and dairy products in 1981, at 120.3 billion pounds, was up 1 percent from the level of 1980 but was virtually unchanged from 1979's level. As a result, with production at record levels, net government purchases of manufactured dairy products rose to 12.9 billion pounds (milk equivalent) in 1981—equivalent to nearly a tenth of all the milk produced last year. This compared with 8.8 billion pounds in 1980 or about 7 percent of total production. Purchases remain at a high level. The total for January and February, at 4.4 billion pounds, exceeded the year-earlier level by 50 percent. Current estimates suggest purchases this year could range from 11 to 16 billion pounds.

As a consequence, the stepped up government dairy purchases have significantly raised government outlays for the dairy support program. In the fiscal year ending September 30, 1981, government expenditures for the dairy program rose to \$1.9 billion, up from a high year-earlier level of \$1.3 billion. And according to some estimates, government expenditures in the current fiscal year will likely exceed the level of last year.

The farm legislation that was enacted in December

incorporated some compromise measures that were designed to cut down the government's outlay to support dairy farmers. Minimum support prices were set for each of the four years—\$13.10 this year, \$13.25 in fiscal 1983, \$14.00 in fiscal 1984, and \$14.60 in fiscal 1985—and were not tied to parity as had been a mainstay of earlier programs. Under the legislation, support prices could rise to 70 percent of parity or higher only if the amount of government purchases fell to specified levels or the government's cost dropped accordingly.

Despite the change in legislation, the administration and the dairy industry are concerned that the dairy program may still be too costly. Several proposals for changes to the program have surfaced. One proposal calls for a reduction in the support prices established under law. Another proposal, made by dairy interests, would leave the current support structure intact, but would create a second tier of prices for that portion of production that is in surplus. For example, dairy farmers would receive a much lower price for the proportion of their milk which equals the imbalance between total production and commercial disappearance. The difference between the normal support price and the price that farmers receive for their excess production would be used to finance purchase of the surplus. The CCC would buy surplus products, but would only pay for the first 5 billion pounds—the rest would be funded from the price differential program. Other proposals are likely to surface at a special symposium that has been called by the Secretary of Agriculture for next week.

The increasing likelihood that further adjustments in the dairy program are forthcoming clouds the outlook for the industry. But some trends are still anticipated. Earnings to dairy farmers may deteriorate this year. Milk prices could average the same as last year. With no increase in milk prices, operating returns to dairy farmers could be undermined by proportionately larger increases in production costs.

Milk cow numbers are 1 percent higher than a year ago, and the number of heifers held for dairy cow replacement is up 8 percent. Many analysts believe these factors will support another small increase in the dairy herd for all of 1982. USDA analysts are expecting milk production this year to rise 1.5 to 3.5 percent resulting in a continuing oversupply of milk. Commercial disappearance is expected to rise this year, but the rate of increase could be less than that of production. Based on current estimates for prices and production, gross receipts to dairy farmers may rise slightly. With prospects for further revisions in the dairy support program and only a nominal improvement in gross earnings, dairy farmers may opt to adjust the size of their operations in order to protect net returns.

Jeffrey L. Miller



## Selected agricultural economic developments

| Subject   | Unit           | Latest period | Value | Percent change from |          |
|---|----------------|---------------|-------|---------------------|----------|
|   |                |               |       | Prior period        | Year ago |
| <b>Index of prices received by farmers</b>      | 1977=100       | February      | 133   | + 0.8               | - 8      |
| Crops   | 1977=100       | February      | 124   | - 1.6               | -14      |
| Livestock                                       | 1977=100       | February      | 142   | + 3.6               | - 1      |
| <b>Index of prices paid by farmers</b>          | 1977=100       | February      | 154   | 0                   | + 4      |
| Production items                                | 1977=100       | February      | 148   | 0                   | + 1      |
| <b>Producer price index* (finished goods)</b>   | 1967=100       | February      | 277   | 0                   | + 5      |
| Foods   | 1967=100       | February      | 258   | + 0.7               | + 3      |
| Processed foods and feeds                       | 1967=100       | February      | 248   | + 0.4               | - 1      |
| Agricultural chemicals                          | 1967=100       | February      | 298   | + 0.7               | +10      |
| Agricultural machinery and equipment            | 1967=100       | February      | 304   | + 0.5               | + 9      |
| <b>Consumer price index** (all items)</b>       | 1967=100       | January       | 283   | + 0.4               | + 8      |
| Food at home                                    | 1967=100       | January       | 275   | + 1.3               | + 4      |
| <b>Cash prices received by farmers</b>          |                |               |       |                     |          |
| Corn  | dol. per bu.   | February      | 2.40  | - 5.5               | -25      |
| Soybeans  | dol. per bu.   | February      | 5.96  | - 2.8               | -21      |
| Wheat   | dol. per bu.   | February      | 3.67  | - 2.9               | -12      |
| Sorghum   | dol. per cwt.  | February      | 4.03  | - 1.5               | -24      |
| Oats  | dol. per bu.   | February      | 1.99  | + 1.0               | - 1      |
| Steers and heifers                              | dol. per cwt.  | February      | 60.30 | + 3.4               | - 3      |
| Hogs  | dol. per cwt.  | February      | 48.20 | +11.1               | +17      |
| Milk, all sold to plants                        | dol. per cwt.  | February      | 13.90 | 0                   | - 1      |
| Broilers  | cents per lb.  | February      | 27.0  | - 0.4               | -11      |
| Eggs  | cents per doz. | February      | 66.3  | + 4.4               | + 6      |
| <b>Income (seasonally adjusted annual rate)</b> |                |               |       |                     |          |
| Cash receipts from farm marketings              | bil. dol.      | 4th Quarter   | 141   | - 2.0               | 0        |
| Net farm income                                 | bil. dol.      | 4th Quarter   | 25    | 0                   | +26      |
| Nonagricultural personal income                 | bil. dol.      | February      | 2,460 | + 0.6               | + 8      |

\*Formerly called wholesale price index.

\*\*For all urban consumers.

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