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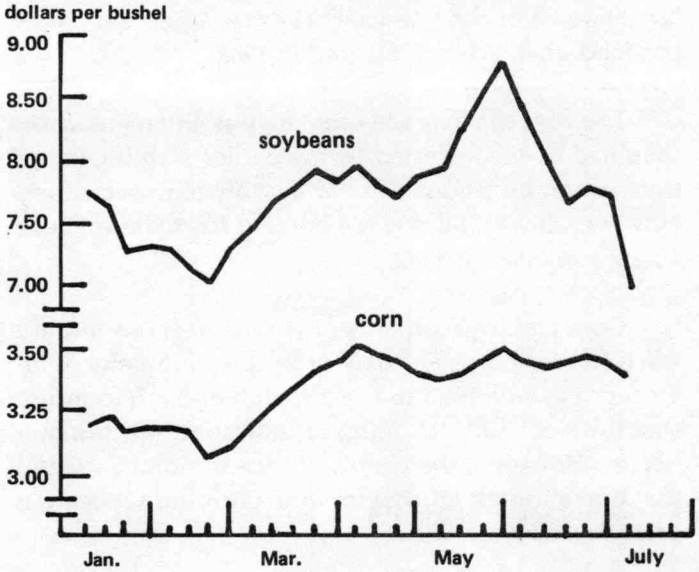
CORN AND SOYBEAN PRICE PROSPECTS received additional clarification from several recent USDA reports. Measures of utilization and remaining old-crop supplies were updated in the *Grain Stocks* report released on June 21. A week later, the *Acreage* report provided the initial estimates of this year's acreage of corn, soybeans, and other spring-planted crops. Other reports containing revised estimates back to 1979 for the quarterly grain stocks data and the annual crop acreage, yield, and production data were also released. The latter reports reflect the new benchmarks established for those data series by the 1982 Census of Agriculture and provide a refined historical basis for analyzing the new estimates on stocks and acreage.

Corn stocks on June 1 were estimated at just over 2.1 billion bushels, down 57 percent from a year ago but in line with most analysts' expectations. That level of stocks, subtracted from the available stocks following the 1983 corn harvest, implies that total utilization of corn during the first eight months of the 1983/84 marketing year was down about 6 percent from the same months the previous year. All of the decline occurred in domestic utilization because known exports of corn for the October-May period were up about 3.5 percent from the year-before pace. Moreover, all of the decline in domestic utilization of corn has apparently occurred since the beginning of January. Reflecting this, the residual calculations show that domestic utilization of corn was up 9 percent and at a record pace in the three-months ending with December, but down 22 percent and at the slowest pace since 1978 in the five months ending with May.

The June 1 stocks estimate implies that domestic utilization of corn during the final four months of the current marketing year will have to lag the year-earlier level by 12 percent. This assumes that corn exports this summer will hold at or slightly below year-earlier levels and that ending carry-over stocks will drop to no less than 500 million bushels. Although substantial, that rate of cut-back would be considerably less than was the case during the January-May period.

Central Illinois corn and soybean prices have been trending lower since late May



Soybean stocks on June 1 were estimated at 456 million bushels, down 42 percent from the year before but, based on known exports and crushing activity, still slightly larger than analysts had expected. Although larger than expected, the latest stocks estimate implies that total utilization of soybeans will have to be constrained through August. Assuming that carry-over stocks of soybeans this fall drop to no less than 100 million bushels, total utilization of soybeans in the June-August period must be limited to 356 million bushels. That would represent a decline of 20 percent from the high year-earlier pace but a decline of only 11 percent from the past three-year average for that period. In comparison, total utilization of soybeans in the September-May period lagged the year-earlier pace by 12 percent and lagged the last three-year average for that period by 9 percent.

The Acreage report confirmed the expected sharp rebound in plantings for this year. Based on surveys conducted around June 1, the USDA is now estimating that farmers planted 79.9 million acres to corn this year and an additional 40.4 million acres to other feed grains

(sorghum, oats, and barley). Soybeans were seeded on 68 million acres.

The planted acreage estimate for corn is up 33 percent from last year but still 2 percent short of the acreage planted in 1982. It is also about 2 percent short of what farmers had indicated in February as their corn planting intentions. The shortfall from the earlier planting intentions survey, however, was nearly offset by the larger than expected plantings of other feed grains, especially sorghum and barley. As a result, the planted acreage estimate for all feed grains was only nominally below what had been expected and less than 1 percent below the feed grain acreage planted in 1982.

The soybean acreage estimate was 4 percent larger than had been suggested by the earlier planting intentions survey but about in line with analysts' expectations. However, it was still down 4 percent from the soybean acreage planted in 1982.

Corn and soybean prices over the next few months will primarily hinge on "new-crop" developments. Old-crop prices will need to remain high enough to insure that the necessary rationing of utilization this summer occurs. However, the trends of recent months suggest that the rationing process for both corn and soybeans is pretty much underway.

While the acreage report provides new insight on 1984 production prospects, heavy rains and flooding in June in several midwestern states leaves considerable uncertainty about the acreage base for this year's harvest. Overall assessments of the flood damage are not yet complete, but it appears that total crop acreage may be somewhat lower than currently estimated and that the mix of the planted acreage could shift slightly, particularly from corn to soybeans.

Even if the acreage estimates prove fairly reliable, weather patterns the rest of the growing season could greatly affect per acre yields. Over the past five years, corn yields have ranged from 81 to 113 bushels per acre and averaged 101 bushels. For soybeans, annual yields have ranged from 25.3 to 32.1 bushels per acre and averaged 29.1 bushels. Based on the historical relationships between planted and harvested acreage and trends in per acre yields over time, these yield extremes suggest that the 1984 corn harvest could range from 5.8 billion bushels to nearly 8.1 billion bushels. Soybean production could range from 1.7 billion bushels to 2.2 billion bushels. These wide ranges, coupled with minimal carryover stocks this fall, will leave crops prices highly susceptible to wide swings depending on weather conditions. If weather conditions permit production to reach the upper portions of the indicated ranges, corn and soybean prices during the summer months will likely retrea considerably from recent levels. But weather developments that foreshadow production falling to the lower end of the indicated ranges would probably trigger another upsurge in prices.

Gary L. Benjamin

THE DECLINE IN HOG PRODUCTION initiated this winter continued during the spring according to the USDA's recent *Hogs and Pigs* report. The report indicates that the December-May pig crop of all U.S. producers was down 11 percent from the same period a year earlier. Moreover, current farrowing intentions of U.S. producers suggest that hog production will remain below year-earlier levels by about 9 percent during the second half of this year. The indicated cut in this year's pig crop foreshadows a smaller volume of hog slaughter during the rest of this year and the first half of next year.

At 41.5 million head, the December-May U.S. pig crop was 11 percent smaller than the year before but slightly larger than two years ago. The cut from last year stems from the squeeze on producers' operating margins as a result of high feed costs during the latter half of 1983 and the first half of this year. Because of the squeeze, sow farrowings in the December-May period were down 10.6 percent from a year ago, with a larger decline registered in the second half of the period. The number of pigs per litter for the six-month period ending in May was down less than 1 percent from the previous year's level.

Hog inventories, reflecting the decline in production, fell below year-ago levels during the first half of the year. The June 1 inventory of all hogs and pigs in the U.S. stood at 52 million head, down 9.4 percent from the year before and about equal to the level of two years ago. Breeding hog inventories, at 7.3 million head, were down 9.2 percent. Although the year-to-year decline was somewhat smaller than many analysts had expected, the June 1 inventory of hogs kept for breeding was about equal to the cyclical low recorded in 1975.

A similar decline was noted in the inventory of market hogs. The June 1 inventory of market hogs was

almost 9.5 percent lower than a year ago, and about equal to the 1982 level. Reflecting the cuts in the spring pig crop, the inventory of market hogs weighing less than 60 pounds fell 13 percent from the previous year's level. The inventory of hogs weighing between 60 and 119 pounds was down about 6 percent, while hogs weighing between 120 and 179 pounds numbered almost 9 percent fewer than a year ago. The inventory of hogs weighing 180 pounds or more, which were likely to have been marketed during June, recorded a 5 percent year-to-year decline.

Farrowing intentions suggest the downturn in hog production will continue through the rest of this year. Nationwide, producers intend to farrow 5.6 million sows during the six months ending in November, down 8.6 percent from the same period last year. That level of farrowings would equal 76.5 percent of the June 1 breeding inventory, well above the average level of the 1970s, but consistent with more recent experience. Declining numbers of hog producers and the consolidation of the industry into larger more specialized operating units over the last several years have been associated with a substantial rise in the ratio. Over the last four years the ratio of actual June-November farrowings to the June 1 inventory of breeding animals has averaged 75.3 percent, compared to 67 percent during the 1970s.

Trends in the three District states surveyed quarterly varied widely. Inventories in Iowa closely followed the national trend with 9 percent year-to-year reductions in both breeding and market hog inventories. In Illinois inventories of breeding and market hogs were down 1.2 percent and 5.6 percent, respectively, from a year ago, while producers in Indiana report 4.8 percent fewer animals kept for breeding and 6.8 percent fewer market hogs on hand.

Hog slaughter continued to hold above the year-ago pace through the first quarter but subsequently turned lower. Commercial hog slaughter in the first quarter was 8 percent above the year-earlier level. However, preliminary indications suggest that hog slaughter in the second quarter dropped 3 percent below the year-ago pace.

The report indicates that a substantial year-to-year decline in hog slaughter is likely this summer. However, the decline may not be as sharp as many analysts had expected in March because of upward revisions in USDA estimates of the ten-state winter pig crop and inventories. The March 1 inventory for the ten-state group was raised by 241 thousand head, while the pig crop estimate was boosted by 452 thousand head. As a result of the revised estimate, the ten-state winter pig crop now shows a 10 percent year-to-year decline rather than the 13 percent drop indicated by the earlier report.

Among all U.S. producers the December-February pig crop was down 10 percent from a year ago and less than 1 percent below the 1982 level. The winter crop accounts for most of the June 1 inventory of market hogs weighing between 60 and 179 pounds that will be marketed this summer. This inventory group was down 7 percent from the year-ago level. Most analysts expect a drop in July-September hog slaughter of between 8 and 10 percent from the year-ago level. Moreover, the 12 percent drop in the March-May pig crop and the 13 percent decline from year-ago levels in the June 1 inventory of market hogs weighing less than 60 pounds foreshadow a corresponding year-to-year reduction in hog slaughter this fall.

Producers' farrowing intentions for the rest of this year provide an early indicator of hog slaughter for the first six months of 1985. U.S. producers intend to farrow about 9 percent fewer sows than a year ago during the June-November period. Assuming the number of pigs per litter over the period is consistent with historical trends, a similar drop in hog slaughter is indicated for the first half of next year. However, initial estimates of hog slaughter based on farrowing intentions are quite tentative, particularly in regard to the September-November intentions that producers can revise subtantially later in the year.

Hog prices remained quite stable at above year-ago levels through much of the second quarter. Second quarter barrow and gilt prices at the major markets averaged $48.32 per hundredweight through the middle of June before rising to the mid-$50 per hundredweight range by the end of the month. Prices during the second quarter of 1983, by comparison, averaged about $47 per hundredweight and were trending downward.

A rise in prices as a result of year-to-year production declines is expected during the third quarter. The expected decline in hog production will be partially cushioned by ample supplies of other meats. Nevertheless, third quarter hog prices will likely average in the high $50s per hundredweight range. Hog prices could decline seasonally in the fourth quarter of this year, but are likely to hold well above year-earlier levels with continued year-to-year declines in slaughter.

Peter J. Heffernan

Selected Agricultural Economic Indicators

	Latest period	Value	Percent change from Prior period	Year ago	Two years ago
Prices received by farmers *(1977=100)*	June	143	- 0.7	+ 8	+ 4
Crops *(1977=100)*	June	145	+ 0.7	+17	+17
Corn *($ per bu.)*	June	3.36	+ 0.6	+11	+31
Oats *($ per bu.)*	June	1.93	+ 4.9	+28	+ 3
Soybeans *($ per bu.)*	June	7.65	- 5.8	+30	+25
Wheat *($ per bu.)*	June	3.45	- 5.5	- 1	+ 2
Livestock and products *(1977=100)*	June	142	- 2.1	+ 1	- 5
Barrows and gilts *($ per cwt.)*	June	49.40	+ 3.6	+ 9	-16
Steers and heifers *($ per cwt.)*	June	60.60	- 3.2	- 3	- 8
Milk *($ per cwt.)*	June	12.80	- 1.5	- 3	- 3
Eggs *(¢ per doz.)*	June	61.0	-11.5	+ 4	+18
Prices paid by farmers *(1977=100)*	June	166	0	+ 3	+ 6
Production items	June	157	0	+ 3	+ 4
Feed	June	141	- 1.4	+ 7	+12
Feeder livestock	June	151	- 1.3	- 7	- 9
Fuels and energy	June	203	- 0.5	0	- 4
Producer prices *(1967=100)*	May	292	0	+ 3	+ 5
Agricultural machinery and equipment	May	337	+ 0.5	+ 3	+10
Fertilizer materials	May	243	- 1.3	+ 6	- 2
Agricultural chemicals	May	445	- 0.2	- 3	- 3
Consumer prices *(1967=100)*	May	310	+ 0.3	+ 4	+ 8
Food	May	301	- 0.3	+ 3	+ 6
Production or stocks					
Corn stocks *(mil. bu.)*	June 1	2,137	N.A.	-57	-45
Soybean stocks *(mil. bu.)*	June 1	456	N.A.	-42	-29
Beef production *(bil. lbs.)*	May	2.06	+15.9	+11	N.A.
Pork production *(bil. lbs.)*	May	1.28	+ 3.9	+ 3	N.A.
Milk production *(bil. lbs.)*	May	12.3	+ 5.2	- 3	N.A.

N.A. Not applicable

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