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The farm sector balance sheet

The balance sheet of the farm sector strengthened considerably during the latter part of the 1980s. But last year brought a slight setback. Updated estimates from the U.S. Department of Agriculture show that the value of farm assets registered a decline while farm debt marked the first annual rise since 1983. Prospects for this year foreshadow little, if any, recovery.

Recently released estimates from the USDA indicate that the uptrend in farm asset values was interrupted last year and may resume in only a nominal sense this year. The latest numbers, although still considered preliminary, contain revisions back to 1987. They show that the value of all farm sector assets edged down to $1,003 billion as of the end of last year. The indicated decline for 1991 is a modest 0.5 percent. Yet if borne out in final estimates, it would mark only the fifth year-over-year decline in farm sector asset values since 1960. The other four years of declining asset values were concentrated in the early- to mid-1980s when the farm sector experienced a wrenching financial adjustment. In the intervening years, the value of farm assets rose about 20 percent, recovering about two-thirds—in nominal dollar terms—of the losses sustained in the early 1980s.

Real estate accounted for all of the decline in asset values last year. The latest estimates show the value of farm real estate declined nearly 1.5 percent, retreating to about $703 billion at year end. The decline was somewhat surprising in view of another USDA report in April that suggested the average per acre value of farmland—including buildings—rose about 0.5 percent last year. The apparent discrepancy between the two reports stems mostly from internal differences between divisions within the USDA in tracking and valuing certain farm real estate components.

The value of nonreal estate farm assets continued to rise last year, but at a much slower pace. After growing at a compound annual rate of nearly 6 percent during the previous four years, the 1991 increase in the value of nonreal estate assets apparently slowed to about 1.5 percent. The updated estimates peg the value of these assets at about $300 billion as of the end of last year. The total is comprised of about $93 billion for machinery and motor vehicles, $68 billion for the year-ending inventory of livestock and poultry on farms, $23 billion for crops in storage, $49 billion for the household goods of farm operator families, $63 billion for certain financial assets related to both the farm household and the farm business, and about $3 billion for purchased farm inputs. Of these components, the livestock and poultry inventory was the only one to register a decline in value during 1991.

The liability side of the farm sector balance sheet has benefitted from a decline in farm debt for several years. But that trend apparently ended last year. Preliminary estimates show that farm debt at the end of 1991 was up 2 percent from the year before. Of the estimated $148 billion in outstanding farm debt, about $80 billion was secured by farm real estate mortgages. The remaining $68 billion in so-called nonreal estate farm debt mostly represents short- and intermediate-term loans used to finance production and/or acquire nonreal estate assets. Both components registered a modest gain last year.

Reports from the major institutional lenders serving farmers suggest that most of the rise in farm debt last year was in loans held by banks. The portfolio of farm loans held by banks rose nearly 6 percent, reaching another new high of $53.0 billion. That marked the fourth consecutive annual rise in farm loans at banks and it boosted the share of outstanding farm debt held by banks to nearly 36 percent, up dramatically from a 21 percent share a decade ago. Farm loans secured by real estate mortgages at banks led the increase, rising 7 percent to $18.4 billion. Nonreal estate farm loans at banks rose 5 percent to $34.6 billion at the end of 1991.

The trend in farm loans held by other institutional lenders last year was mixed. Reports from the Farm Credit System

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	1970	1975	1980	1985	1990	1991
	(billion dollars)					
Assets	324	579	1,089	893	1,008	1,003
Real estate	224	421	850	657	713	703
Nonreal estate	100	158	239	236	295	300
Debt	53	91	179	188	145	148
Real estate	30	50	97	106	78	80
Nonreal estate	22	42	81	82	67	68
Equity						
Nominal dollars	271	488	910	705	863	855
1987 dollars*	753	960	1,207	736	749	722

*Deflated by the GDP implicit price index.

(FCS) suggest their portfolio of farm loans edged up about 1 percent and approximated $37.5 billion at year end. That marked the first year-over-year gain for the FCS in nine years. Nonreal estate loans rose about 6 percent to account for all of the upturn. Long-term farm mortgage loans held by the FCS declined marginally to about $26.7 billion. Preliminary reports note that farm loans held by life insurance companies—which are predominantly secured by real estate mortgages—declined more than 1 percent while sizable declines in both the real estate and the nonreal estate component cut the portfolio of all farm loans held by the Farmers Home Administration more than a tenth last year. These measures suggest that the FmHA held about $16.8 billion in farm loans as of the end of 1991 while life insurance companies held less than $10.1 billion.

The combination of a slight decline in asset values and a marginal rise in farm debt trimmed farm sector equity to about $855 billion as of the end of 1991, down less than 1 percent from a year earlier. In nominal, or current dollar terms, the equity measure remains about a fourth above the cyclical low it reached in 1986 when the financial slump in agriculture was ending. But in inflation-adjusted terms, the real purchasing power of farm sector equity remains some 40 percent below the peaks of the late 1970s and early 1980s and ranks second only to 1986 as the lowest in the last 30 years. The bulk of the farm sector's equity is distributed among farm operators, retired farmers, and a broad spectrum of non-farmer landlords. The amount is huge in the aggregate and also very impressive if averaged among the some 2.1 million farms nationwide. But defining an average equity claimant is difficult, if not impossible. In terms of real purchasing power, however, the retirement nesteggs of equity of many farmers and retired farmers has probably not made the recovery from the mid 1980s that had been hoped for. In the same vein, the low level of real farm sector equity probably contributes significantly to the cautious spending and borrowing patterns that still characterize the behavior of farmers.

For this year, the USDA is projecting that the trend in both farm asset values and farm debt will be flat to only marginally higher. Asset values will likely be held in check by the lackluster farmland market. This year's projected decline in farm earnings could lead to a further modest slowing in farm loan repayment rates and a possible increase in borrowings to finance operating expenses. But the influence of these trends on farm debt may be largely offset by curtailed borrowings to finance capital expenditures. Farm sector equity may edge up in nominal, or current dollar terms. But adjusted for inflation, equity may decline again this year.

Gary L. Benjamin

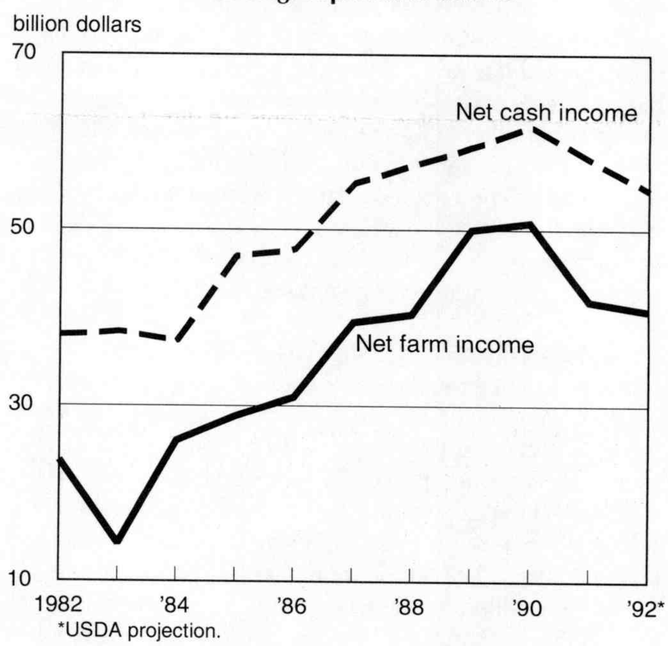
Farm earnings expected to decline in 1992

Current figures from the U.S. Department of Agriculture indicate that both net farm income and net cash farm income are expected to be down for the second consecutive year in 1992. Cash receipts from commodity marketings will likely post a decline during the current year after falling about 1 percent in 1991. In addition, cash farm production expenses are expected to post their sixth consecutive annual increase in 1992.

The USDA defines net cash farm income as the sum of cash receipts from commodity sales, farm-related income, and direct Government payments, less cash expenses. Net cash income provides a measure of farm income without regard to the time period in which production actually occurred. As a cash-based concept, net cash farm income is a useful indicator of the availability of funds to meet loan principal payments, purchase capital items, augment savings, pay taxes, and contribute to family living expenses. A recent USDA report estimates that net cash income to the farm sector came in at about $58 billion in 1991, a drop of about $4 billion from the year before. The midpoint of the USDA's forecasted range for net cash income in 1992 is $54.5 billion.

Net farm income is an accrual measure of the earnings associated with a given year's production. In addition to gross cash income and expenses, net farm income includes non-cash items to account for inventory changes, the rental value of farm dwellings, the consumption value of farm-grown food, labor perquisites, and depreciation. A sizable inventory swing—from nearly $3 billion in 1990 to -$1 billion in 1991—led to a comparatively large decline

Farm earnings expected to decline



in net farm income last year. The latest estimates show net farm income for 1991 fell 17 percent from the previous year to $42 billion. The midpoint of the USDA projection for net farm income this year is $41 billion.

Cash receipts from farm marketings are expected to post another small decline this year as a fractional increase in crop receipts will not be sufficient to offset a projected reduction in receipts from livestock marketings. Receipts from livestock marketings declined to less than $86 billion in 1991 and are projected to range between $83 and $85 billion this year as a boost in livestock marketings is more than offset by lower farm prices. Hog receipts will likely experience a significant decline as herd expansion has led to increased slaughter and sharply lower average prices. Cattle marketings are expected to be stable, but competing meat supplies will pressure prices and contribute to a modest decline in cash receipts. In contrast, poultry receipts are expected to remain fairly constant as increased production is counterbalanced by marginally weaker prices. Dairy receipts are forecast to show the most significant improvement as moderate gains in milk production are accompanied by higher farm-level prices.

The USDA estimates show that crop receipts reached $82 billion in 1991 and are expected to range between $81 to $84 billion this year. Wheat receipts this year are likely to post a solid gain as production increases and prices remain strong. In contrast, little change is anticipated in the level of receipts from corn or soybean marketings. Corn acreage is expected to be up, suggesting larger fall marketings and a proportionately greater decline in prices. But soybean acreage may show a modest decline, with slightly stronger prices contributing to level cash receipts. In addition, cash receipts from fruits and nuts are forecast to increase during 1992, while stable receipts are expected for vegetables, and for greenhouse and nursery plants. Cotton receipts are projected to fall.

Other cash farm income components are direct government payments and farm-related income. Government payments to farmers have declined over 50 percent since peaking in 1987. They are projected to range between $8 and $9 billion this year, compared to $8 billion last year. Farm-related income consists of income from custom work, machine hire, and other miscellaneous sources. It is expected to hold near the $7 billion level again this year.

Cash farm production expenses rose about 1 percent in 1991 to $125 billion, and are expected to range between $125 and $130 this year. Much of the predicted increase stems from higher labor costs and miscellaneous operating expenses, which include such items as grazing and dairy assessment fees, irrigation water costs, farm tools and noncapital equipment, motor vehicle registration and licensing fees, insurance, and utilities. USDA reports indicate farm labor wage rates in January and April were up about 7 percent from a year ago. Miscellaneous operating expenses are projected to range between $10 and $14 billion dollars, compared to an estimated $11 billion in 1991. Cash expenses directly associated with crop production (seed, fertilizer, and pesticides) are expected to show little change from the $16 to $17 billion of the past two years. Price indices reported by the USDA in January and April indicated that seed and fertilizer prices were running slightly below year-earlier levels while chemical prices had risen. However, there is still considerable uncertainty surrounding the actual level of crop-related input usage due to questions regarding the number of acres planted, the crop mix, and the amount of replanted acreage. The major livestock-related cash expenditures are for the purchase of feed and feeder livestock. These two items together account for over one-quarter of the total cash farm expenses. Feed expenditures are projected to range between $18 and $22 billion in 1992, compared to $20 billion the previous year. In contrast, the cost of feeder livestock will likely decline as cattle and hog prices languish below year-earlier levels.

Interest charges accounted for 11 percent of total cash farm expenses in 1991, well below the 19 percent share recorded in 1983. The interest charges paid by the farm sector have trended lower the last nine years. Last year's level was the lowest since 1979, as a moderate increase in farm debt was offset by declining interest rates. Interest costs are projected to show little change this year as farm loan rates and debt levels remain fairly stable.

Net cash income to farmers in the Seventh Federal Reserve District is closely tied to grain, red meat, and milk production. USDA figures indicate that net cash income to beef and hog producers fell about 7 percent in 1991, while cash grain producers suffered a similar decline. In contrast, net cash income to dairy farmers fell nearly 30 percent. Current projections indicate net cash income to dairy farms will improve this year, while beef and hog operations suffer another decline. Net cash income to grain operations is expected to register a slight increase.

Mike A. Singer

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Selected agricultural economic indicators

	Latest period	Value	Percent change from: Prior period	Year ago	Two years ago
Prices received by farmers *(index, 1977=100)*	May	141	0.0	–7	–8
Crops *(index, 1977=100)*	May	123	–2.4	–10	–8
Corn *($ per bu.)*	May	2.48	0.0	4	–5
Hay *($ per ton)*	May	74.20	1.6	11	–26
Soybeans *($ per bu.)*	May	5.89	4.1	4	–1
Wheat *($ per bu.)*	May	3.56	–2.5	34	5
Livestock and products *(index, 1977=100)*	May	158	1.9	–4	–7
Barrows and gilts *($ per cwt.)*	May	45.80	10.6	–16	–26
Steers and heifers *($ per cwt.)*	May	76.10	–0.5	–4	–3
Milk *($ per cwt.)*	May	12.80	2.4	13	–5
Eggs *(¢ per doz.)*	May	51.7	–5.1	–13	–16
Consumer prices *(index, 1982-84=100)*	May	140	0.1	3	8
Food	May	137	–0.5	0	5
Production or stocks					
Corn stocks *(mil. bu.)*	March 1	4,559	N.A.	–5	–5
Soybean stocks *(mil. bu.)*	March 1	1,177	N.A.	–1	11
Wheat stocks *(mil. bu.)*	March 1	886	N.A.	–37	–6
Beef production *(bil. lb.)*	May	1.90	6.3	–2	–5
Pork production *(bil. lb.)*	May	1.29	–9.0	0	2
Milk production* *(bil. lb.)*	May	11.2	3.3	0	0
Receipts from farm marketings *(mil. dol.)*	February	12,347	–16.0	5	–2
Crops**	February	4,722	–38.3	2	1
Livestock	February	6,804	–2.5	3	–1
Government payments	February	821	1,056.3	67	–23
Agricultural exports *(mil. dol.)*	March	3,739	–3.1	3	–7
Corn *(mil. bu.)*	March	124	–5.6	–34	–36
Soybeans *(mil. bu.)*	February	68	N.A.	2	–9
Wheat *(mil. bu.)*	March	108	–10.8	–9	–2
Farm machinery sales *(units)*					
Tractors, over 40 HP	May	4,089	–20.6	–38	–34
40 to 100 HP	May	3,027	–13.4	–27	–25
100 HP or more	May	1,062	–35.8	–57	–50
Combines	May	205	–34.7	–84	–75

N.A. Not applicable
*21 selected states.
**Includes net CCC loans.

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