FEDERAL RESERVE BANK OF CHICAGO

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THE OUTLOOK FOR CROP PRICES was partially clarified by recent reports and announcements from the U.S. Department of Agriculture (USDA). The 1977 annual summary of *Crop Production* verified earlier estimates of last year's record corn and soybean harvest. The January 1 *Grain Stocks* report confirmed the suspected increase in utilization rates for corn and soybeans. The *Prospective Plantings* report indicated farmers have initial plans for large spring plantings of 1978 crops. Moreover, the Administration confirmed this week that the 10 percent feed grain set-aside requirement tentatively announced last November would be retained and that the benefits under the grain reserve program would be enhanced.

Crop production in the United States surged to an all-time high last year, a somewhat ironic development given the low moisture supplies that prevailed throughout many areas during the past growing season. According to the USDA, the index of all crop production rose to 129 (1967=100) last year, up from 121 in each of the previous two years. (See chart on page 4.) Last year's corn crop was estimated at nearly 6.4 billion bushels, down nominally from the previous estimate, but 1 percent above last year. The soybean production estimate was boosted 2 percent above earlier expectations, and at 1.7 billion bushels marked an increase of 33 percent from the 1976 harvest and an 11 percent rise from the previous record in 1973.

Corn and soybean production reached new highs last year

	Yield per harvested acre			Production		
	1971-75 average	1976	1977	1971-75 average	1976	1977
	(bushels)			(million bushels)		
Corn						
Illinois	103.4	107	105	1,026	1,240	1,153
Indiana	95.6	110	102	508	693	633
Iowa	99.0	91	88	1,140	1,174	1,091
Michigan	74.2	69	85	139	154	191
Wisconsin	86.0	68	104	192	151	286
United States	86.9	87.9	90.8	5,485	6,266	6,357
Soybeans						
Illinois	31.9	33	37	258	250	327
Indiana	30.5	34	36	115	112	139
Iowa	32.9	31	34	218	200	246
Michigan	23.5	21	29	14	12	21
Wisconsin	24.4	22	34	5	3	7
United States	27.1	26.1	29.6	1,352	1,288	1,716

Grain stocks as of January 1 remained at record levels, although utilization was up during the latter part of 1977. The corn stock estimate, at 5.4 billion bushels, implied total utilization during the October-December 1977 period of 1.8 billion bushels, up only 25 million bushels from the year-earlier pace. However, since exports during the last quarter of 1977 were considerably lower, the indicated domestic utilization of corn was up about one-tenth.

Implied soybean utilization for the September-December 1977 period—calculated by subtracting January 1 stocks from beginning supplies—was roughly 510 million bushels, or about 10 million bushels above the record pace of a year earlier. The indicated increase, however, fell considerably short of other measures which show even greater utilization. Soybean exports for the September-December 1977 period, for example, were about 30 million bushels above the record year-earlier pace, while domestic crush was up about 12 million bushels. Since the reports on exports and domestic crushing activity are normally quite reliable, it appears that the 1977 soybean production estimate will ultimately be revised upward again by perhaps 30 million bushels. Similar circumstances led to a recent revision in the 1976 soybean crop estimate.

The *Grain Stocks* report also provided an indication of the amount of grain still under farmers' ownership. Based on stocks held on farms, plus farmer-owned grain that has moved off-farm, it appears farmers owned—and hence maintained pricing control over—roughly 4.8 billion bushels of corn as of January 1, up 10 percent from a year ago. Similarly, farmers owned about 1.0 billion bushels of soybeans, up 37 percent from the quantity owned a year ago. Despite the increased ownership, prospects for larger carryover stocks and the likelihood of below year-ago average prices suggest that 1978 sales of corn and soybeans may not generate receipts comparable to year-ago levels.

Corn and soybeans owned by farmers (January 1, 1978)

	Corn		Soybeans	
	Amount	Change*	Amount	Change*
	(mil. bu.)	*(percent)*	*(mil. bu.)*	*(percent)*
Illinois	921	− 2	238	30
Indiana	397	− 9	65	13
Iowa	1,022	2	215	14
Michigan	134	40	12	144
Wisconsin	210	74	4	60
United States	4,835	10	1,046	37

*From previous year.

Based on the revised production estimates and the utilization rates implied in the January 1 stocks report, the USDA has raised its estimate of corn utilized for feed during the entire 1977/78 marketing year by 50 million bushels from earlier forecasts and lowered the corn carryover estimate by 60 million bushels. The corn export estimate was left unchanged at the prospective record-breaking level of 1,750 million bushels, even though weekly export inspections through late January show the corn export pace to be off 20 percent from a year ago. For soybeans, estimated crush for the 1977/78 marketing year was raised slightly, while pojected carryover was raised to 270 million bushels.

USDA projects sharply higher carryover stocks for corn and soybeans

	Corn			Soybeans		
	1975/76	1976/77	1977/78	1975/76	1976/77	1977/78
	(million bushels)			*(million bushels)*		
Supply						
Carry in	361	399	884	188	245	103
Production	5,829	6,266	6,357	1,547	1,288	1,716
Total*	6,192	6,668	7,242	1,735	1,533	1,819
Utilization						
Domestic						
Feed/crush	3,592	3,587	3,825	865	790	860
Other	490	513	535	70	76	79
Exports	1,711	1,684	1,750	555	564	610
Total	5,793	5,784	6,110	1,490	1,430	1,549
Carryover	399	884	1,132	245	103	270

*Totals for corn include small amount of imports.

1978 planting forecasts are still very tentative, but a recent USDA report summarized the planting intentions held by farmers in 34 states as of the first of last month. In general, the results support prospects for another large harvest. For example, the report indicated that planted acreage of 13 major crops in 1978—including the winter wheat seedings of last fall, which were down an estimated 14 percent—would be down only 2 percent from last year. Corn plantings were indicated for only 2 percent fewer acres than last year—while total feed grain acreage was pegged for only a 1 percent reduction. In contrast, indicated soybean plantings showed an 8 percent rise from last year's record.

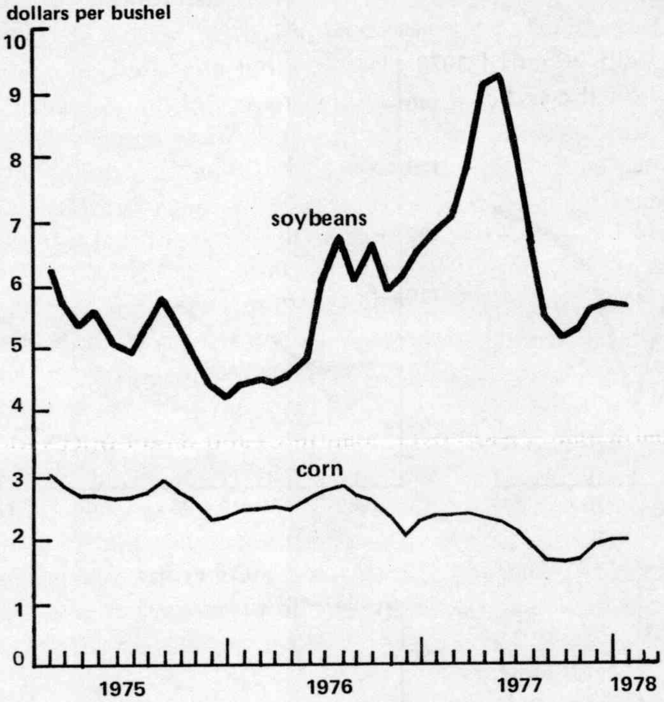
A number of special circumstances this year could result in actual 1978 plantings that differ considerably from the indications of the January intentions report. Most apparent is the confusion surrounding the 1978 feed grain program. Whether the 10 percent feed grain set-aside requirement that was "tentatively" announced last November would be formally adopted, abandoned, or revised was unknown at the time of the survey. (This week, however, the Administration formally adopted the 10 percent set-aside requirement, even though a late January survey indicated that less than one-fifth of the farmers in the 10 major feed grain states would participate.) Moreover, loan rates and target prices for 1978 crops of sorghum and barley had not been announced prior to the plantings intentions survey. But as subsequently announced, government benefits for these two crops appear high relative to corn and hence may trigger increased interest in program participation as well as some switching in crop plantings.

The overall price implications of the recent reports were more bearish than bullish for corn and soybeans. In short, the record utilization rates anticipated for both corn and soybeans during their 1977/78 marketing years will not match last fall's harvest. Hence, substantial increases in carryover stocks seem virtually assured. Moreover, indications of potentially large plantings, along with the abundant buildup in moisture reserves, supports initial prospects for a large 1978 crop harvest. Nevertheless, Chicago cash prices for corn remain close to the $2.20 per bushel average experienced since early November, while soybean prices have recently averaged about 30 cents below the $5.85 per bushel average experienced through December and early January.

Pricing trends in the month ahead will be influenced by a number of variables. As always, weather patterns will be an important factor, although the buildup in stocks has provided an important cushion against the impact that might result from adverse weather. Export movements will also be important, especially in the case of corn where future shipments will have to offset the lag of recent months if the projected record is to be achieved. The pending spring harvest in the Southern Hemisphere will be particularly crucial in determining competitive supplies of soybeans for world markets.

Another important factor this year will be the distribution of stocks between "free market" supplies and stocks isolated by either unredeemed Commodity Credit Corporation (CCC) loans or the long-term grain reserve. The movement of corn under loan has been at a

Prices received by farmers



record pace since last fall, reaching 900 million bushels as of February 1. Although farmers can redeem the loans at any time—and likely will do so if farm prices reach levels sufficient to cover principal and interest—corn loan maturities will begin expiring in July. If farm level prices at maturity are not sufficient to encourage redemption, then a considerable portion of the corn could revert to the CCC or move into the long-term grain reserve. Both of the latter alternatives would isolate stocks from free market supplies at prices below the trigger level ($2.50 per bushel for corn) associated with the grain reserve program. Although initial indications suggest farmers may not be inclined to participate in the three-year grain reserve, recent Administrative actions—including a boost in the annual storage payment from 20 to 25 cents per bushel for corn and wheat and provisions for early entry into the reserve—may stimulate more interest among farmers. And if a large 1978 harvest does emerge, with only a portion of the crop eligible for government benefits because of limited set-aside participation, the long-term grain reserve could prove to be an important factor supporting prices this summer.

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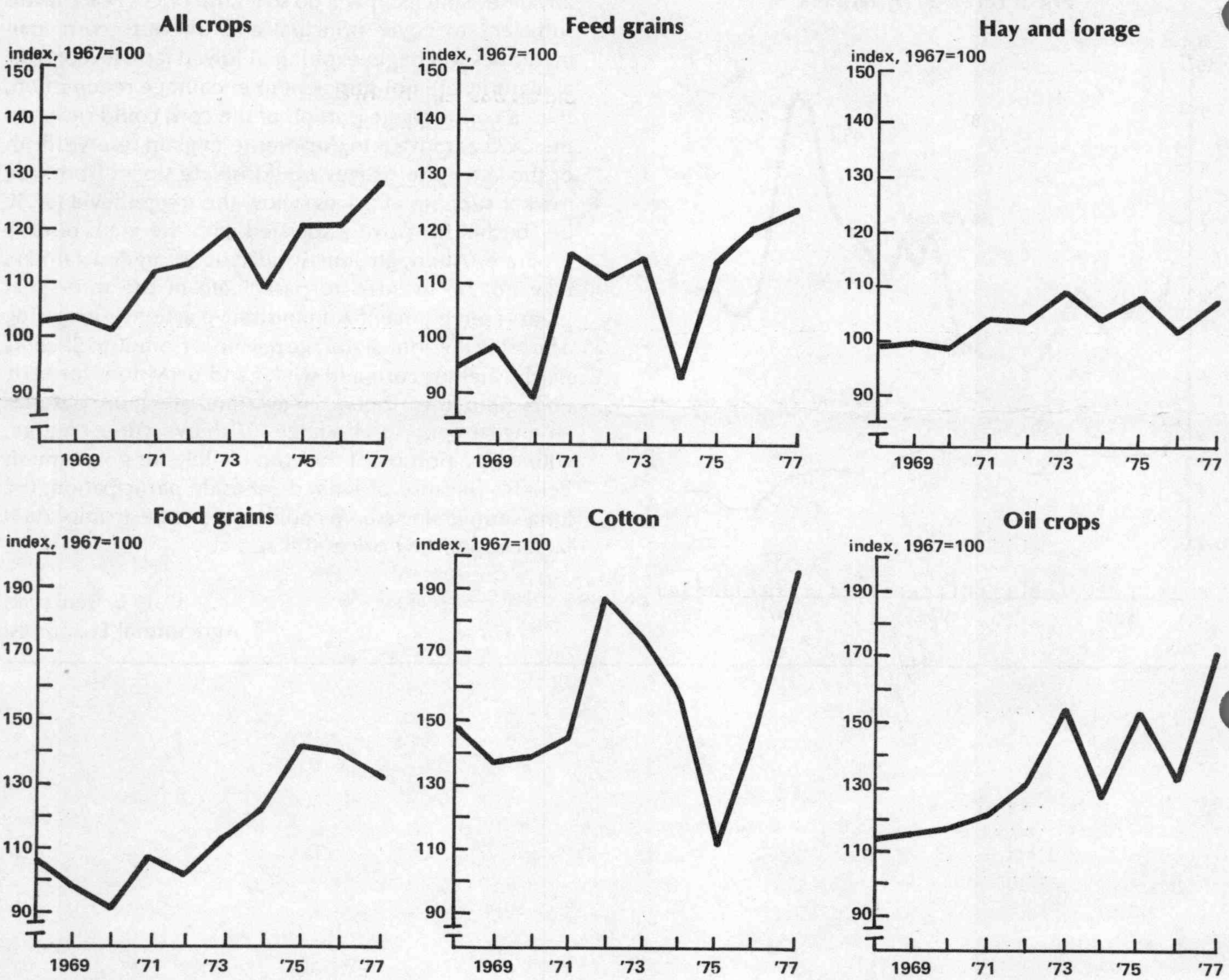
Feed grains and oilseeds contribute to record crop harvest in 1967



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