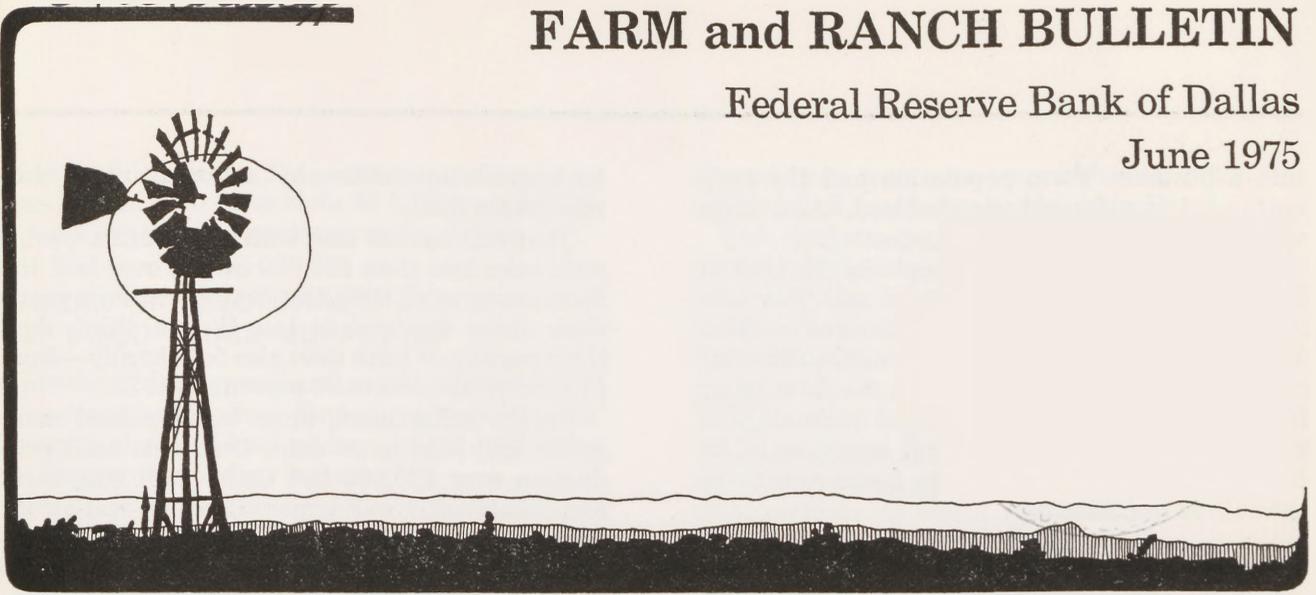


FARM and RANCH BULLETIN

Federal Reserve Bank of Dallas

June 1975



BOLSTERED BY CREDIT, LARGE FARMS GROW LARGER

Capital accumulation by large farming and ranching units has brought agricultural production in the United States increasingly under the control of large operations. Large-scale operators, able to tap sources of capital and credit and to readily adjust to new technology, are producing a larger share of farm output.

Fewer than 1 million of the nation's 2.8 million farms and ranches produce most of its food and fiber. And these large units account for only a fraction of the nation's population.

Several measures reflect the growing dominance of large units. Where operations with sales of \$20,000 or more accounted for half of farm product sales in 1960, their share was nearly 90 percent in 1973. And where only 10 percent of all farms and ranches sold that much in 1960, more than a third were selling at least \$20,000 annually by 1973. Some of the gains in sales have, no doubt, resulted from higher farm prices.

In addition, these large operations owned 36 percent of total farm assets in 1960 and held 43 percent of total farm debt. But by 1973, their assets had increased to 71 percent and their portion of the debt had climbed to 77 percent.

Commercial farms and ranches have evolved from self-sustaining units to high-powered businesses highly dependent on purchased inputs. At the turn of the century, farmers and ranchers typically purchased few goods and services, fashioned most of the tools and equipment used to produce crops and livestock products, raised replacement stock and planting seed, and frequently marketed their own produce.

Operations change

By contrast, modern producers of farm commodities are involved mainly in production, many being specialists in just one crop or one kind of livestock. Unlike his counterpart in generations past, today's producer depends almost entirely on other businesses to provide the many resources used in farming and ranching.

Ready to help him is a complex of agribusinesses that provide the many goods and services needed for efficient production and marketing. This frees the producer to concentrate on supplying food and fiber for domestic and export use.

Several basic, well-known trends have emerged from the transformation of farming and ranching

into a business. Farm population and the agricultural labor force have declined. And farm workers have become more productive.

Where the proportion of people in the United States engaged in producing food and fiber was 23 percent in 1940, it was only 4 percent in 1974. Too, in the past 20 years, farm output has increased about 40 percent, even as the farm labor force has been cut by half. Rapid technological advancement in machinery and equipment has been a major factor leading to fewer and more specialized operations.

Credit boosts growth

Capital accumulation from both income and credit sources has been a major reason large farming units have increased in size and number. As their asset values grew, large units were able

to upgrade operations by assuming more non-real-estate debt.

That was not the case with small farms. Farms with sales less than \$20,000 owned over half the farm assets until 1969, but in the next four years, their share declined to less than a third. And their portion of farm debt also fell sharply—from 57 percent in 1960 to 23 percent in 1973.

On the other hand, large farms gained more assets and held more debt. On farms with production over \$20,000 but under \$100,000, farm real estate debt was larger than non-real-estate debt in most recent years. But on the largest farms—those with sales over \$100,000—most debt was for non-real-estate purposes. Non-real-estate debt is, as a rule, more closely related to farm income than is real estate debt.

Since 1960, debt-asset ratios have been higher for farms with large gross sales than for farms with small sales totals, indicating credit or borrowed capital is valuable—if not essential—for expanding farm size. But since U. S. Department of Agriculture data makes no distinction between indebted or debt-free operators and landlords, the full effect of credit on the growth and financial position of farms and ranches is unclear.

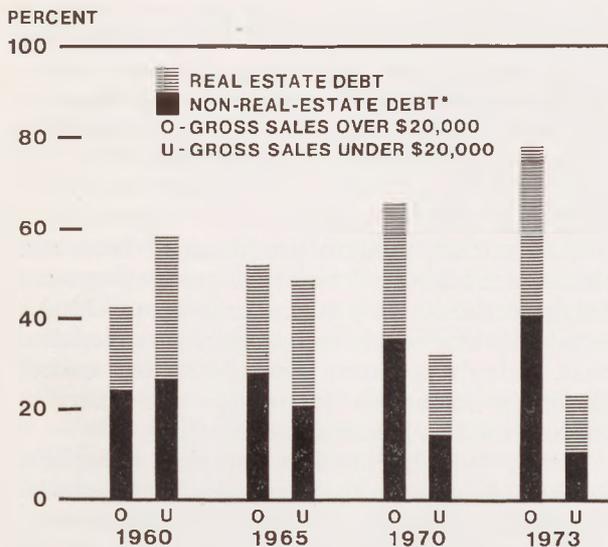
The lower debt-asset ratios of small farms indicate many operators are part-time farmers that earn much of their income from sources other than farming. In fact, farms with sales under \$10,000 have off-farm incomes that equal two-thirds or more of their total income.

Agriculture has become increasingly capital-intensive. And farm credit demands have grown accordingly. Farm debt has grown much more rapidly in the past 25 years than either production expenses or investment in assets.

Total farm debt, which was \$12 billion in 1950, had increased to \$95 billion by the start of 1975. This year alone, farm credit is expected to expand some \$14 billion—more than the total farm debt just 25 years ago.

Increases in credit used by farming and ranching operations in Texas mirror those in the nation as a whole. In the past decade, agricultural loans

DISTRIBUTION OF DEBT FOR LARGE AND SMALL FARMS



*Including CCC loans

SOURCE: U.S. Department of Agriculture

held by all lenders in Texas moved up sharply—from \$2 billion to more than \$5 billion—and this trend is expected to continue in the future.

STOCKS OF FEED GRAINS DOWN BUT FOOD GRAIN SUPPLY UP

Stocks of feed grains and soybeans on April 1 were considerably less than a year earlier. By contrast, stocks of food grains—wheat and rice—were larger than a year before.

Supplies of feed grains—corn, sorghum, barley, and oats—totaled 76.2 million short tons, or 26 percent less than a year before. Corn stocks had fallen 23 percent to 2.2 billion bushels, while sorghum stocks, at 209 million bushels, were about half those a year earlier. Stocks of barley and oats also fell substantially.

A small crop of feed grains in 1974, added to the unusually low carryover from the 1973 season, kept feed grain stocks short. Production in 1974 totaled 165 million short tons, nearly 20 percent less than a year earlier.

The level of feed grain stocks indicated disappearance since last fall has been about 17 percent less than in the corresponding period of the 1973-74 season. Domestic use has been off a fifth, and the volume of exports has weakened.

Soybeans

Soybean stocks of 659 million bushels on April 1 were 11 percent smaller than a year earlier and slightly less than the U. S. Department of Agriculture had projected. The USDA, moreover, has forecast soybean stocks will fall to 185 million bushels in September.

The outlook, however, could change. Forecasts of soybean use—domestic and foreign—for both the remainder of the current marketing year and the 1975-76 season have been revised downward from earlier projections.

Domestic disappearance for soybean meal and oil still lags year-earlier levels. And a rather sharp falloff in exports reflects not only continuing slack demand for soybean meal abroad but

also pressure from new crop soybeans, primarily meal and oil now being produced in Brazil.

Too, projected soybean plantings are up this year, and yields should be better than for the 1974 crop. On balance, soybean stocks could rebuild in the 1975-76 season, perhaps doubling the September forecast.

Wheat

Wheat stocks of 638 million bushels on April 1 were 17 percent more than a year before. But disappearance of wheat has been strong in the 1974 season, and could reach 1.8 billion bushels by the end of the marketing year on June 30. That would pull carryover stocks down to 230 million bushels—the lowest level in more than two decades.

Increased plantings of wheat for 1975 harvest, fused with a return to a yield of at least 30 bushels per acre, would likely replenish stocks in the next marketing year. As of May 1, the winter wheat crop was estimated at 1.6 billion bushels—16 percent higher than last year's record. And

PROJECTED SUPPLIES AND USE OF SELECTED U.S. CROPS, 1975 SEASON

(Averages of April 1 ranges. Million units)

Item	WHEAT (Bushels)	RICE (Hundred- weight)	FEED GRAINS (Short tons)
Supply			
Old-crop stocks	230	13.4	14.6
Output and imports	2,126	116.5	217.2
Total	2,356	129.9	231.8
Use			
Domestic	804	38.5	161.9
Foreign	1,125	65.8	42.2
Total	1,929	104.3	204.1
Carryover	427	25.6	27.7

NOTE: Season begins July 1 for wheat, barley, and oats; August 1 for rice; and October 1 for corn and sorghum.
SOURCE: U.S. Department of Agriculture

although spring wheat production will not be formally estimated until July, it is tentatively projected at 525 million bushels.

The wheat crop, therefore, could total more than 2.1 billion bushels. That would compare favorably with production of almost 1.8 billion bushels last year and 1.7 billion bushels in 1973. Supplies would be sufficient to accommodate an increase in domestic use and exports, as well as to furnish a carryover of 400 million bushels on July 1, 1976.

Rice

April 1 stocks of rough rice totaled 34 million hundredweight, increasing 29 percent over a year earlier and reflecting the record crop of 114 million hundredweight in 1974. Both acreage and yields rose over 1973 levels. And since carryover stocks were also larger, total supplies of 122 million hundredweight were 10 percent more than the previous high in 1968-69.

Total disappearance of the 1974 crop is projected at slightly less than 109 million hundredweight. Of that, 71 million hundredweight will be exported—up from 50 million hundredweight shipped in the 1973 season. As a result of the large 1974 crop, season-ending stocks are expected to climb to over 13 million hundredweight, nearly double a year earlier.

Although rice producers are faced with both price and cost uncertainties this year, they intend to plant about the same acreage as in 1974. If intentions are realized and weather is favorable, output could be near last year's record.

GAINS IN FARM EXPORT VALUE LINKED WITH HIGHER PRICES

The value of farm products exported from the United States in the first nine months of fiscal 1975—through March—totaled \$17 billion, or 7 percent more than in the same period of fiscal 1974. The gain in export value stemmed from higher prices for commodities, since the volume of shipments dropped substantially.

Shipments of wheat, feed grains, and cotton declined. Cotton exports were down 33 percent—the largest volume drop for one commodity—as shipments to all main markets were cut back. Wheat exports fell 17 percent, despite increased shipments to West and South Asia. And less volume shipped to the USSR and Southeast and East Asia pulled feed grain exports down 18 percent. Cancellation of export sales contracts has been especially prevalent for corn, soybeans, and cotton.

The future of U.S. farm shipments abroad is cloudy. But export prices have dropped significantly since mid-1974, and further declines may occur. In addition, demand is expected to weaken because of improved world grain production and sluggish economic conditions in developed countries. Therefore, U.S. farm exports may drop substantially in fiscal 1976 from the \$22 billion expected in fiscal 1975.

GLOBAL GRAIN STOCKS EXPECTED TO INCREASE

Grain stocks worldwide are likely to be boosted somewhat in the 1975-76 season, as world production is projected to outpace consumption for the first time since the 1971-72 season.

Early estimates peg the world grain crop this season at nearly 1 billion metric tons, a gain of about 88 million tons over 1974. Consumption, expected to offset half the gain, will total 972 million metric tons, up 43 million tons over last season. If these projections for production and consumption are realized, world stocks at the end of the 1975-76 season would be up about 25 million metric tons to 115 million tons.

Prepared by Carl G. Anderson, Jr.