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### Federal Reserve Bank of Dallas

# FARM and RANCH BULLETIN

**April 1971** 

#### THE BEEF INDUSTRY

The basic story of the economic and social efficiency of the nation's food economy is reflected by a single statistic. That is, the typical family in this country buys its food with about 16.5 percent of its take-home pay. This compares with nearly 20 percent in Canada, around 37 percent in both Western Europe and Japan, and about 50 percent in Russia. An effective participant in the overall progress in efficiency of the U.S. food economy is the meat industry. It performs the complex and essential service of converting, processing, and distributing beef, one of the major meat products desired by the consuming public.

### Consumption

Annual per capita beef consumption, at an estimated 113 pounds in 1970, has almost doubled since 1950. This significant increase in beef consumption is the primary reason consumers now spend about a quarter of their total food budget for meat.

A look at trends in food preference patterns indicates consumers will likely continue to eat more beef. Based on estimates by the USDA, per capita beef consumption is expected to increase to around 130 pounds by 1980, about 15 percent greater than in 1970. Per capita consumption of pork will probably hold steady around 66 pounds. But the amount of lamb and veal consumed per person is likely to continue to decline.

#### Production

Although consumption determines production in the long run, farmers and ranchers primarily govern the basic supplies of meat in the short run. The number of animals marketed varies from year to year and week to week due to weather conditions, feed supplies, current and prospective prices, and other factors. In the beef industry, the supply of calves appears to be influenced not only by these direct physical and economic factors but also by the indirect factors associated with cow-calf operations, such as price appreciation of land, fees from hunting and fishing leases, and recreational benefits. However, the modern feedlot is a beef factory with many characteristics similar to those of a large business.

The commercial cattle feeding industry has undergone rapid development and growth in the last decade, and it is now a multimillion dollar industry with very distinct characteristics. These include large and highly mechanized feedlot operations, highly specialized management and labor, large investments in fixed facilities, and a highly competitive industry in terms of market outlets.

Much of the growth in feedlots has occurred in the Southwest, particularly in the High Plains area of Texas. Although the rapid pace of feedlot expansion in this area slowed in 1970, several factors have encouraged feedlot expansion and growth, continuing to provide a sound base for future development. These include generally abundant supplies of feeder cattle and feed, increasing demand for fed beef, and a growing population with rising per capita incomes in the South and Southeast.

In addition, recent construction of slaughter plants in the vicinity of the Texas Panhandle is providing additional incentive for feedlot expansion and growth in that area. At the beginning of this year, there were nearly 1.5 million head of cattle on feed in Texas—about three times as many as at the start of 1965.

# **Processing**

Along with the expanded demand for beef and the development of feedlots, important changes have also been occurring in the meat processing industry. The time when a few major packers dealt with many

small livestock producers and when their distribution system involved serving many thousands of small, single-unit retailers has largely disappeared. With fewer and larger livestock producers, greatly decentralized marketing of live animals, and the rise of strong multiple-unit mass retailers, the competitive position of the packer has vastly changed.

The marketing system and the competitive environment within which red meat—especially fed beef—is marketed have been revolutionized in the past decade. The fed beef market has changed from a local or state basis to a national basis as a result of modern communication networks, advances in technology, a rapid transportation system, and the universal language embodied in the federal grading system. These factors and the desire to locate near concentrated cattle feeding areas have encouraged large, specialized, shipper-type slaughter plants to locate in and adjacent to major livestock feeding areas such as the Texas Panhandle. In 1969, almost 11 percent of the 2.7 million cattle and calves fed in Texas were owned by or fed for meat packers.

As a result, concentration in wholesale meat distribution, as well as in fresh-meat packing, has declined, and specialization and production according to specification has increased. Many packers have continuing informal arrangements with feedlots. In addition, some packers have integrated into livestock feeding and other activities.

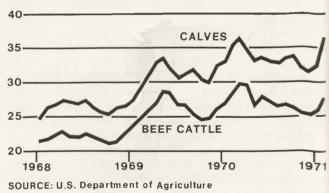
In the future, consumers may be even more exacting in their preferences for flavor, tenderness, and fat content of meat. They are apt to want more deboning, prepackaging, ease of storage and preparation, uniformity, and portion control. The consumer will not likely have blind loyalty to any industry, state, animal, product, or store. In seeking greater efficiency, retailers will probably centralize their cutting and packaging operations. As a result, they may impose more exacting requirements or specifications for the meat product. In turn, packers and processors will strive to be specialized and efficient.

These factors suggest a trend toward more coordination of production, marketing, and processing of

beef into a specified product desired by the consumer. Many packers and processors point out that beef fabrication is good for the beef industry as well as the consumer because of less shrinkage, lower transportation charges, more effective use of rendering products, fewer inventory problems, and greater efficiency with mass production techniques.

#### AVERAGE BEEF PRICES RECEIVED BY TEXAS FARMERS RISE SHARPLY IN 1971

DOLLARS PER HUNDREDWEIGHT



#### SLOWER UPTREND IN FARMLAND VALUE

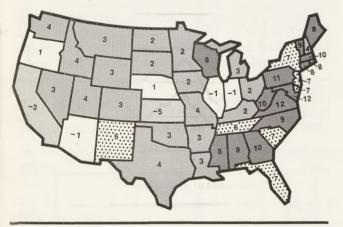
The total value of U.S. farm real estate reached almost \$211 billion on November 1, 1970-up about 1 percent from a year earlier, according to the USDA. However, due to the continuing decline of total acreage in farms, the average value of farmland in the nation increased to \$195 per acre, about 3 percent above a year ago.

Since November 1969, changes in value per acre (based on index numbers of average value per acre including improvements) varied widely among the states. Land values increased 10 percent or more in

six states and from 5 to 9 percent in 15 states. Values declined from 1 to 5 percent in five states, while the remaining states posted gains from 1 to 4 percent. Generally, values rose less rapidly in March-November 1970 than in any similar period since 1960. The widespread slowdown during the eight-month period apparently reflected tight credit markets and uncertainty over general economic conditions.

#### CHANGE IN DOLLAR VALUE OF FARMLAND

Percent change, November 1970 from November 1969



Many individuals questioned in the October 1970 USDA survey of the farm real estate market expressed uncertainty over market prospects in 1971. But the consensus pointed either to stability or only slight declines in farmland values in many areas of the country. Prospects for strong gains were notable only in the Northeast and Southeast. If the general price level continues to rise more rapidly than farmland prices, landowners will find the purchasing power of their real estate assets reduced.

Conditions in the real estate market may improve slightly in 1971 as the supply of long-term credit

increases and interest rates edge downward, the USDA reports. However, the supply of funds available from commercial institutions is expected to remain below the level that prevailed in 1967 and 1968.

Farm loans with variable interest clauses adopted in 1969 by the federal land banks may soon be instituted by other lenders involved in farm mortgage loans. Variable-interest loans permit lenders to earn the market rate of interest on current and prior loans and may allow borrowers to reduce interest payments on outstanding loans as interest rates decline without refinancing the loans. But borrowers no longer will have the security of a fixed interest rate when financial markets tighten. As a result, the cost of loans for farm real estate is becoming more closely aligned with changes in the credit market.

#### DISTRICT CATTLE NUMBERS UP

The rise in cattle numbers in Oklahoma and Texas last year was sufficient to boost the total cattle population in the Eleventh Federal Reserve District states to more than 22 million head at the start of 1971. That number represented around one-fifth of all the cattle and calves in the United States. Cattle numbers were unchanged in Louisiana but declined in Arizona and New Mexico. Texas, with over 12.5 million head, had more cattle than any other state in the nation.

The total value of all cattle and calves in the five states was estimated by the USDA to be nearly \$3.6 billion at the beginning of this year. For the year ended January 1, 1971, this represented a gain in value of almost 6 percent for the District states, slightly higher than for the nation. The total value of cattle and calves in Texas exceeded \$2 billion.

The 4-percent gain in the Texas beef cow population was slightly higher than the percentage increase for the total of the District states and of the nation. There was a moderate decrease in the number of beef cows in Arizona. The inventory of milk cows in

three of the District states (Louisiana, New Mexico, and Oklahoma) and in the nation declined. Arizona registered a slight gain, and in Texas the number of milk cows held steady.

Although the total number of sheep and lambs increased in Texas and was virtually unchanged in Arizona, decreases were posted in Louisiana, Oklahoma, New Mexico, and in the nation. The number of hogs in the District states increased at a rate about double the nearly 20-percent gain for the nation. Even with this boost, however, the hog population in the five states was only about 3 percent of the U.S. total. As a result, this area continues to consume more pork than it produces. In 1970, these five states had a total population of more than 20 million people—almost 10 percent of the nation's population.

The number of chickens, excluding commercial broilers, increased in New Mexico, Oklahoma, and Texas but eased down in Arizona and Louisiana. In comparison, the U.S. total registered a 2-percent gain. The turkey population gained more than 50 percent in both Oklahoma and Texas but dropped in Louisiana, while the increase for the nation was only 10 percent.

# RETAILERS TAKE BIGGEST SHARE OF DOLLAR SPENT FOR COTTON PRODUCTS

About 90 cents of each dollar the consumer pays for finished cotton products goes for processing and trading services between the cotton producer's gate and the consumer's shopping bag, according to a USDA report. The large marketing margin for cotton includes the cost of taking seed cotton to the gins, having it ginned and baled, storing it in warehouses, delivering the bales to mills, manufacturing the cotton into finished cotton goods, distributing the goods through wholesale channels, and retailing products to the consumer.

Retailers take the largest portion of the consumer's dollar paid for cotton products. The average retail share was one-third in 1967, but the amount varies greatly depending on the cotton product involved. The retailer's share of an all-cotton shirt costing \$5 can amount to as much as \$2.50. The farmer receives only about 25 cents.

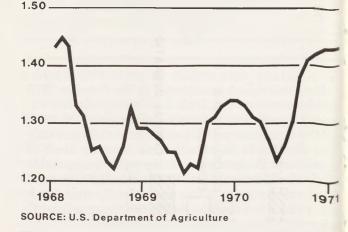
After retailers, manufacturers of apparel and household goods take the largest part of the market margin in the breakdown of the dollar spent. These manufacturers accounted for 29 percent in 1967-about the same as in earlier years.

Ginning and baling charges and merchandisers margins each accounted for about 2 percent of the consumer's dollar. But these margins fluctuate depending on the price of cotton, costs of bagging and ties, and costs of storage and transportation.

Spinners, weavers, and finishers received 18 cents of each dollar in 1967-up from 12 cents in 1962. Wholesaling accounted for about 8 percent of the total value of operations and services.

#### AVERAGE WHEAT PRICES RECEIVED BY TEXAS FARMERS GAIN OVER 1970

**DOLLARS PER BUSHEL** 



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