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UPDATE

Agricultural and Resource Economics

The Beef Industry in Crisis

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The cattle industry in the United States is struggling to adjust to the changing conditions in the beef market. In general, the national cattle herd is shrinking in response to declining cattle prices and rising production costs. The resulting profit squeeze continues to pressure the existence of many producers in California and across the country.

The American cattle herd has been declining in numbers for the past quarter of a century. This trend is in direct contrast to the continuous growth in total cattle inventories prior to the 1970s, shown in Figure 1 on page 2. The expansion in cattle numbers ended in about 1975, reaching a peak of 140.2 million. Over the last 25 years the downward trend for the American cattle herd signals that a significant shift in market conditions has occurred during the period. The current inventory of 98.5 million is expected to shrink further as the 21st century begins. California is following the national trend, but slowly. The state's herd has decreased from 4.7 million to 4.6 million head over the past decade.

Why the Decline in Cattle Production?

The simple answer to this complicated question is that profits are being squeezed out of American cattle markets. Cattle prices across the country have trended downward during the past decade. During the same period, the prices of inputs purchased by cattle producers have been volatile. For example, prices for corn purchased as supplemental feed for cattle have shown how sensitive they can be to variable production totals. From 1995 to 1996 corn prices more than doubled due to the short corn supplies in 1996, and then quickly returned to 1995 price levels as corn production increased in subsequent years.

The net effect of declining cattle prices and increasing costs of

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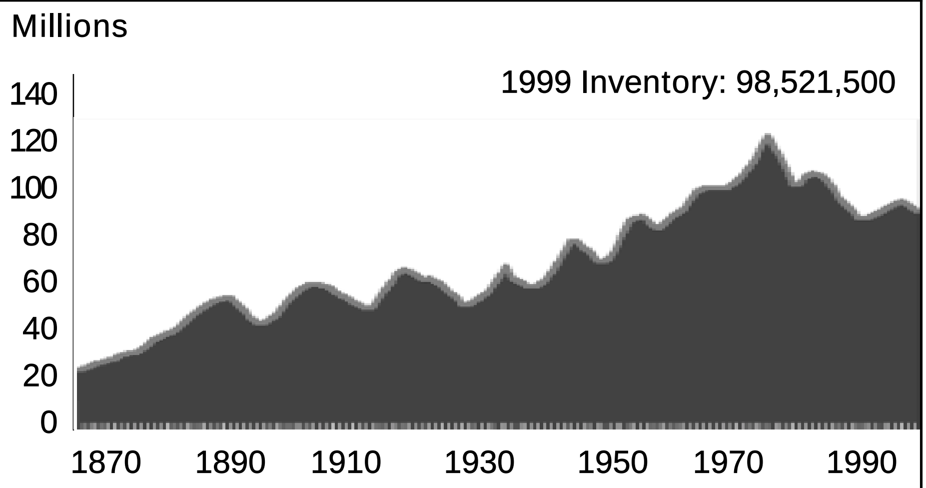
Figure 1. January 1 U.S. Cattle Inventory 1867 - 1999



Source: USDA

inputs purchased by cattle producers has been declining profits. Figure 2 (on page 10) shows that over the past decade, costs of inputs purchased by American cattle producers have increased about 12% while the prices received for cattle have dropped about 10%. This trend is not a recent phenomenon. Cattle prices have fallen in real terms (adjusted into purchasing power by accounting for inflation) to a current level that is about one-third of the price that cattle producers received in 1950.

In California, the past decade began with up-trending steer and heifer prices, reaching a peak of $79.40 per hundredweight average for 1993, before plummeting to an average of $52.50/cwt for 1996. Monthly average prices for steer and heifers got as low as $44.50 during May 1996. That was the lowest average price (not adjusted for inflation) received by cattle producers in over 30 years. By April 1999, steer and heifer prices in California had rebounded only to $63/cwt, which was $2.30/cwt below the national average.

Why the Decline in Cattle Prices?

In the competitive market for cattle, prices have been trending downward because of both supply and demand factors. Although the multi-year "cattle cycle" that is visible in Figure 1 is expected to remain a feature of the cattle market, prices will generally continue their downward spiral until supplies better match demand.

The "cattle cycle" is a phenomenon of the biological nature of cattle production and of producers' reactions to market prices. Throughout history, producers' natural tendency to want to expand profits led them to expand production, thus increase the size of their herds. Over the few years that it takes to raise and breed additional cows to increase the number of calves, steers and heifers available to feedlots, cattle markets slowly react to the increasing supplies by offering lower prices. Eventually, the lower prices cause cattle producers to have low, or negative, profits on sales so they have no incentive to expand herds further. In fact, the economics of cattle production mean that liquidating some part of a herd is the best response to low prices. This action of reducing herd sizes means that more cattle are being sent to markets for a few years, thus increasing the downward pressure on prices. As a result of falling prices, cattle producers continue to reduce the size of their herds, adding even more downward pressure on prices. After some number of years, ranging from 4 to 16 in the past, producers have reduced herds to a level such that the supply is reaching markets is less than consumers want at the prevailing (low) prices, so market prices begin to be bid up slowly. As cattle producers see the rising market prices, they have an economic incentive to expand their production again. This begins another "cattle cycle". Figure 1 shows the many cycles the industry has experienced over the last 125 years. As long as this joint biological-market phenomenon continues, cattle prices will cycle as well.

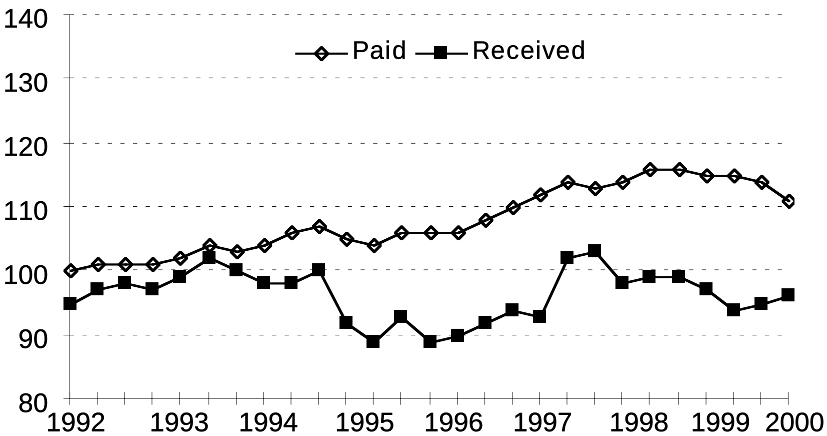
Added to the intermediate-term effects of the cattle cycle, American cattle markets are currently also suffering from the effects of adjusting to a long-term shift in cattle supplies. A global market has developed for beef. This means that supplies from America now must compete with foreign imports of beef. Boxed beef and other technical developments make it possible for foreign suppliers to deliver their beef to American markets at competitive prices. For example, half of the beef now sold in Burger King hamburgers across the U.S. comes from Australia. The expansion of foreign beef imports into the United States and the increased foreign competition facing American cattle producers trying to export their products to markets in places

Beef—continued on page 10

Beef*—cont'd from page 2*

like Europe and Japan have both added to the downward pressure on prices received for American cattle. The timing of the technological advances that created the global market for beef, thus increasing total supplies available to American markets, is readily apparent in Figure 1. Since the mid-1970s, the trend in total American cattle production has been downward (despite the continuing cycles) due to downward pressure on prices from increased foreign supplies in the global market. This trend is likely to continue for the foreseeable future as the livestock sectors of less-developed nations expand.

Figure 2. Livestock Farm Index: Prices Received and Prices Paid - All Items, U.S., By Quarter
Percent (1990-92 = 100)



Source: USDA

One reason that global livestock production is expected to expand is that consumers buy more meat (including red and white meat products) as their incomes improve, and the improvements in the economies of many less-developed nations in recent decades are expected to continue into the next century. Eastern Europe and Asia, in particular, offer good prospects for expanded beef sales. The question for American cattle producers is whether or not they will be able to compete profitably in those growing markets. The problem is "commodity prices are global, but production costs are local." American producers have higher land, labor and other costs of production than producers in many less-developed nations, thus our cattle producers face a stiff challenge to profitably serve those distant markets.

On the demand side, beef has suffered somewhat in its recent competition with white meat. Consumers in America, in particular, are eating more chicken, turkey and fish, causing them to buy less beef per person. In some other countries (especially less developed nations), beef consumption per capita is still below American levels and may grow with income levels. Both economic and health factors influence consumers' consumption of red and white meats.

Consolidation is Painful

The beef cattle industry and American agriculture, in general, are going through a painful consolidation. Just like the consolidations going on in the banking and other industries, the cattle industry is experiencing a reduction in the number of individual firms because there is not enough profit to support all the firms operating at present. It is a painful process for those cattle producers who are being displaced by the market. In some places in California, cattle ranches can be converted into the production of other agricultural commodities, like tree and vine crops, but in other locations the list of profitable agricultural alternatives is limited. This means that the total number of cattle ranches and the total volume of cattle production are both likely to decrease over the next decade or more.

At some point, global cattle supplies and demand will stabilize, causing prices to stabilize in general. As the market finds its new (although ever-shifting) equilibrium, producers who can make a profit at the new price level will survive. However, no one knows where the market price will stabilize.

In the meantime, American cattle producers are being challenged to find production and marketing strategies that will maintain or improve their profit margins. Production costs per unit are already relatively low for cattle producers in California. Our industry is already very efficient, thus it may be difficult to further reduce production costs per head of cattle. Therefore, increased marketing activities hold the best promise for improving profit margins. It is also likely that group marketing efforts, rather than individual producer efforts, hold the most promise for success. The California Cattlemen's Association and livestock advisors in county offices of the University of California's Cooperative Extension Service are all working to find new marketing methods for groups of producers. With increased participation of cattle producers, these groups may be able to make the beef industry consolidation process a profitable one for California ranchers.