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Farm equipment sales in eight-year decline

Unit sales of farm equipment continued to slide during the early months of 1987. Almost all of the major farm equipment items cited in the Farm and Industrial Equipment Institutes reports on industry sales show declines from last year's levels. Inventories of farm equipment at the end of March, although in many cases down sharply from a year earlier, remain quite large. Although many analysts expected industry sales to stabilize in 1987, the first quarter results suggest that another year of deteriorating sales is underway.

Sales of farm tractors and combines, the largest components of the industry, have continued to deteriorate in 1987. Through the first three months of 1987 unit sales of tractors with 40 or more horsepower were down almost 27 percent from the comparable period of last year. The sharpest declines were registered in sales of two-wheel drive tractors with over 100 horsepower, down more than 50 percent, and in the larger four-wheel drive units of more than 200 horsepower, down more than 40 percent from last year. Other horsepower categories of farm tractors all registered year-to-year declines as well. Preliminary figures for April, typically the best sales month for tractors, showed unit sales about 9 percent off the year-earlier pace.

Combine sales through the first three months of the year have continued to drop as well. Cumulative sales through March registered a 68 percent year-to-year decline. Preliminary sales figures for combines in April, however, show an increase of almost 15 percent from a year earlier, which would trim the cumulative decline for the year to about 57 percent.

Declines from year-ago levels have been registered in sales of most other major farm machinery and equipment as well. Unit sales of small balers during the first quarter were down almost 22 percent, while sales of mower conditioners dropped about 16 percent from the comparable period of a year earlier. Unit sales of windrowers and corn heads were off a third and two-thirds, respectively.

Although sales of most types of farm equipment have been down, two items have seen unit sales increase in 1987. Sales of forage harvesters rose more than 26 percent from a year ago during the first three months

of the year, while unit sales of combination grinder-mixers were almost 14 percent higher. However, the increased sales of these items do little to offset the effects of the substantial declines in most of the industry's machinery and equipment.

Farm equipment sales in District states during the first quarter recorded substantial year-to-year declines as well. Tractor sales, including units with less than 40 horsepower, were down more than a third from the first quarter of 1986. The largest declines were recorded in Illinois and Wisconsin, off 41 and 53 percent, respectively. Combine sales were even more dismal, dropping 74 percent below the cumulative sales of the first three months of 1986, with sharp drops recorded in every District state. Unit sales of small balers in District states were down 21 percent, while corn head sales were almost 63 percent lower than the comparable period of a year ago. In contrast, District sales of mower conditioners were up 12 percent, largely due to a three-fold increase in Iowa. A sharp gain in sales of forage harvesters of 82 percent was mostly accounted for by the strength of sales in Wisconsin.

Inventories of farm machinery and equipment have continued to register substantial year-to-year declines.

Unit sales of farm equipment continued to fall in the first quarter of 1987

	1986	1987	Percent change
Tractors			
Two-wheel drive			
40-99 HP	6,259	5,514	-11.9
100-139 HP	1,367	665	-51.4
140 HP or more	2,427	1,218	-49.8
Four-wheel drive	511	321	-37.2
Total	10,564	7,718	-26.9
Self-propelled combines	1,013	324	-68.0
Small balers	676	529	-21.7
Forage harvesters	178	225	26.4
Mower-conditioners	1,308	1,101	-15.8
Windrowers	246	164	-33.3
Grinder-mixers	561	637	13.5
Corn heads	576	207	-64.1

Source: Farm and Industrial Equipment Institute.

Inventories of tractors with 40 or more horsepower at the end of March, were down more than 26 percent from a year earlier. Inventories of four-wheel drive tractors and large two-wheel drive units with more than 140 horsepower were both down about 40 percent. Inventories of two-wheel drive tractors with between 100 and 140 horsepower dropped about 37 percent from the year-earlier level, while inventories of tractors with between 40 and 99 horsepower dropped 15 percent.

The continued declines have brought inventories into somewhat better balance with recent sales. The stock of tractors on hand at the end of March equaled about 84 percent of the previous twelve months' sales, down from the 90 percent inventory-to-sales ratio last March. Inventories of two-wheel drive tractors with more than 100 horsepower were about equal to the previous twelve months' sales, while inventories of four-wheel drive tractors were down to 86 percent of the previous year's sales volume.

Combine inventories in March were down more than a fourth from a year earlier. The sharp drop brought the inventory-to-sales ratio for the most recent twelve months down to 72 percent compared to 89 percent at the same time last year. Inventories of other farm equipment items covered in the FIEI report recorded substantial year-to-year declines as well, ranging from 15 percent to 46 percent. Inventories of these items at the end of March, however, remain well above the sales levels of the previous twelve months.

Many analysts expected 1987 to be a year of stability for the farm equipment industry. Initial forecasts of stable farm sector expenditures for machinery in 1987 along with an uptrend in sector income over the last few years encouraged many observers to expect that the long decline in sales might end this year. However, sales of new farm machinery continue to compete with good used equipment and the variety of government programs cutting acreage have likely dampened demand. As a result, the slack sales of the first few months of 1987 may foreshadow the eighth year of declining sales for the industry.

Recent trends in food prices

The consumer price index is periodically revised to reflect changing patterns of consumers' purchases of goods and services. Such a revision this year has adjusted some of the components pertaining to food prices. The major change has been a reduction in the weight given to food purchases from 19 percent of consumers' total purchases to 16 percent. Within the food component of the consumer price index, the weight assigned to prices of food consumed away from home has been raised to reflect the growing

share of consumers' food dollars going to this use. Consequently, the component representing grocery store prices, or food consumed at home, is now accorded a somewhat lower weight in the overall food price index.

The overall consumer price index for food has risen at a somewhat faster pace in 1987 than during last year. Through the first four months of this year, retail prices for all food have averaged 4.6 percent above the comparable period of 1986. Contrary to past trends, increases in the prices of food purchased in grocery stores has paced the overall rise. The April index of retail prices of food consumed at home, a measure of grocery store prices, was up more than 2 percent from year end 1986 and more than 5 percent higher than a year earlier. For the four month period, grocery store prices averaged 4.8 percent more than during the same months of 1986.

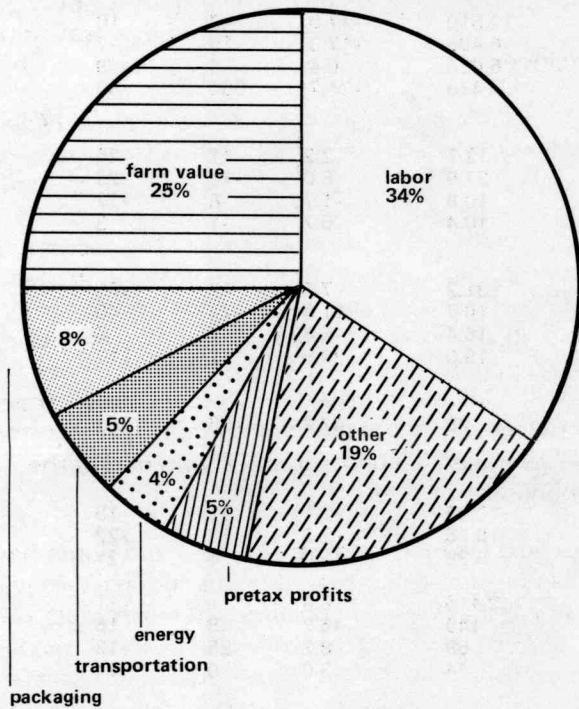
Prices paid for food consumed away from home have risen somewhat faster than the year ago pace as well. The April index of food consumed at restaurants was up 1.2 percent from the year-end level and 4 percent higher than a year earlier. For the first four months of 1987, prices for food consumed away from home averaged 4.3 percent more than the comparable period last year.

Prices for meats and fruits and vegetables have paced the increase in food prices this year, with April prices in both categories 9.4 percent higher than a year ago. Much of the increase in red meat prices is attributable to an almost 14 percent year-to-year rise in pork prices recorded in April. However, beef and veal prices in April also stood 7.4 percent above a year earlier. The rise for fruits and vegetables is largely attributable to increases in the prices of fresh produce, up 13.7 percent from a year earlier in April. Prices for processed fruits and vegetables registered a more moderate 2.5 percent year-to-year gain in April. Prices for fish and seafood, up almost 12 percent from the previous year, registered substantial gains as well. However, fish and seafood represent a relatively small proportion of consumers expenditures on food and therefore have less of an impact on the food price index.

Price increases in other food groups were much more moderate. Prices for cereals and bakery products in April were about 4 percent above the previous year's level, while dairy product prices were up only 2.5 percent. Increases of about 1 percent were recorded in prices of fats and oils, and in sweeteners.

Consumer spending for domestically produced food is expected to approach \$377 billion in 1987, up about 4.5 percent from last year. Given the recent trends, it appears that much of the increase this year will be

Distribution of expenditures on domestically produced food in 1986



* Includes taxes, depreciation, rent, advertising, interest, and other costs.

SOURCE: USDA.

generated by higher food prices. Although per capita consumption is expected to change little, population growth will continue to provide a small boost to expenditures.

The portion of food expenditures garnered by farmers is expected to rise by less than 1 percent in 1987 to \$89.6 billion. Most of the gain is expected to result from higher beef prices, although the farm value of fruits and vegetables and dairy products may rise slightly as well.

The cost of processing, handling, and distributing food, the so-called food marketing bill is expected to register an increase this year in line with previous rises. At about \$287.7 billion, the portion of consumer food expenditures spent for marketing costs is projected to rise about 5.7 percent.

The major factor behind the rise in the marketing bill over the last several years has been increasing labor costs. Labor costs typically account for 45 percent of the food marketing bill and about a third of all con-

sumer expenditures on domestically produced foods. Although wage increases have moderated, the overall level of employment in food related industries has risen steadily. As a result of these trends, labor costs have risen by about 6 percent per year in the 1980s.

Packaging costs rose by about 4.3 percent in 1986, slightly less than the average gain of the previous five years. The increase was attributable to greater volume of food being marketed as well as higher prices for some materials. However, lower oil prices were partially offsetting, reducing the costs of plastic materials. The oil price drop also moderated the year-to-year increase in energy costs, holding the overall rise to about 3.8 percent compared to 6.2 percent in recent years. Somewhat higher electric rates and greater use of electricity for lighting, heating, and refrigeration largely accounted for last year's increase in energy costs.

Among other components of the food marketing bill, transportation costs rose only 1.8 percent in 1986, well below the 3.7 average gains of the previous five years. While lower fuel costs largely offset increased labor and equipment costs, an increased volume of shipments boosted overall transportation costs. Pretax profits rose 4.7 percent in 1986, about half the rate of increase averaged during the previous five years. The moderate increase in pretax profits last year was attributed to increased sales volume, particularly in food consumed away from home. Other miscellaneous costs, including advertising, rent, and depreciation, make up about a fourth of the total marketing bill and had been rising at about 5.6 percent per year in the first half of the 1980s, but jumped by 7.4 percent in 1986.

Peter J. Heffernan

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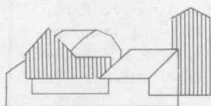
Selected Agricultural Economic Indicators

	Latest period	Value	Percent change from		
			Prior period	Year ago	Two years ago
Receipts from farm marketings (\$ millions)					
Crops*	January	12,610	-17.9	-7	-10
Livestock	January	6,496	-17.3	-19	-7
Government payments	January	5,635	0.4	4	-9
	January	479	-74.7	594	-40
Real estate farm debt outstanding (\$ billions)					
Commercial banks	December 31	12.7	2.2 [†]	11	25
Federal Land Banks	December 31	37.9	-5.0 [†]	-16	-23
Life insurance companies	January 31	10.8	-1.7 [†]	-8	-12
Farmers Home Administration	December 31	10.4	-0.7 [†]	-1	3
Nonreal estate farm debt outstanding (\$ billions)					
Commercial banks	December 31	31.2	-7.3 [†]	-12	-21
Production Credit Associations	December 31	10.7	-11.3 [†]	-24	-40
Farmers Home Administration	December 31	16.4	-6.8 [†]	-2	5
Commodity Credit Corporation	December 31	19.0	20.5 [†]	12	112
Farm loans made (\$ millions)					
Life insurance companies	January	79	-47.2	156	224
Interest rates on farm loans (percent)					
7th District agricultural banks					
Operating loans	April 1	10.89	-2.1 [†]	-12	-19
Real estate loans	April 1	10.26	-2.3 [†]	-12	-22
Commodity Credit Corporation	June	6.88	10.0	6	-21
Agricultural exports (\$ millions)					
Corn (mil. bu.)	March	2,416	8.8	1	-11
Soybeans (mil. bu.)	March	145	46.2	48	-15
Wheat (mil. bu.)	March	68	-8.2	-25	13
	March	74	-3.0	0	14
Farm machinery sales^P (units)					
Tractors, over 40 HP	April	4,501	60.8	-9	-36
40 to 139 HP	April	3,622	55.8	-3	-32
140 HP or more	April	879	85.4	-26	-48
Combines	April	171	125.0	15	-42

*Includes net CCC loans.

[†]Prior period is three months earlier.

^PPreliminary



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