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U.S. Cattle Supplies and Disposition

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Downturn in U.S. Cattle Cycle Continues

Current indications for 2001 show that the Nation's cattle herd is declining slightly, continuing the downturn in the current cattle cycle. This special report provides information on current cattle supply and disposition numbers and trends which have implications for future cattle supplies.

Looking at the cattle cycle on a January 1 basis, this is the fifth year of the downturn in the cattle cycle after six years of increase during the upturn (Figure 1). Cattle numbers have declined 6.2 million head during the downturn compared with an increase of 7.7 million head during the upturn. Adding the 6.2 million head to market supplies during the downturn has mostly offset the effects of smaller calf crops. The beef cow herd, the foundation of the total cattle inventory, has declined 1.9 million head since January 1, 1996, after gaining 2.9 million head during the 6-year upturn.

The July 1, 2001, **Cattle** report indicated the Nation's cattle herd, at 105.8 million head, was continuing to decline slightly, down 500,000 head from a year earlier (Figure 2). Both the beef cow and milk cow herds were down 100,000 head. Also, both beef and milk replacement heifers were down 100,000 head. The 2001 calf crop was estimated at 38.4 million head, down 221,000 head or 0.6 percent. U.S. cattle on feed on July 1 were up 7 percent or 800,000 head.

The July 1, 2001, **Cattle on Feed** report indicated that placements of heifers in feedlots continued heavy, indicating herds were not rebuilding. Heifers as a percent of total cattle on feed were 40 percent on July 1, 2001, about the same percent as a year earlier. The 40 percent heifers in feedlots compares with 33 percent in the early 1990s when the herd was building. This difference of 7 percent applied to current placements adds about 1.8 million head to feedlots annually (Figure 3). Herd reduction is also signaled when comparing cattle inventory estimates. In July of 1994, a year prior to peak cattle inventories, beef replacement heifers represented 44 percent of the beef replacement and other heifers (excluding dairy replacement heifers); seven years later, they represent 35.9 percent (Figure 4).

Heifer slaughter also continues to run at a high level. Through the first half of this year, heifer slaughter as a percent of total cattle slaughter has averaged 33 percent, the same as last year but 5 percentage points above the 28 percent average during the early 1990s when the herd was building (Figure 5). This additional 5 percent of heifer slaughter increased slaughter in 2000 by about 1.8 million head from the earlier lows. Cow slaughter during 2000 represented 15 percent of total slaughter compared to 17-18 percent during the early 1990s. This was about 0.4 million head less than the 1990-1995 average. Even with harsh winter and spring conditions in many cow-calf regions during 2000-2001, cow slaughter averaged around 16 percent of total slaughter for the first half of 2001. This remains below the 17-18 percent average when inventory levels were increasing. The lower cow slaughter indicates the cow herd is smaller and producers may be retaining cows in the herd longer, but the relatively larger increase in heifer slaughter indicates herds are not rebuilding.

The July 1 beef and dairy cow herd declined from 45.6 million head in 1995 to 43.0 million head in 2001, down 2.6 million head or nearly 6 percent. Similarly, the calf crop declined from 40.3 million head in 1995 to an estimated 38.4 million head this year, a decline of 1.9 million head or 5 percent. When the calf crop is adjusted for calf slaughter, calf deaths, imports, and exports, the adjusted calf crop increased for 1998, 1999, and 2000 (Figure 6). It appears the adjusted calf crop will also increase for 2001 since the increase in imports and decline in calf slaughter and deaths will likely more than offset the actual decline in the 2001 calf crop.

Calf slaughter as a percent of the calf crop has declined from around 8 percent in the mid-1980s to less than 3 percent in 2000, a decline of nearly 2.3 million head (Figure 7). Calf slaughter for the first half of 2001 was down 74,000 head or 13 percent compared with a year earlier. This decline in calf slaughter allows a corresponding number of calves to go into feedlots or the replacement herds. Since the peak of the current cattle cycle in 1996, annual calf slaughter has declined over 600,000 head, which would effectively offset nearly a 2 percent decline in the calf crop.

Cattle imports for the first half of 2001 are up 196,000 head, or 18 percent compared with a year earlier. Feeder calves accounted for 72,000 head of the increase. Total cattle imports in 2000 increased 242,000 head to nearly 2.2 million head (Figure 8). An increase of feeder calves from Mexico and Canada more than offset a slight decline in Canadian fed cattle imports and accounted for the increase. Since the sharp drop in feeder calf imports in 1996, the peak of the current cattle cycle, feeder imports have increased by 722,000 head in 2000.

Comparing July 1996 to July 2001 inventory data show steers, heifers, and calves are down 3.4 million head. This inventory decline combined with the increase in feeder imports and decrease in calf slaughter has largely offset the effects of smaller calf crops that have come with the decline in the cattle cycle.

U.S. cattle exports climbed to 481,000 head in 2000 compared with 329,000 head in 1999 (Figure 9). Increased shipments of feeder cattle to Canada and fed cattle to Mexico accounted for the increase. U.S. exports were up slightly comparing the first half of 2001 to the first half of 2000. An increase of fed cattle exports to Mexico more than offset a reduction of feeder calf shipments to Canada.

Cattle on feed supplies have been heavy in recent years as the rate of calf slaughter has declined, imports have increased, and lighter weight feeder calves have been drawn into feedlots. January 1 feeder cattle supplies have meanwhile declined by nearly 4 million head from the peak of the cattle cycle on January 1, 1996 to January 1, 2001. First of the year feeder cattle supplies have been boosted during the following year in each of the past four years; this occurred as feeder imports increased during the following year and the rate of calf slaughter declined. The cumulative effect of five years of increasing imports and decreasing calf slaughter is an additional 1.6 million head of feeder cattle (Figure 10).

Cattle on feed in lots with 1,000 head or more capacity totaled 10.89 million head on August 1, 2001, seven percent above a year earlier. Placements of feeder calves under 600 pounds continue to bolster cattle on feed inventories. Through the first seven months of 2001, placements of feeder cattle under 600 pounds were up 9.8 percent while placements above 700 pounds were down 7.5 percent. Placements of feeder cattle under 600 pounds during 2000 were up 1.7 million head, or 37 percent, compared with 1998 (Figure 11). If feeder calves enter the feedlots two weeks earlier on average or are fed two weeks longer during the course of a year, it adds about one million head to cattle on feed numbers.

During the past two years the price of calves has rallied at the same time corn prices have remained relatively low (Figure 12). With gains in fed cattle prices also during the past two years, there has been an increased incentive to place cattle into the feedlots. The current large cattle on feed numbers, which include increased numbers of lighter weight calves and heavy heifer placements, reflect the turnaround in calf prices and feeding costs. Aside from economics, the other major factor impacting placements is weather. Dry conditions in cow-calf areas have recently drawn a number of lightweight calves into feedlots.

The inventory of steers and heifers over 500 pounds increased over 5 million head from the late 1980s to 1996 (Figure 13). The increase is largely attributed to a smaller proportion of the calf crop being slaughtered, increased rates of gains for yearlings, higher imports, and a longer time in feedlots. Since the peak of the current cattle cycle in 1996, the U.S. steer and heifer inventory has been worked down nearly 2 million head. The working down of this inventory adds supplies to the market in addition to annual calf crop supplies.

Another method of monitoring the levels of the cow herd and calf crop is a comparison of the adjusted calf crop and its disposition. Disposition of the adjusted calf crop is composed of steer and heifer slaughter the following year, change in steer and heifer inventory the following year (either building or reducing the inventory during the following year), death loss, exports and imports the following year, and additions to the cow herd two years following the adjusted calf crop. Based on expected steer and heifer slaughter during 2001, imports and exports, and changes in steer and heifer inventory levels, it appears the 2000 adjusted calf crop, and therefore calf crop, is supported by expected disposition (Figure 14). Having a good accounting of the calf crop helps in estimating cow numbers and consequently, the total cattle inventory. Because it takes three years to account for the disposition of a calf crop, no one calf crop is a perfect fit with disposition since it is influenced by two other calf crops.

A larger proportion of the calf crop going into feedlots, increased feeder imports, and heavier fed cattle are largely the reason why U.S. beef production has continued to trend upward although the herd has trended downward (Figure 15). Beef production per cow has now increased nearly 200 pounds per head, or over 40 percent, over the last 20 years (Figure 16). Also, both the average live weight and dressed weight of cattle have increased about 100 pounds each over the past 20 years (Figure 17).

In summary, it is the fifth year of the downturn in the cattle cycle and there are no significant signs of expansion since replacement heifer numbers are down and placements of heifers in feedlots remain heavy. At the same time, the percentage of the calf crop slaughtered as calves is at a record low level (which suggests it is not likely to go much lower given there is a veal market) and the steer and heifer inventory has been worked down by 2.0 million head. These factors point to reduced future cattle supplies, which should support both future calf and fed cattle prices. On the other hand, increased imports, and continued heavy placements of heifers and lighter weight calves have added to feedlot supplies. These factors have tended to moderate cattle prices, especially fed cattle, and will be a major influence on the strength of future cattle prices.

Note

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Figure 1

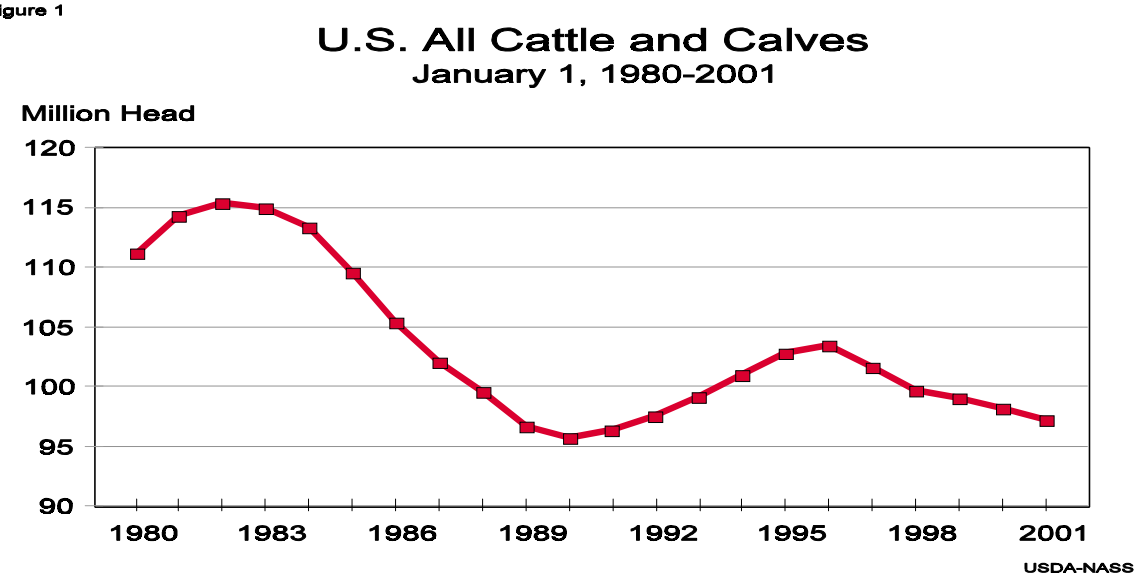


Figure 2

Cattle and Calves: Number by Class and Calf Crop, United States, July 1, 1999-2001

Class	1999	2000	2001	2001 as % of 2000
	1,000 Head	*1,000 Head*	*1,000 Head*	*Percent*
Cattle and Calves	107,000	106,300	105,800	100
Cows and Heifers That Have Calved	43,300	43,200	43,000	100
Beef Cows	34,150	33,950	33,850	100
Milk Cows	9,150	9,250	9,150	99
Heifers 500 Pounds and Over	16,600	16,500	16,400	99
For Beef Cow Replacement	4,800	4,700	4,600	98
For Milk Cow Replacement	3,700	3,700	3,600	97
Other Heifers	8,100	8,100	8,200	101
Steers 500 Pounds and Over	14,400	14,300	14,600	102
Bulls 500 Pounds and Over	2,200	2,100	2,100	100
Calves Under 500 Pounds	30,500	30,200	29,700	98
Cattle on Feed	11,500	12,300	13,100	107
Calf Crop - Annual	38,796	38,621	38,400	99

Figure 3

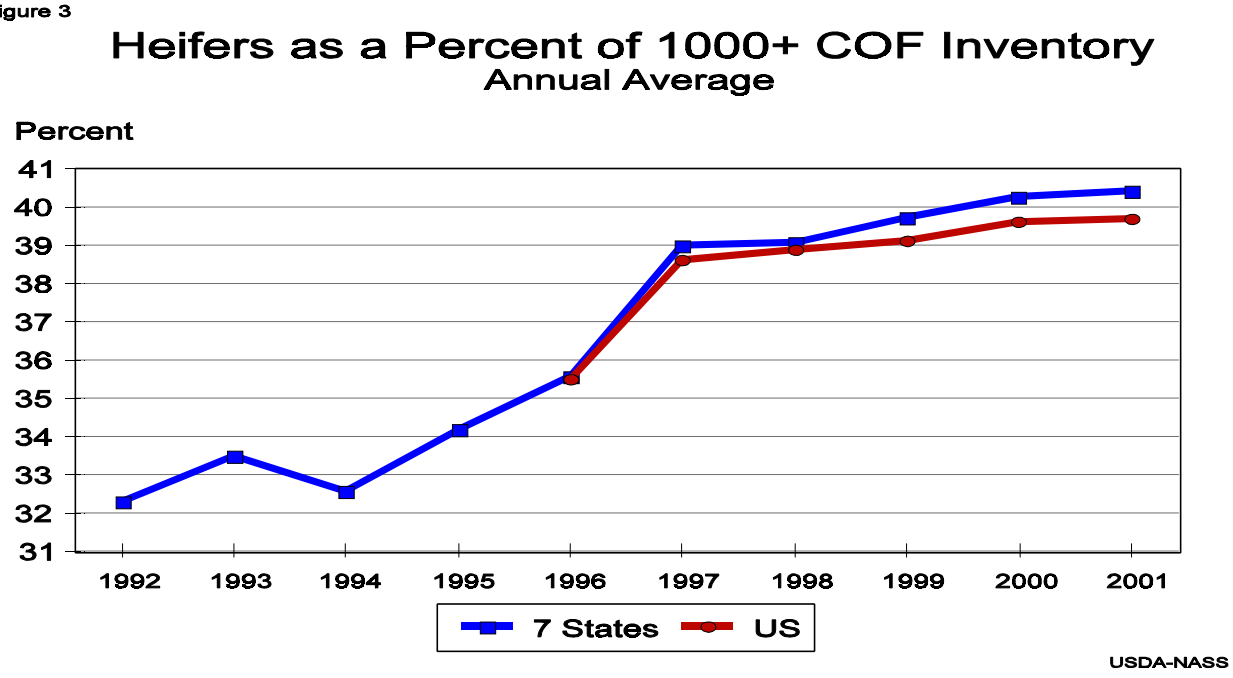


Figure 4

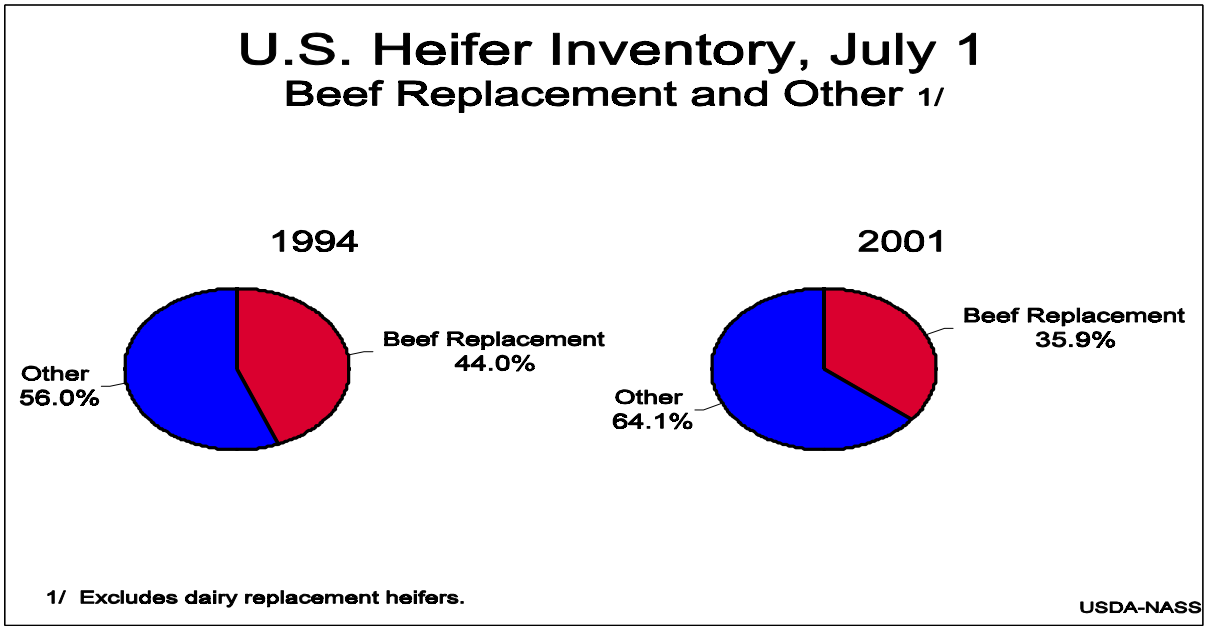


Figure 5

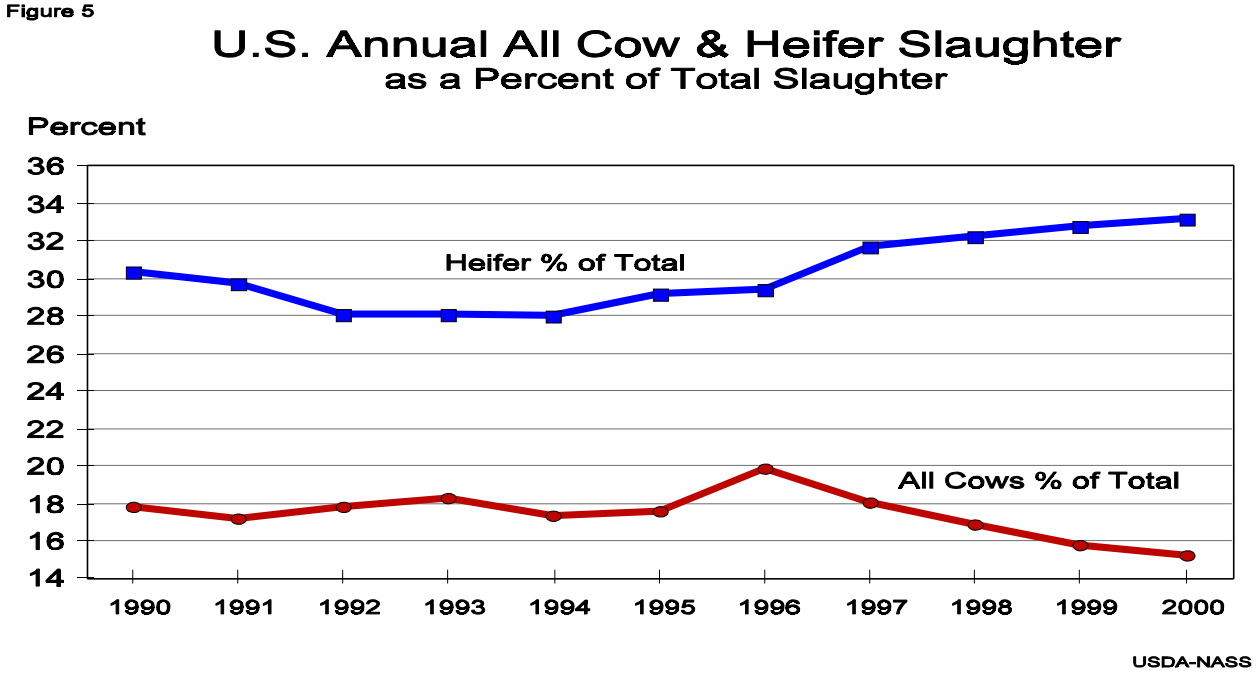
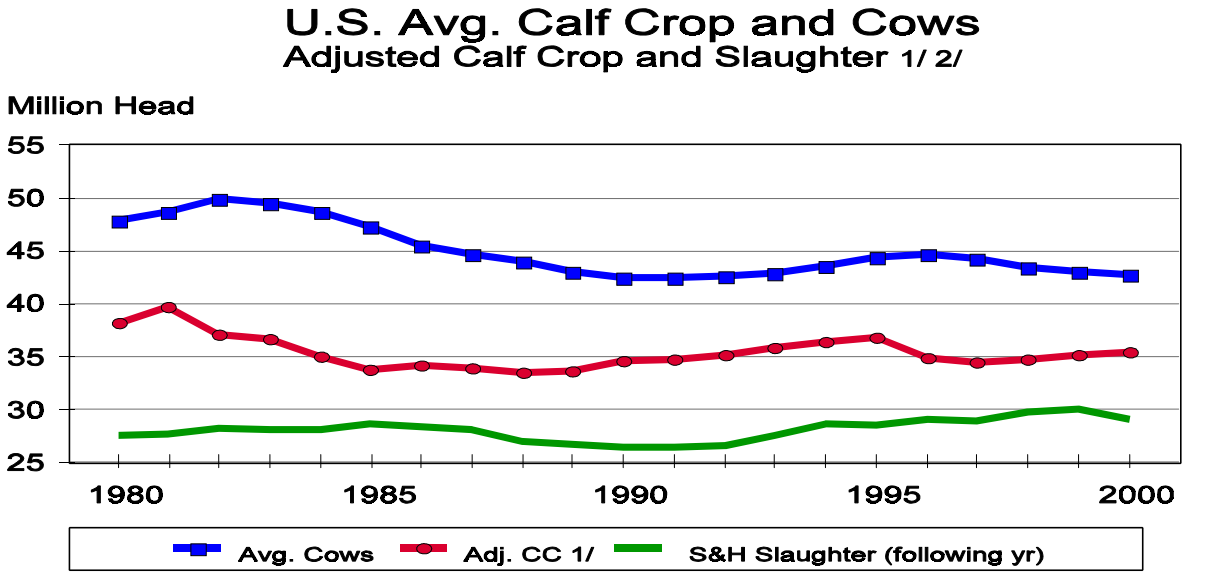


Figure 6



1/ Adj. CC=CC+feeder imports-calf sltr.- calf deaths- (following yr cattle deaths /2).
2/ 2000 Adj. calf crop & following yr. s&h slaughter estimated.

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Figure 7

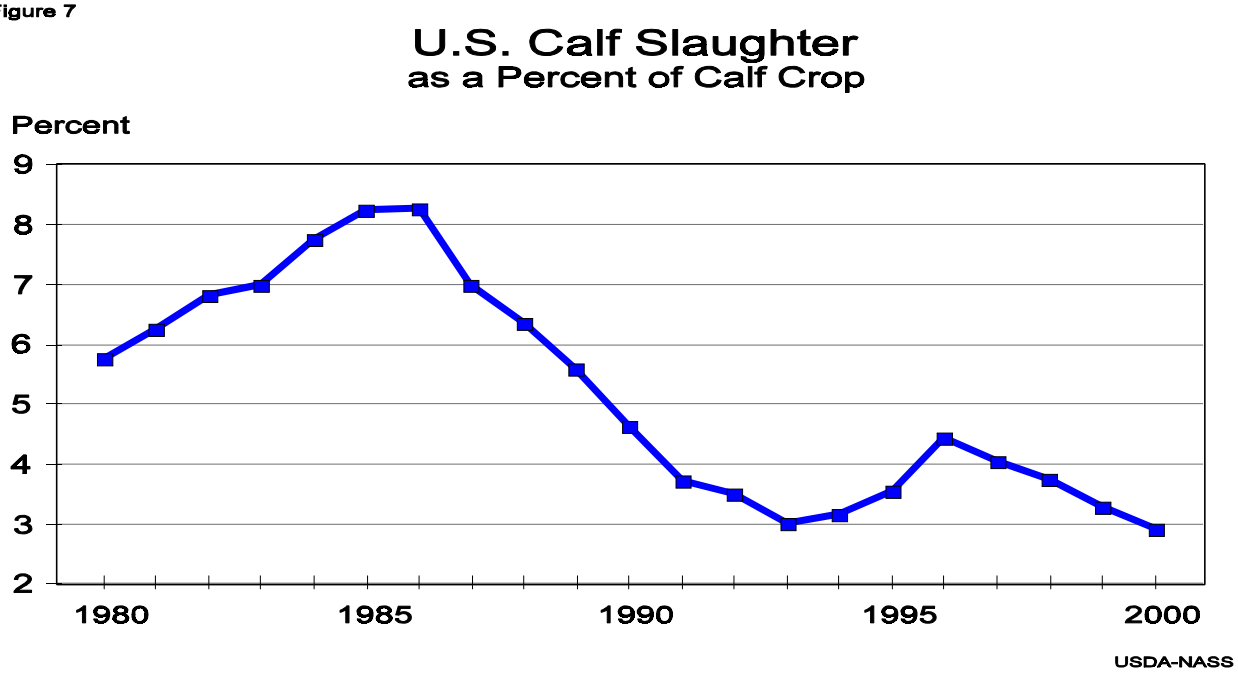

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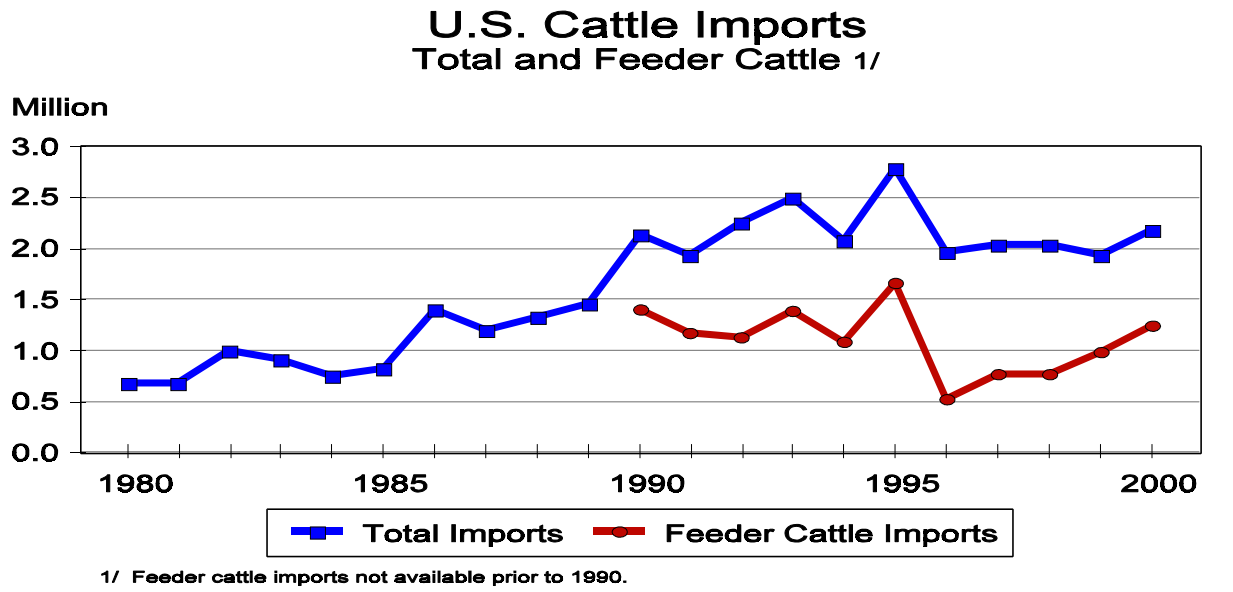
Figure 8



1/ Feeder cattle imports not available prior to 1990.

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Figure 9

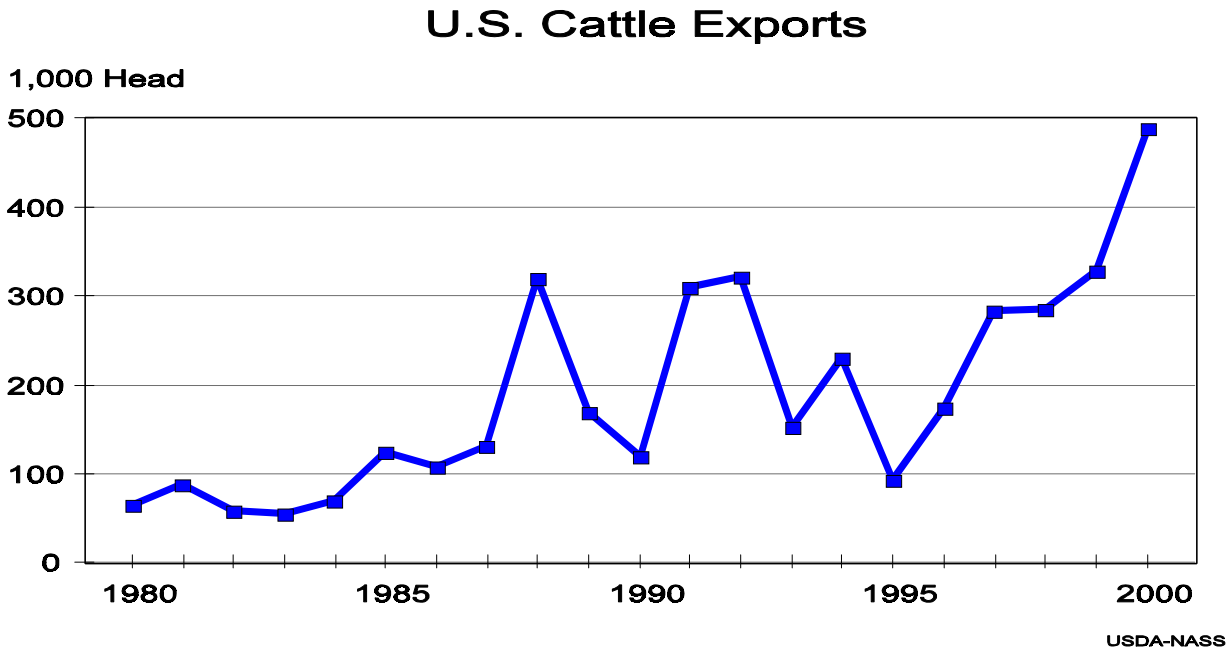

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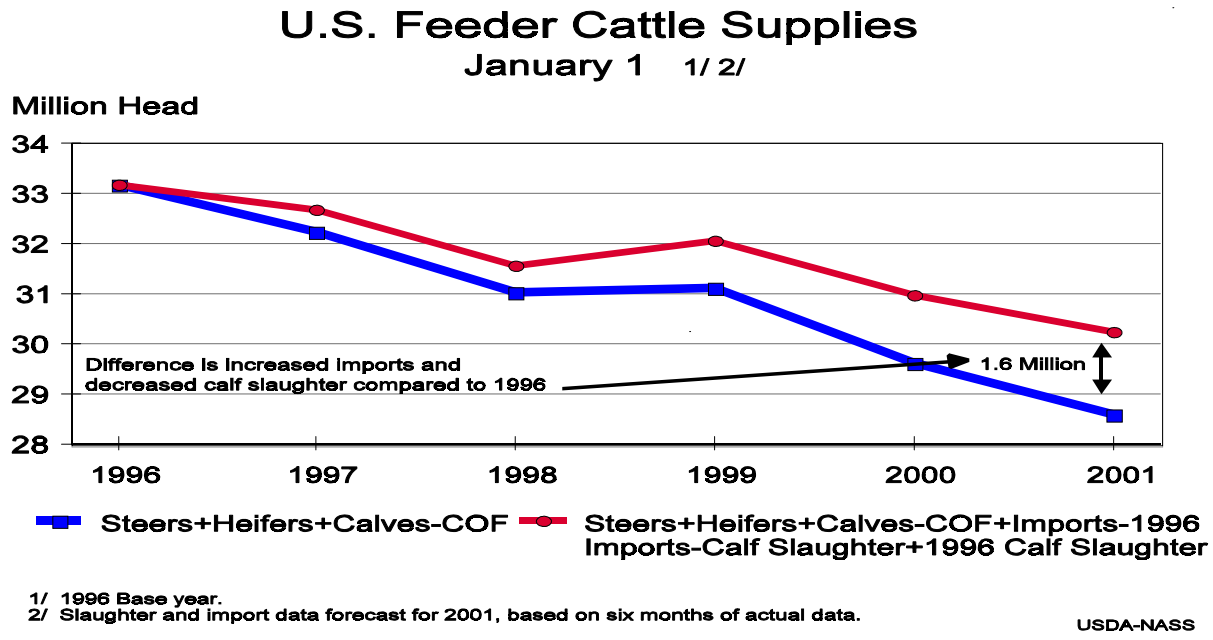
Figure 10



1/ 1996 Base year.
2/ Slaughter and import data forecast for 2001, based on six months of actual data.

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Figure 11

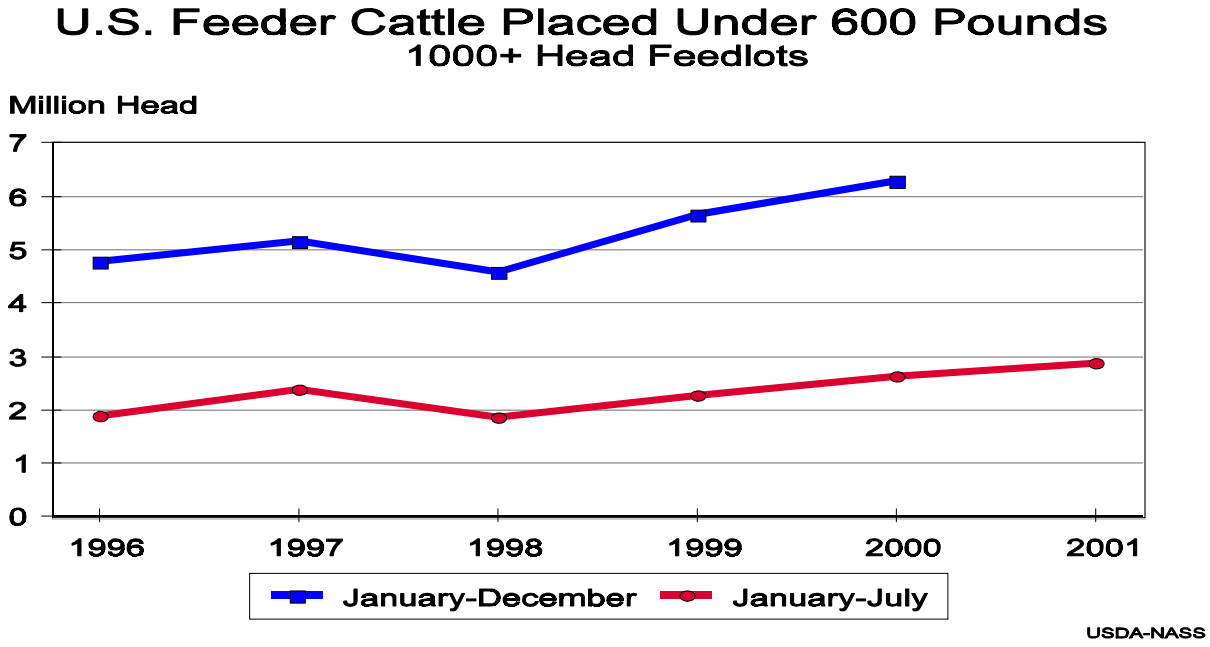

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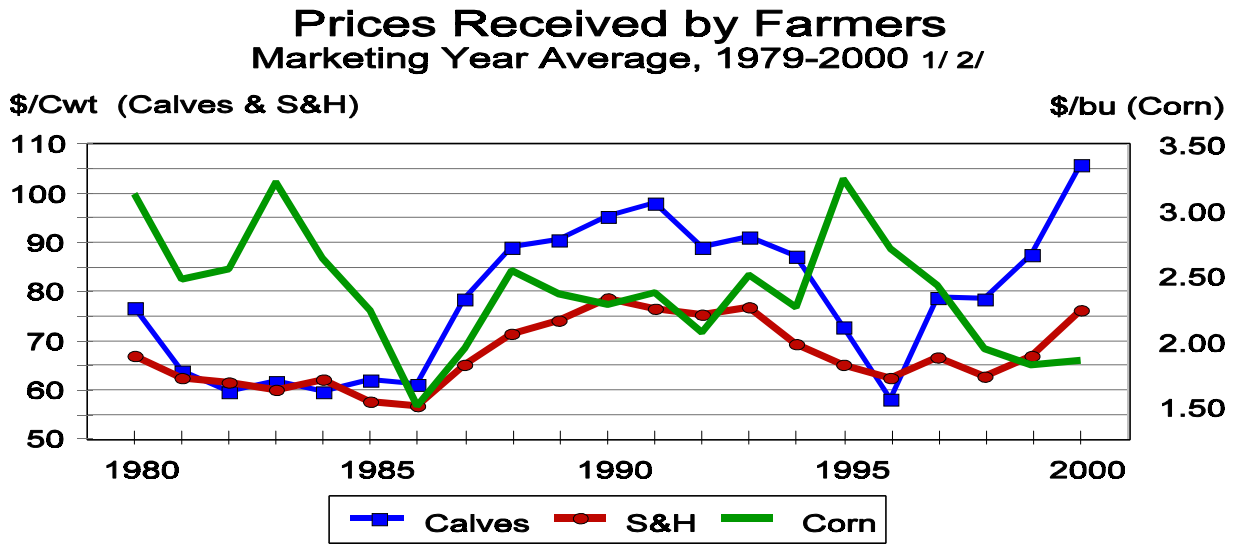
Figure 12



1/ Preliminary December 2000 monthly price.
2/ Calves are less than 500 pounds, steers and heifers are more than 500 pounds.

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Figure 13

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Figure 14

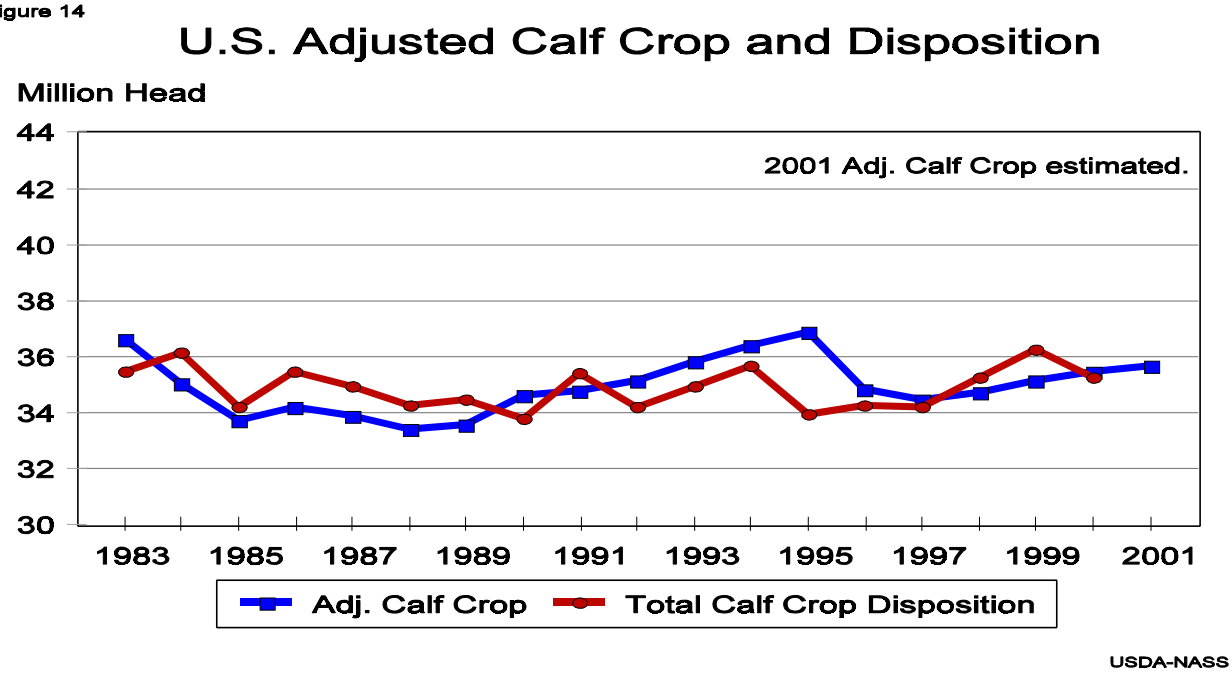


Figure 15

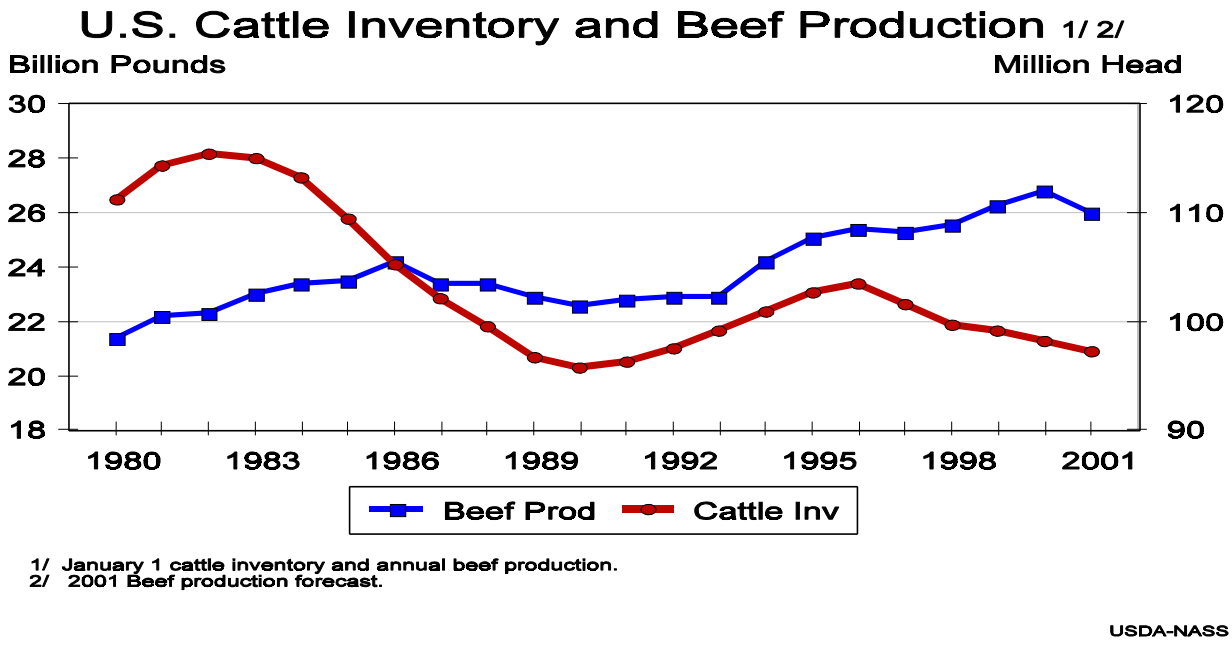


Figure 16

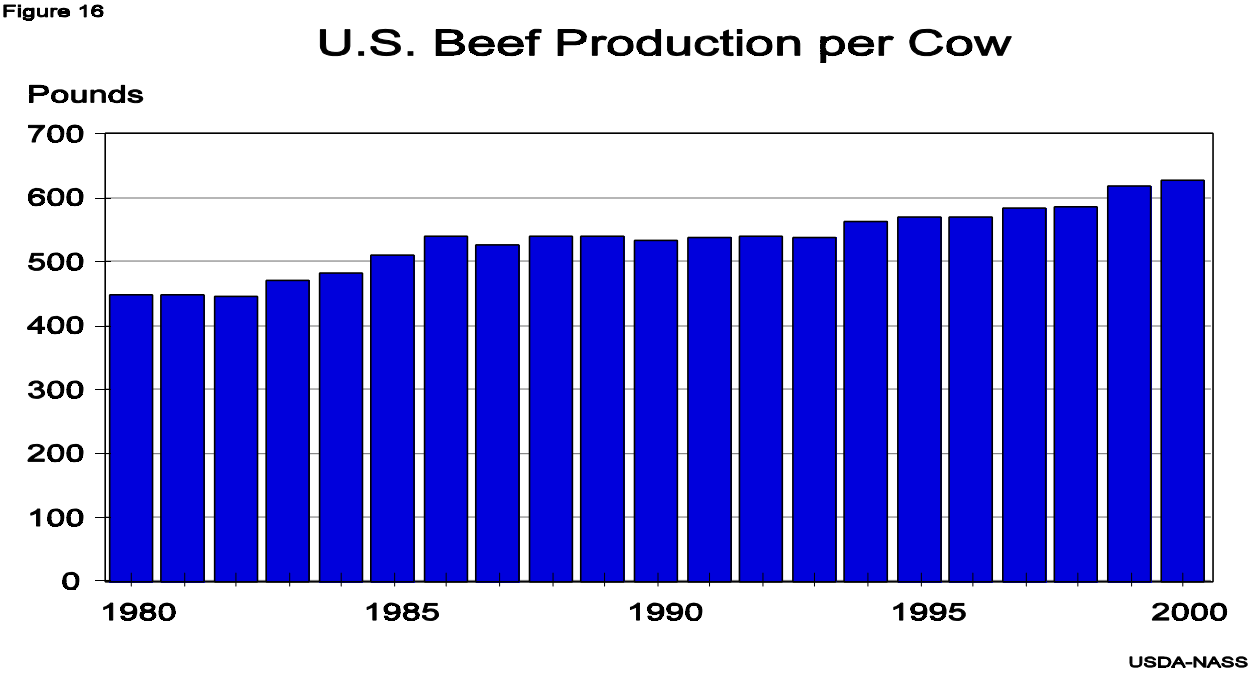
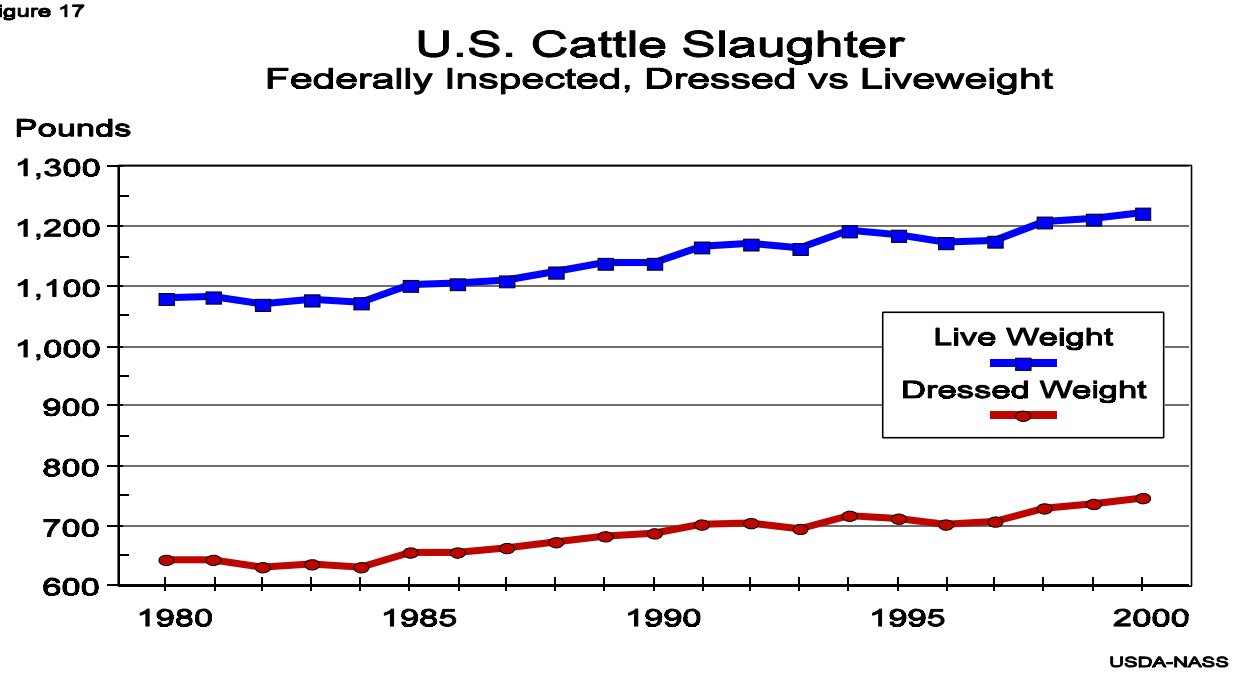


Figure 17



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