Assessment of the Livestock and Poultry Industries

FY 2006 Report

United States Department of Agriculture
Grain Inspection, Packers and Stockyards Administration

March 2007

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Executive Summary

This report is prepared in accordance with the Grain Standards and Warehouse Improvement Act of 2000 (PL 106-472, Nov. 2000). The Act requires that by March 1st of each year, the Secretary of Agriculture shall submit to Congress a report that: 1) assesses the general economic state of the cattle and hog industries; 2) describes the changing business practices in those industries; and 3) identifies market operations or activities in those industries that appear to raise concerns under the Packers and Stockyards Act.

This is the sixth annual report made by the Grain Inspection, Packers and Stockyards Administration (GIPSA) to Congress. The report focuses on data GIPSA collects under its regulatory authority for the livestock and meat market channels in the cattle-beef and hog-pork industries. Additionally, the report includes sections on the sheep-lamb and poultry industries. By focusing on the marketing segment (livestock dealers, markets, and packers) that GIPSA regulates, the report highlights information unavailable from other sources. The report covers events and data available as of September 30, 2006, which is the close of the government fiscal year. Most of the discussion of the projected annual outcomes, however, is on a calendar year basis.

Data available from annual reports filed with GIPSA by packers provide a snapshot of the industry each year through the most recent year of data available. The data were used to reveal trends over time in key industry characteristics and project expectations for 2006. The data show that the four largest firms' share of the total value of livestock purchases, i.e., aggregate industry concentration, has trended steadily upward over the last 10 years. Patterns of concentration in purchase of different types of livestock, however, have exhibited different trends. Four-firm concentration by volume of slaughter in total cattle, steer and heifer slaughter, boxed beef production, and poultry slaughter have all been relatively stable in recent years, while cow and bull slaughter and hog slaughter have exhibited increases in concentration, and concentration in sheep slaughter has declined over this period.

Trends in marketing practices of packers vary by species. For example, carcass-basis purchases of cattle exhibited a strong upward trend from 1998 through 2002, remained about the same in 2003 before falling in 2004, then increased in 2005. By comparison, carcass-basis purchases of hogs increased steadily from 1995 through 1999, fell slightly in 2000, and have increased at a relatively slow rate since since 2000. The four largest beef packers' use of committed procurement methods increased slightly in 2005, but packer feeding and use of marketing agreements have both declined notably since the first 3 years of this decade. Only forward contracting exhibits a continuing upward trend. Forward contracts currently, however, represent a relatively small portion of total cattle procurement. Another source of information on marketing arrangements is the Swine Contract Library (SCL) maintained in accordance with the Livestock Mandatory Reporting Act of 1999. Reports to the SCL of estimated future deliveries under contracts provided a useful indication of expected future trends in deliveries prior to the expiration of the Act in September 2005. The Act was recently renewed.

As carcass-based procurement has historically increased in volume, packers have increased the development and testing of carcass evaluation devices in the beef industry. Changes to carcass merit programs for hogs were not significant in 2006, perhaps reflecting the fact that trends in carcass-basis purchases of hogs have stabilized at already-high levels in recent years.

I. General Economic State of the Industries

The Packers and Stockyards Program (P&SP) of the Grain Inspection, Packers and Stockyards Administration (GIPSA) administers and enforces the Packers and Stockyards Act (P&S Act) and monitors financial and business practices in the livestock, meatpacking, and poultry industries. Every packer, live poultry dealer, stockyard owner, market agency, and dealer must file a report annually with GIPSA. Since reporting year 1977, packers that operate in interstate commerce and purchase $500,000 or more of livestock on an annual basis are required to file an annual report with GIPSA. The reports filed by these packers contain data on the quantity and costs of the firms' purchases of livestock for slaughter, the firms' business practices, and financial aspects of the slaughter firms' operations. Data available from these reports provide a snapshot of the industry each year. Data from reports for reporting years through 2005 are used below to describe recent trends in key characteristics.[1] The data were also used to develop simple statistical estimates (predictions) of expected ranges for those characteristics in 2006. If additional information is available to GIPSA, the predictions based upon the statistical estimates have been adjusted to reflect that data. All analysis is based on data and information available to GIPSA at the end of fiscal year 2006. Because most of the data series are on a calendar year basis, the anticipated outcomes that are described refer to calendar year 2006.

A. Aggregate Livestock Industry

Data on the value of livestock purchased for slaughter reveal that the four largest packing firms' share of total industry expenditures on livestock for slaughter has trended upward over the last 10 years (Figure 1). If the trend continued, the four largest firms' share of total industry procurement expenditure for 2006 would be between 65.0 and 72 percent.

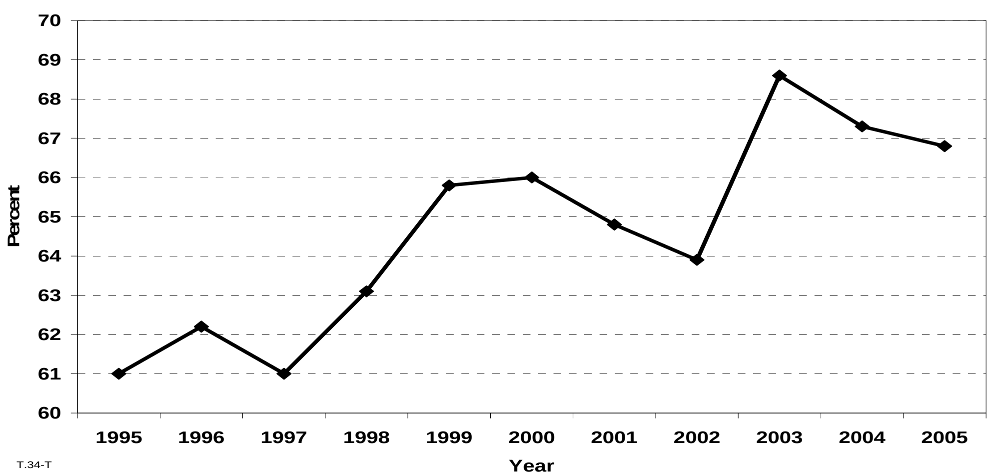

Figure 1. Share of Total Industry Livestock Procurement Expenditures for the Four Largest Slaughter Firms, Firm Size Ranked by Total Livestock Procurement Expenditure

[1] Unless otherwise indicated, data represented in the graphs and discussed in this report are as reported in various issues of the annual *Packers and Stockyards Statistical Report (*see http://www.gipsa.usda.gov/GIPSA/webapp?area=newsroom&subject=landing&topic=pub-stat), supplemented with other data from reports filed with Packers and Stockyards Program by business entities subject to the Packers and Stockyards Act. The majority of firms file reports on a calendar year basis, and the reports for 2006 are not due until April 15, 2007. GIPSA provides a 90-day extension when requested, and performs a data verification process after receiving the reports. Thus 2006 data will be published in early 2008 in the GIPSA publication *Packers and Stockyards Statistical Report, 2006 Reporting Year*.

Several financial ratios can be used to provide a summary of financial conditions in the meat packing industry. Two examples, one for expenses and one for income, are used below. First, trends in operating expenses as a percentage of sales illustrate the combined effects of changes in input costs and in firms' production practices on the costs of doing business over time. Second, trends in operating income as a percentage of sales over time provide a measure of profitability.

Operating expenses expressed as a percentage of sales of meat packing firms have trended upward over the last several years. Manufacturing costs, i.e., the costs of actual slaughter and processing operations including labor, make up the greatest component of operating expenses.[2] This ratio for large firms tends to be lower than is the case for smaller firms. For example, in every year but one since 1997, this ratio as a percentage of sales has been lower for the four largest firms than for firms ranked 21st through 40th (size rankings based on total livestock procurement expenditures) (Figure 2).[3] GIPSA anticipates that total operating expenses for the top four firms for 2006 will be between 18.8 and 22 percent of the value of sales. GIPSA expects that the anticipated range of total operating expenses for the 21st-40th firms for 2006 will be between 18.6 and 24.4 percent of the value of sales.

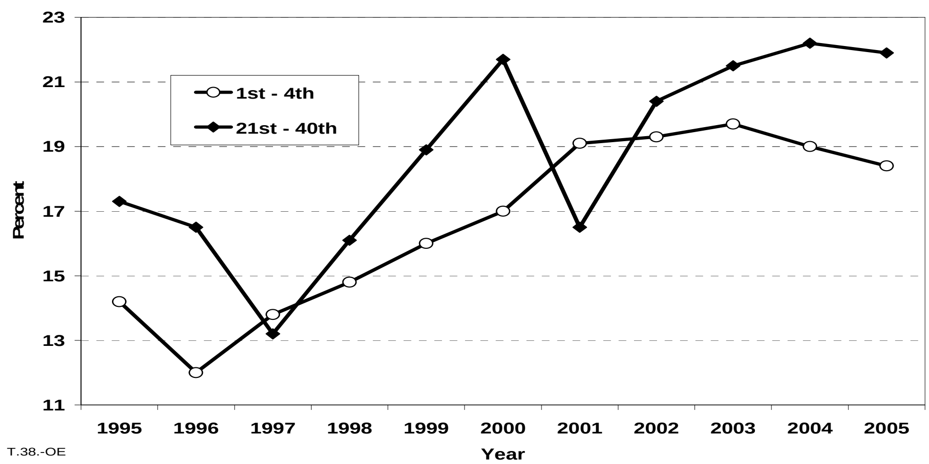

Figure 2. Total Operating Expenses as a Percentage of Sales for the Top 4 and the 21st-40th Firms, Ranked by Total Livestock Procurement Expenditure

Operating income as a percentage of sales of meat packing firms has trended slightly upward in recent years, with considerable year-to-year variation (Figure 3).[4] Since 2000, the four largest firms have had lower operating income as a percentage of sales than the firms ranked 21st through 40th, a reversal of the relationship that existed prior to 2000. The lower operating income of the larger packers, despite having lower operating expenses (Figure 1), is due to the larger packers paying a higher average cost for livestock.[5] The anticipated range of operating income as a percentage of sales for the top four firms, ranked by total livestock procurement expenditure, for 2006 is between 0.7 and 2.8 percent. The anticipated range of operating income as a percentage of sales for the 21st-40th firms for 2006 is between 1.5 and 2.9 percent.

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[2] Operating expenses include manufacturing, advertising and selling, administrative, depreciation and amortization, interest, and other day-to-day expenses of running the business. Note that financial data reported to GIPSA by some firms may include information on operations other than meat packing and processing.

[3] While this difference may suggest that larger firms tend to operate larger, lower-cost plants than the smaller firms, these financial data are highly aggregated across a variety of types of firms. There are differences both across and within size groups in combinations of species slaughtered (beef, pork, sheep, poultry) by the included firms and also in other types of non-meat activities included in the data from some firms.

[4] Operating income as summarized here is sales minus cost of sales (primarily cost of livestock) and minus operating expenses, and is essentially a measure of profit before taxes.

[5] See Table 35, *Packers and Stockyards Statistical Report, 2005 Reporting Year*.

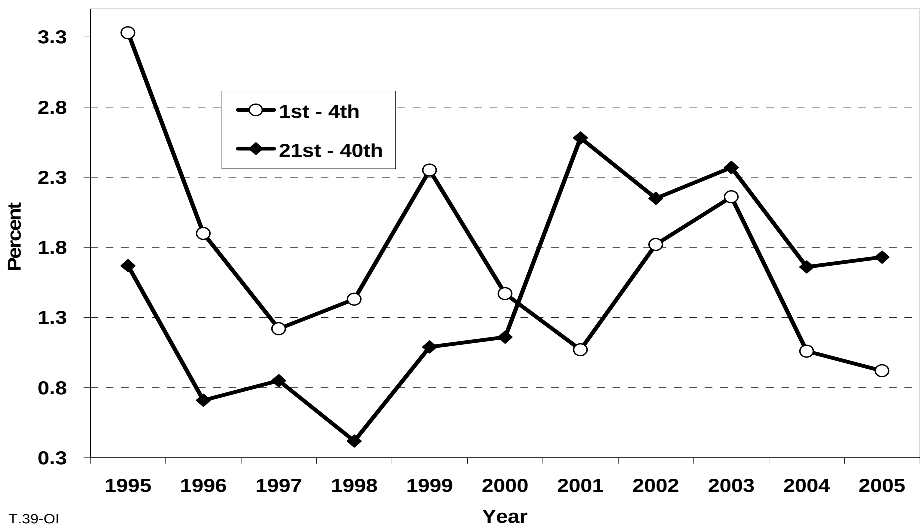

Figure 3. Operating Income as a Percentage of Sales for the Top 4 and the 21st-40th Firms, Ranked by Total Livestock Procurement Expenditure

B. Cattle Industry

The volume of cattle slaughtered by firms reporting to GIPSA fluctuates with the cattle cycle and changes in total U.S. commercial slaughter and has trended downward over the last 10 years (Figure 4).[6] Total cattle purchases for 2006 for firms reporting to GIPSA are anticipated to range between 31 million head and 34 million head, with the expected value being closer to the lower boundary.

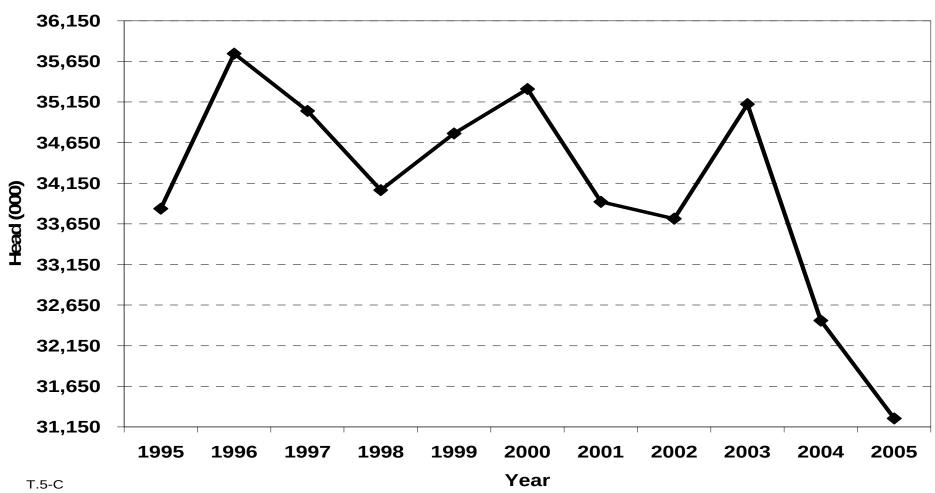

Figure 4. Total Slaughter Cattle Purchases for Firms Reporting to GIPSA

The number of plants reporting to GIPSA declined by approximately 100 plants or 38 percent from 1995 through 2003 as plant size increased and smaller plants closed, but that trend shows some signs of slowing since 2002 (Figure 5). Based on preliminary information on changes in the number of cattle

6 Total cattle includes steers and heifers (often collectively called "fed cattle"), cows, and bulls. In most but not all cases, individual plants operated by firms that report to GIPSA tend to slaughter either fed cattle, or cows and bulls.

slaughter plants, GIPSA anticipates that the downward trend of the late 1990s has stabilized at 150 to 170 plants for 2006.

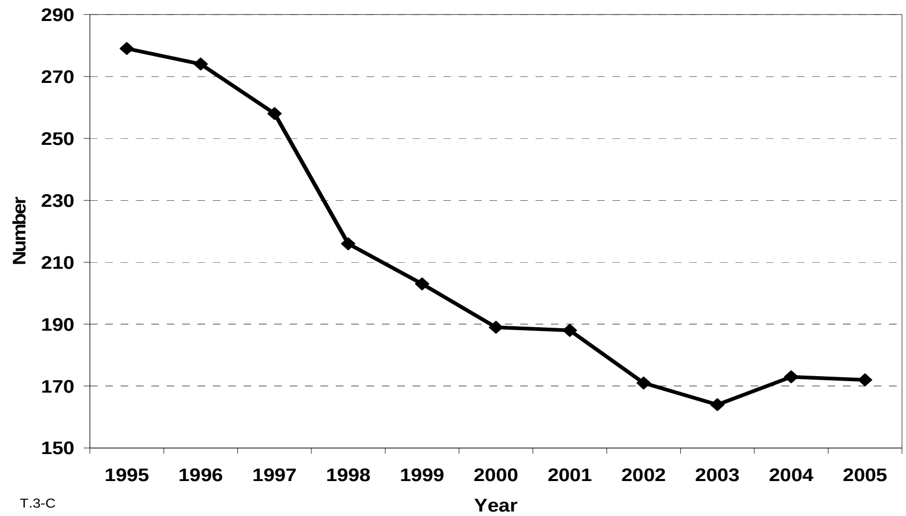

Figure 5. Number of Cattle Slaughter Plants for Firms Reporting to GIPSA

The percentage of the total volume of steer and heifer purchases accounted for by the four largest firms that slaughter steers and heifers has remained between 78 and 82 percent since 1995 (Figure 6). Projecting the trend since 1995 would suggest that this measure of concentration in 2006 would range between 79 and 83 percent.[7] Several factors, however, have influenced the combined market share of the four largest firms slaughtering steers and heifers since 2004. Acquisitions by larger firms were largely offset by plant closings among those firms, but several smaller packers also ceased operating. Taking these partially offsetting factors into account suggests a modest additional increase from the 2004 level in the combined market share of the four largest firms in 2006. While continuation of the trend in boxed beef since 1995 (Figure 7) would result in concentration between 80 and 84 percent in 2006, the same factors influencing changes in market shares in steer and heifer slaughter will likely lead to a modest increase from the 2004 level in concentration in boxed beef production as well.

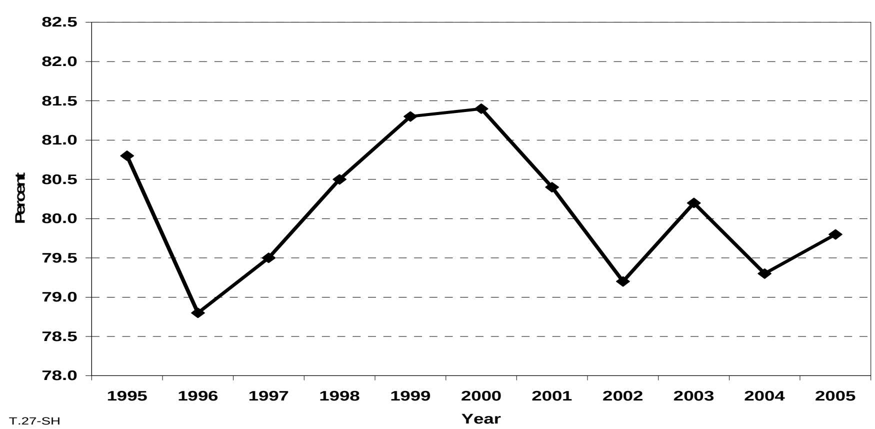

Figure 6. Combined Market Share (by Volume) for the Four Largest Steer and Heifer Slaughter Firms

[7] In this report the terms "concentration" and "combined market share" are both used to refer to the combined volume of the four largest firms as a share of the total volume of all industry firms.

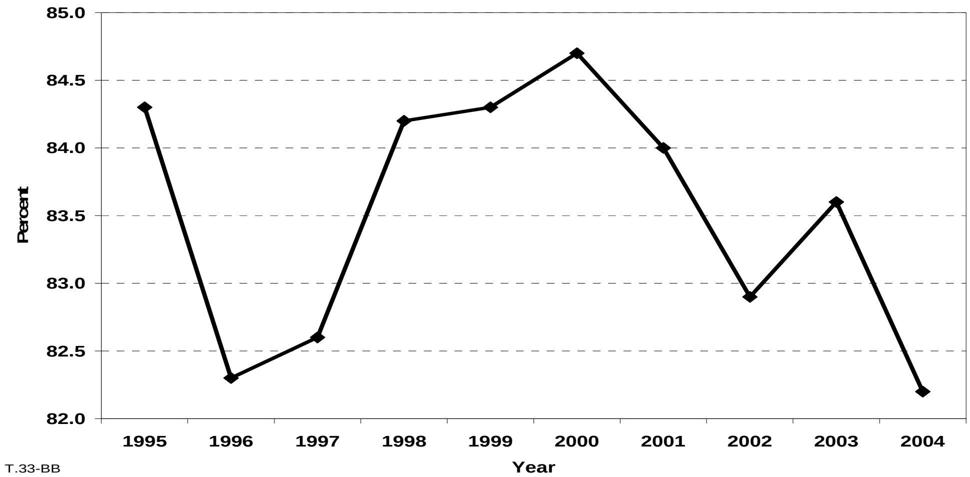

Figure 7. Combined Market Share (by Volume) for the Four Largest Firms Producing Boxed Fed Beef

Concentration in cow and bull slaughter has trended upward since 1995 (Figure 8). In 2006, plant closings were offset by capacity increases driven by acquisitions by larger firms. Several smaller packers also ceased operating. Taking these factors into account leads to the suggestion that the combined market share of the four largest firms slaughtering cows and bulls could increase to 50 percent in 2006.

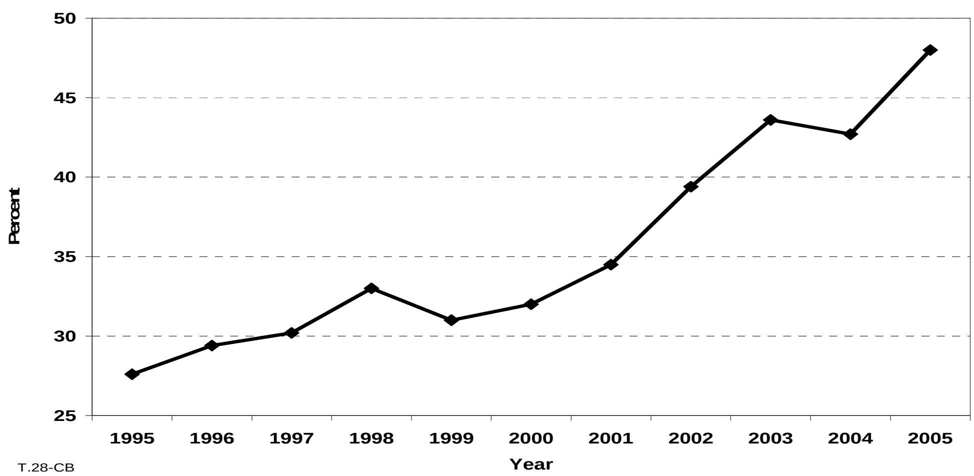

Figure 8. Combined Market Share (by Volume) for the Four Largest Cow and Bull Slaughter Firms

C. Hog Industry

Hog slaughter has trended upward in the last 10 years, with slaughter plants reporting purchasing about 101.1 million hogs for slaughter in 2005 (Figure 9). Continuation of recent trends would result in an anticipated number of total hog purchases for 2006 between 96.8 and 102.5 million head. With respect to number of hog slaughter plants, continuation of the trend since 1995 would suggest that the anticipated number for 2006 could range between 136 and 150. However, the rate of decline has slowed since 1999 and the number of hog slaughter plants increased in 2004 (Figure 10). Based on preliminary data on changes in number of plants since 2004, GIPSA believes it is likely that the number of plants in 2006 will be slightly above the upper end of that range.

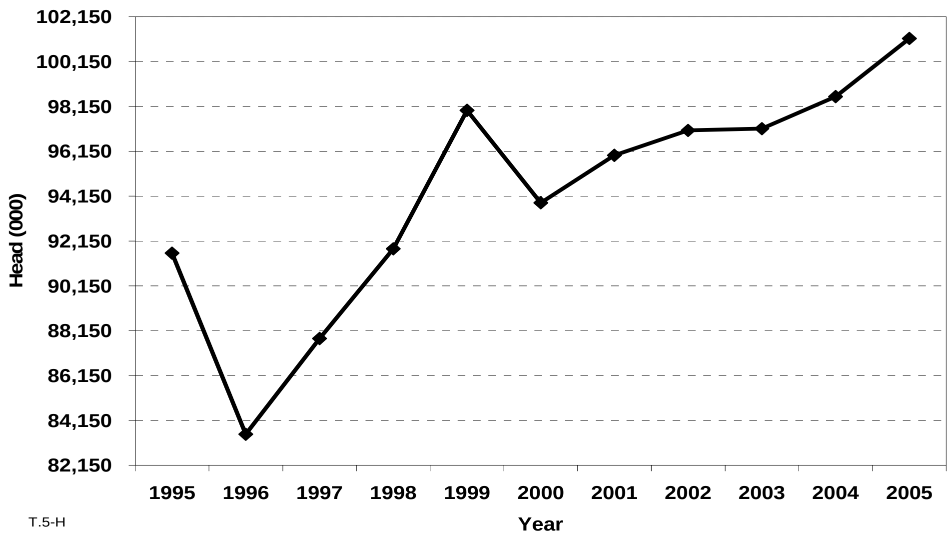

Figure 9. Total Hog Purchases for Slaughter for Firms Reporting to GIPSA

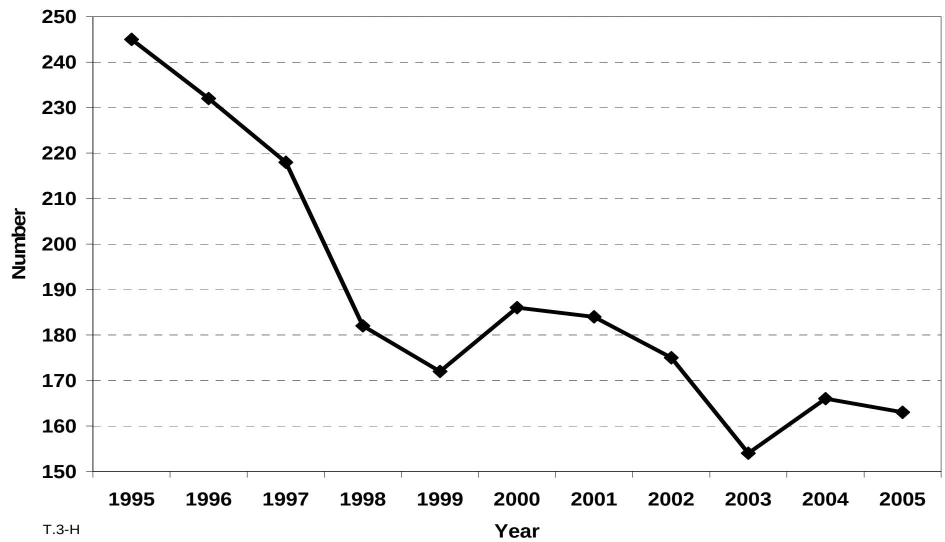

Figure 10. Number of Hog Slaughter Plants for Firms Reporting to GIPSA

After remaining stable in the latter half of the 1990s, hog slaughter concentration increased from 55 percent in 2002 to about 64 percent in 2003 and remained at 64 percent since (Figure 11). Based on the trend since 1995, the four largest firms' share of total hog slaughter for 2006 could range between 61.6 and 68.5 percent. The mix of plant closings and openings since 2005 by firms of different sizes is expected to reduce the four largest firms' market share to the lower end of that 2006 range estimate.[8]

[8] Smithfield's announced acquisition of Premium Standard Farms likely would not affect concentration for 2006.

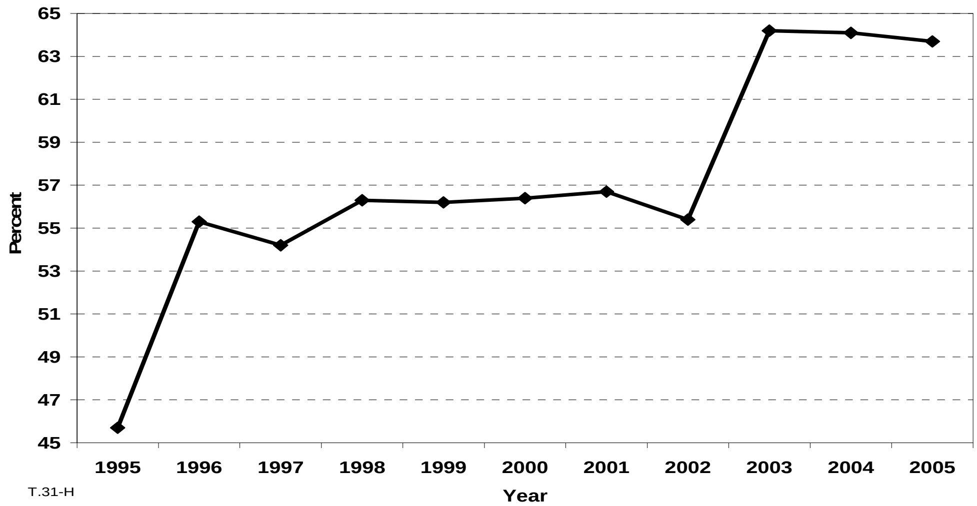

Figure 11. Combined Market Share (by Volume) for the Four Largest Hog Slaughter Firms

In FY 2004, GIPSA implemented a web-based Swine Contract Library (SCL) in accordance with the requirements of the Livestock Mandatory Reporting Act of 1999 (LMRA). After the LMRA expired in September 2005 approximately half the previously responding plants continued reporting to GIPSA on a voluntary basis.[9] The SCL reports swine contract information from swine (hog) packing plants with a slaughter capacity of 100,000 swine or more per year. The SCL reports information from the submitted contracts by region, including price, premiums, discounts, grids, formulas, and other important contract terms that GIPSA extracts from offered and available contracts that packing firms use to purchase hogs. Each month the SCL also reports estimates of total future deliveries of hogs under contract for the following 6-month and 12-month periods. The SCL data are known in advance of Agricultural Marketing Service (AMS) data on actual deliveries and thus provide a forecast estimate (Figure 12).

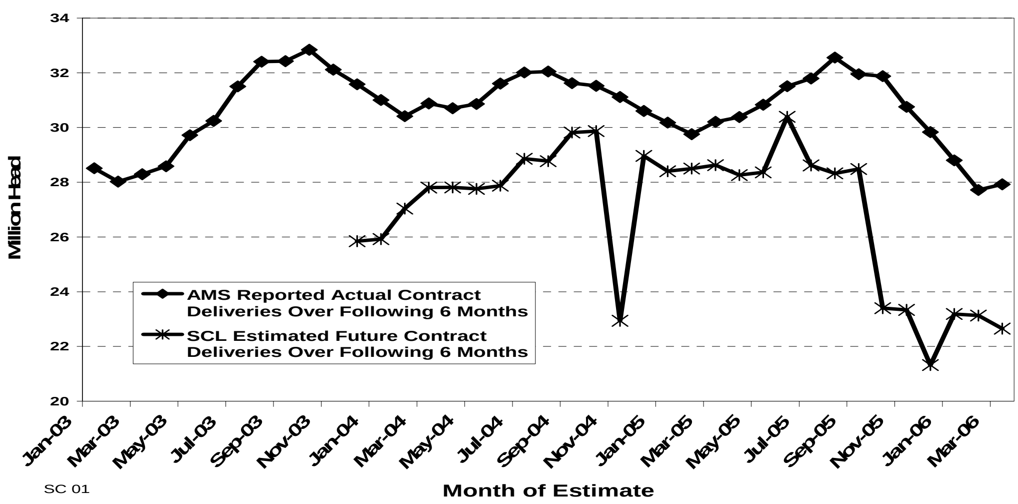

Figure 12. Actual Total Contract Deliveries Over Following Six Months Versus Swine Contract Library Estimates of Future Deliveries Over Same Periods, National Totals, All Contract Types

[9] The Act actually expired briefly in the fall of 2004 but was extended for 1 year. During that period about half of the plants reported to GIPSA on a voluntary basis, thus the large decline in late 2004 shown in the graph in Figure 12).

Prior to the expiration of the LMRA, GIPSA found that packers' reports to the SCL of estimated future deliveries under contract tended to under-estimate actual deliveries subsequently reported by AMS but still provided a useful indication of the trend in deliveries. When reporting to the SCL and to AMS became voluntary in September 2005, fewer plants provided data to the SCL about estimated future deliveries under contract than those that voluntarily provided data to AMS about actual deliveries. As a result, SCL estimates became a less accurate predictor of the trend than they had been previously. In October 2006 President Bush signed legislation renewing the Livestock Mandatory Reporting Act, including the SCL provision. GIPSA expects that the relationship between estimated and actual deliveries should approach a more consistent pattern once all packers resume filing reports to the SCL as required.

D. Sheep and Lamb Industry

The volume of sheep and lambs slaughtered by packers reporting to GIPSA increased in 2004 for the first time since 1998 but declined in 2005 (Figure 13). Total purchases of sheep and lambs for slaughter for 2006 for firms reporting to GIPSA are anticipated to range between 1.8 million head and 2.5 million head. The number of plants slaughtering sheep and lambs declined by 43 from 1995 through 2002 but has been relatively stable since then (Figure 14). GIPSA expects between 53 and 56 reporting sheep and lamb slaughter plants in 2006.

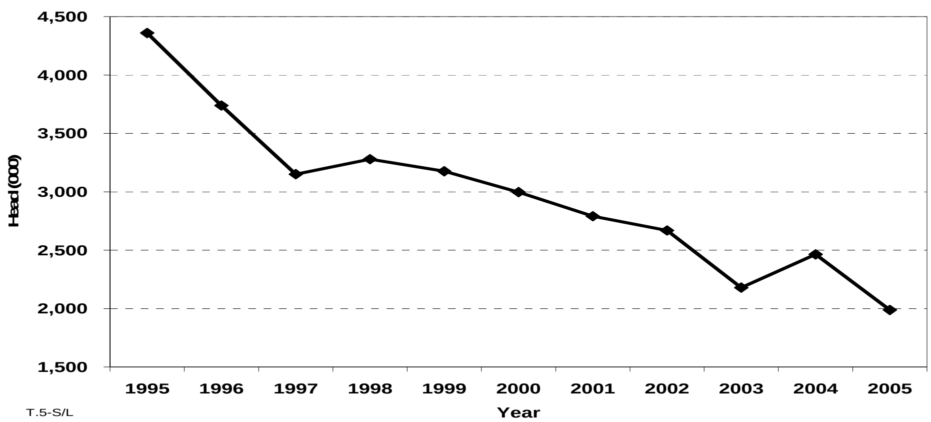

Figure 13. Total Slaughter Sheep and Lamb Purchases for Firms Reporting to GIPSA

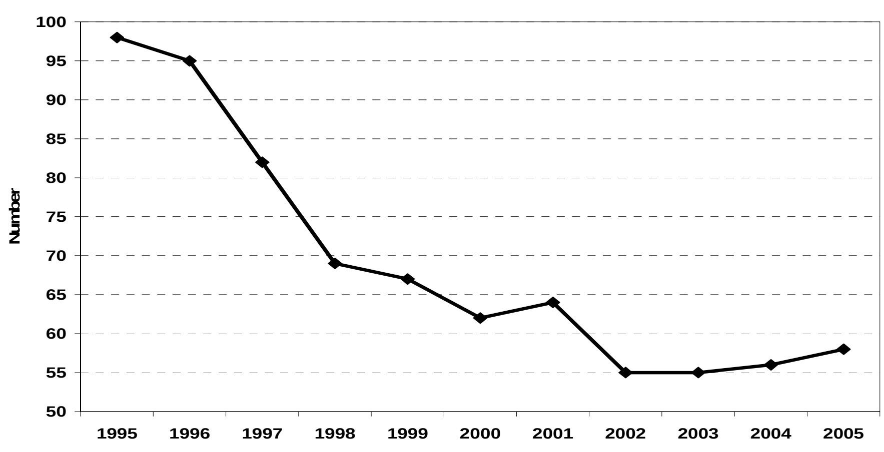

Figure 14. Number of Sheep and Lamb Slaughter Plants for Firms Reporting to GIPSA

The combined market share of the four largest sheep and lamb slaughter firms has trended downward since 1998. Preliminary data indicate an increase in 2005 as the four largest firms increased their combined slaughter volume while total industry slaughter declined (Figure 15). The projected range in the largest four firms' share of total purchases for slaughter in 2006 would be between 60 and 63 percent if the trend from 1995 through 2004 continued. Based on available information on actual changes in firms and plants since 2004, GIPSA expects concentration to be closer to the high end of that range.

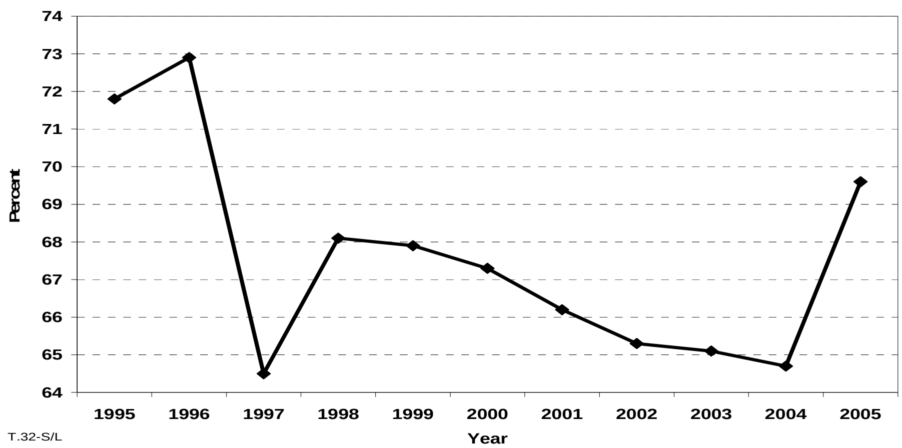

Figure 15. Combined Market Share (by Volume) for the Four Largest Sheep and Lamb Slaughter Firms

E. Poultry Industry

Federally inspected broiler slaughter (measured in pounds of ready-to-cook broilers) has trended upward since 1995, while turkey slaughter has been relatively constant (Figure 16). USDA's World Agricultural Outlook Board (WAOB) estimates that broiler and turkey slaughter will be 1.4 percent and 3 percent higher, respectively, in 2006 than in 2005.[10]

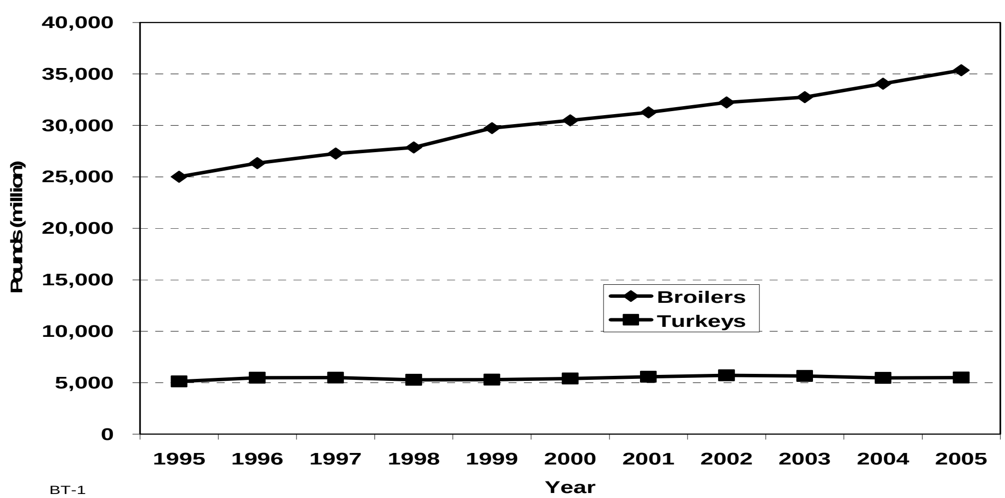

Figure 16. Total Federally Inspected Broiler and Turkey Slaughter (Pounds Ready-to-Cook)
Source: World Agricultural Outlook Board, *World Agricultural Supply and Demand Estimates*, various issues.

[10] World Agricultural Outlook Board, *World Agricultural Supply and Demand Estimates*, Table WASDE-440-31, WASDE-440, November 9, 2006, http://usda.mannlib.cornell.edu/usda/current/wasde/wasde-11-09-2006.pdf.

Concentration in broiler and in turkey slaughter has remained fairly constant since 2003, with slight declines in both in 2005 (Figures 17, 18).[11] Recent firm acquisitions will likely increase concentration in broiler slaughter and turkey slaughter slightly in 2006.

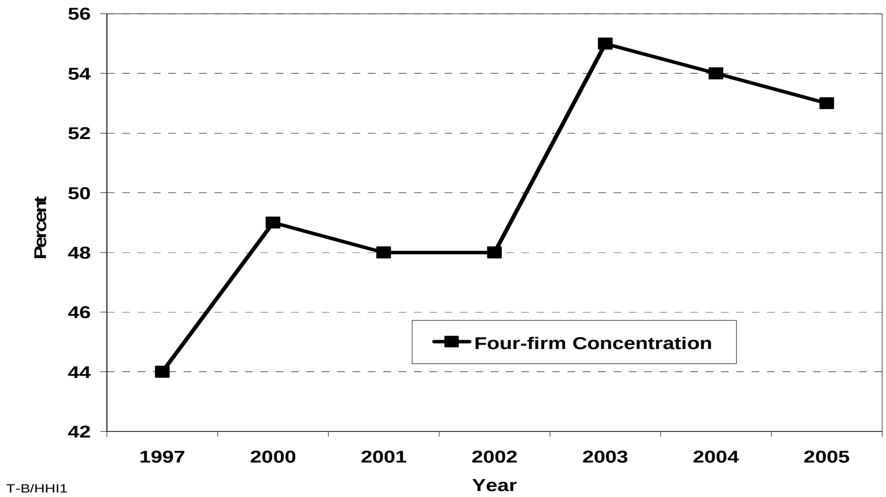

Figure 17. Combined Market Share for the Four Largest Broiler Slaughter Firms
Source: Watt Poultry USA. "WATT Poultry USA Rankings," various years.

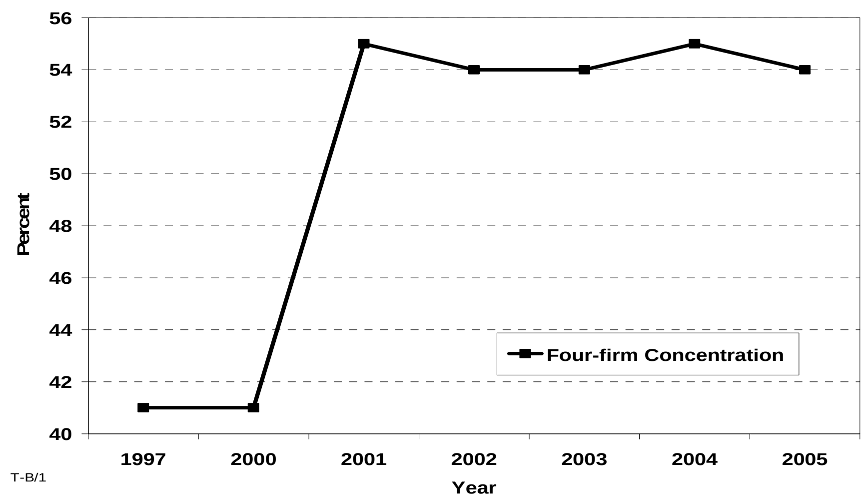

Figure 18. Combined Market Share for the Four Largest Turkey Slaughter Firms
Source: Watt Poultry USA. "WATT Poultry USA Rankings," various years.

F. Livestock and Poultry Producers

GIPSA does not have jurisdiction over livestock producers and poultry growers and does not obtain data from those operations. The Economic Research Service (ERS) and World Agricultural Outlook Board (WAOB) within USDA devote considerable resources to the tracking and analysis of economic conditions in livestock and poultry production. Analyses and projections by those agencies indicate that

[11] Concentration or 4-firm market shares reported here for broilers and turkey refers to share of total industry output, rather than share of total industry input as in other sections of this report for livestock slaughter firms.

livestock and poultry producers likely experienced a reduction in income in 2006 as a result of a combination of lower prices and higher input costs. The decline in 2006 was relative to high levels of the previous 2 years, as high livestock prices relative to historical averages resulted in cash receipts for livestock producers that set successive records in 2004 and 2005. Hog producers' incomes for 2006 likely fell somewhat more than poultry and beef producers' incomes.[12] Estimates released by the WAOB indicate that annual turkey prices averaged higher in 2006 than in 2005 while fed cattle, hog, and broiler prices were all lower in 2006 than in 2005.[13] All prices average higher in the latter half of the year, suggesting improvement in returns to producers as the year progressed.[14]

[12] A variety of publications and data sources on economic conditions are available on the ERS web page at http://www.ers.usda.gov/. See especially "Income Outlook and Financial Circumstances Varies Among Farms," at http://www.ers.usda.gov/Briefing/FarmIncome/Businessincome.htm (accessed November 9, 2006).

[13] World Agricultural Outlook Board, *World Agricultural Supply and Demand Estimates*, Table WASDE-440-31, WASDE-440, November 9, 2006, http://usda.mannlib.cornell.edu/usda/current/wasde/wasde-11-09-2006.pdf

[14] Economic Research Service, *Livestock, Dairy, and Poultry Outlook* , LDP-M-147 and LDP-M-148 (September 18 and October 19, 2006) http://usda.mannlib.cornell.edu/usda/ers/LDP-M//2000s/2006/LDP-M-09-18-2006.pdf and http://usda.mannlib.cornell.edu/usda/ers/LDP-M//2000s/2006/LDP-M-10-19-2006.pdf

II: Changing Business Practices of the Livestock and Poultry Industries

A. Aggregate Livestock Industry

A long-term decline in the number of livestock slaughter firms reporting to GIPSA has been accompanied by a trend to increased specialization in slaughter. This is illustrated by a greater decline since 1995 in the number of firms slaughtering two or more classes of livestock than in the number of firms slaughtering a single class (Figure 19).[15] The anticipated number of firms slaughtering one class of livestock for 2006 could range between 107 and 115. The anticipated number of firms slaughtering two or more classes of livestock for 2006 could range between 78 and 95.

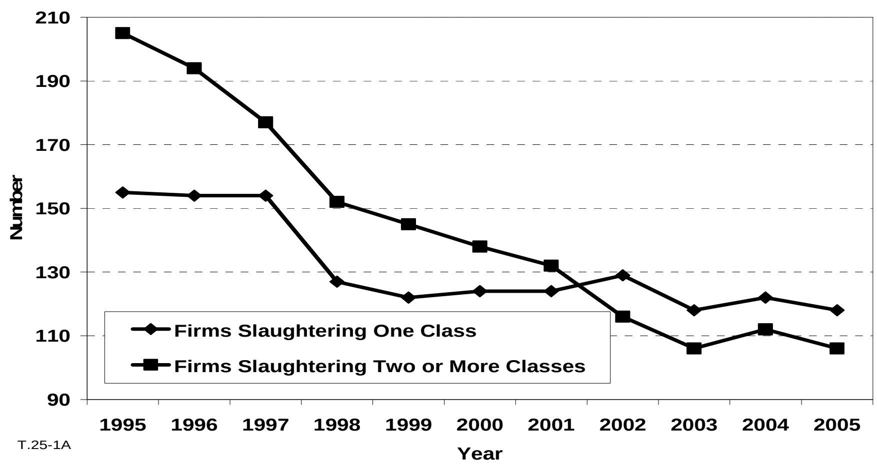

Figure 19. Number of Firms Slaughtering One Class and Number of Firms Slaughtering Two or More Classes of Livestock

B. Cattle Industry

Major Acquisitions, Divestitures, and Plant Closures in the Cattle Industry

There were several ownership changes and plant closures among large beef slaughter firms in 2006. Tyson Foods closed its fed cattle slaughter facility in West Point, NE. Cargill Meat Solutions acquired Fresno, CA based Beef Packers, Inc. Swift & Company announced it had agreed to sell its two non-fed cattle processing facilities in Nampa, ID (which had been closed since August 2005) and Omaha, NE to XL Foods, of Calgary, Alberta. National Beef Packing, Company LLC acquired Brawley Beef LLC of Brawley, CA. Tyson Foods announced that it would close its Boise, ID fed cattle slaughter plant.

The cattle industry continued to be affected by restrictions on imports from Canada of cattle over 30 months of age. The reduced numbers of imports resulted in some cow and bull slaughter plant closures prior to 2006, and continue to impact plant utilization in some areas of the Northern United States.

[15] For purposes of this comparison, the separate classes of livestock are steers and heifers; cows and bulls; calves; sheep and lambs; and hogs.

Carcass Basis Purchases

Purchases of cattle on a carcass basis, as opposed to on a live-weight basis, trended upward from 1995 through 2002 (Figure 20). Although there were declines in 2003 and 2004, an increase followed in 2005 and GIPSA believes the upward trend will continue. GIPSA anticipates that packers reporting to GIPSA will purchase between 19 and 22 million head of cattle on a carcass basis in 2006.

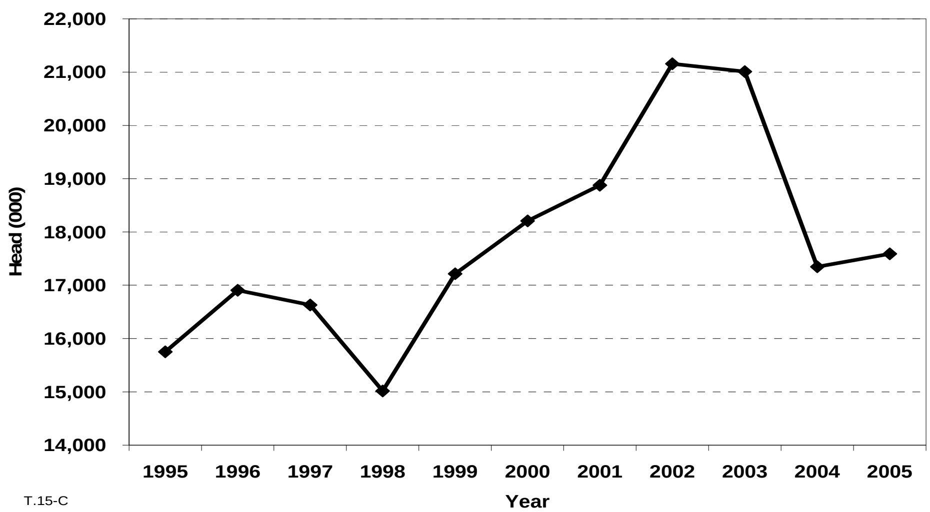

Figure 20. Cattle Purchases on a Carcass Basis

As carcass-based procurement has become increasingly important, packers have increased the development and testing of carcass evaluation devices in the beef industry. GIPSA has attended carcass tests conducted jointly by AMS and device manufacturers to evaluate device performance under real-time conditions in packing plants. While these devices are not yet being used as a basis for payment to producers, the industry is poised to augment traditional USDA AMS meat grading services with complex images that provide a "score" of carcasses for both yield grade and marbling.

Procurement Methods

Packers use multiple procurement methods to obtain live cattle for slaughter.[16] The methods commonly fall into two categories: (1) cash sales for immediate delivery or sometimes on a delayed delivery, normally within a 2-week period, and (2) "committed procurement" arrangements that create an assured exchange and commit the cattle to a particular packer in excess of 14 days prior to delivery. GIPSA collects and audits data on the three major committed procurement methods used by the four largest firms that slaughter fed cattle. These methods include packer feeding, forward contracts, and marketing agreements.

GIPSA defines "packer fed" livestock as all livestock obtained for slaughter that a packer, a subsidiary of the packer, the packer's parent firm, or a subsidiary of the packer's parent firm owns, in whole or part, for more than 14 days before the packer slaughters the livestock. The percentage of total purchases of fed cattle that are obtained through packer feeding arrangements by the four largest steer and heifer slaughter firms declined in 2004 and 2005 (Figure 21). GIPSA expects that the percentage of total procurement obtained from packer feeding by these firms in 2006 will be between 5 and 7 percent.

[16] Data included in the graphs and discussed in this section for 2005 are preliminary.

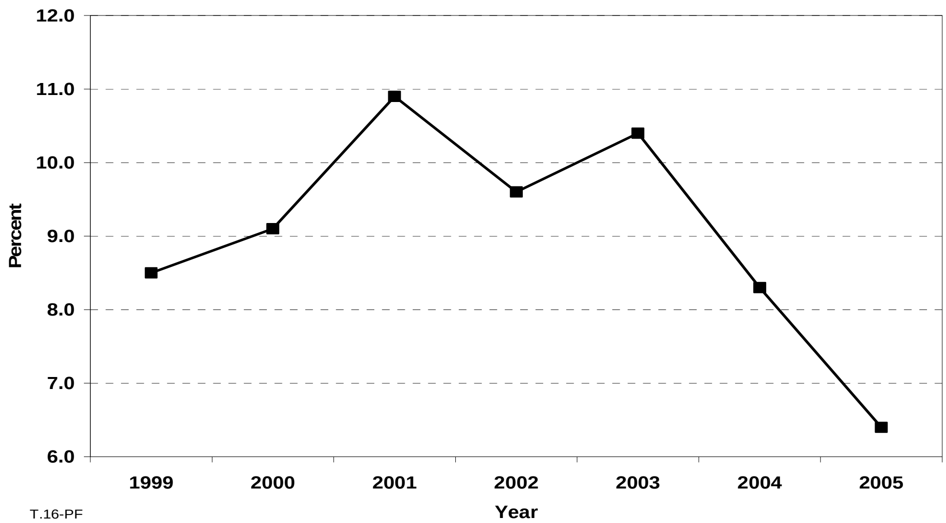

Figure 21. Percentage of Steers and Heifers Procured Through Packer Feeding Arrangements by the Four Largest Steer and Heifer Slaughter Firms

"Forward contracts" are agreements between packers and sellers for future delivery of a specific lot or quantity of livestock. The price of the cattle in a forward contract can be set at the time of the contract or determined upon delivery based upon an agreed pricing arrangement, e.g., using prices from the Chicago Mercantile Exchange futures market for live cattle with an adjustment for the basis at the time of delivery.

The four largest firms' use of forward contracts accounts for a small percentage of total procurement of fed cattle but the proportion has been trending upward in recent years (Figure 22). The percentage of fed cattle procured through the use of forward contracts by the four largest steer and heifer slaughter firms in 2006 is expected to lie between 5 and 7 percent.

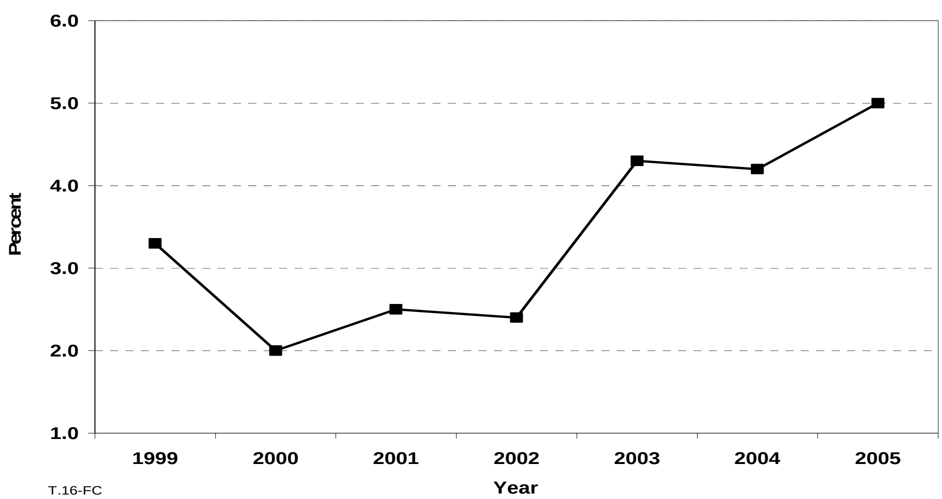

Figure 22. Percentage of Steers and Heifers Procured Through Forward Contracts by the Four Largest Steer and Heifer Slaughter Firms

The term "marketing agreements" includes a variety of agreements that establish an ongoing relationship for trading multiple lots of cattle rather than negotiating single lots of cattle. In these arrangements the seller agrees to deliver cattle to the packer at a future date, with the price generally being determined by some type of formula pricing mechanism. The price is often based on the current cash market at the time of delivery with premiums or discounts determined by evaluation of carcass characteristics. Many of these arrangements commit livestock through an alliance or cooperative of some type.

Of the three categories of committed procurement, marketing agreements account for the largest proportion of total committed procurement. The percentage of fed cattle procured through the use of marketing agreements by the four largest steer and heifer slaughter firms fell in 2003 and 2004, and increased very little in 2005 (Figure 23). GIPSA expects that marketing agreements will account for between 23 and 25 percent of total procurement in 2006 by the four largest steer and heifer slaughter firms.

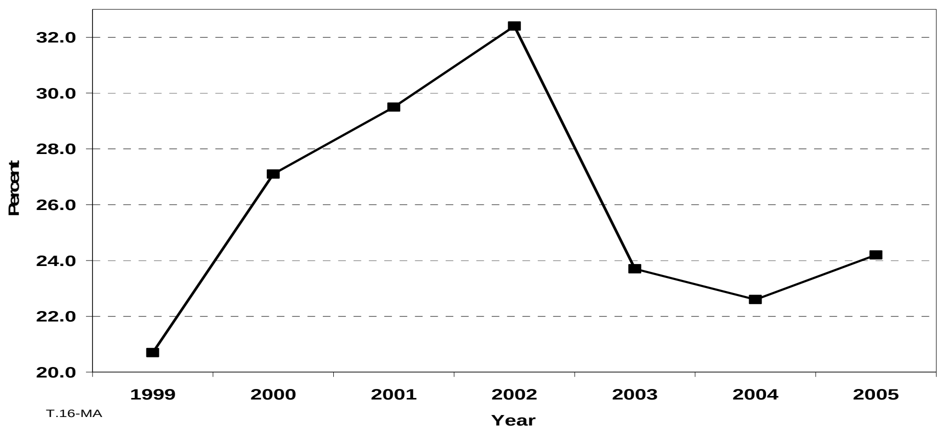

Figure 23. Percentage of Steers and Heifers Procured Through Marketing Agreements for the Four Largest Steer and Heifer Slaughter Firms

Since marketing agreements account for a large portion of total committed procurement, the trend in the percentage of fed cattle procured through the use of all methods of committed procurement closely resembles that for marketing agreements (Figure 24). Total committed procurement (packer feeding, forward contracts, and marketing agreements) by the four largest steer and heifer slaughter firms in 2006 is expected to lie between 33 and 39 percent of those four firms' total procurement for slaughter.

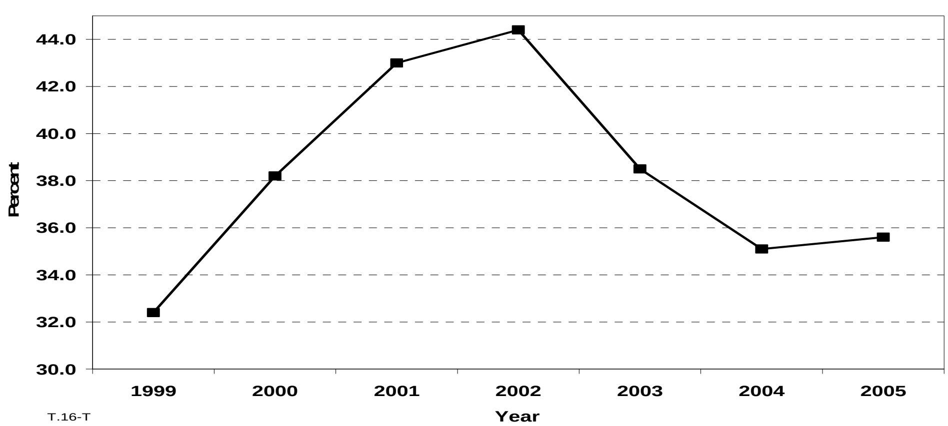

Figure 24. Percentage of Steers and Heifers Procured Through all Methods of Committed Procurement for the Four Largest Steer and Heifer Slaughter Firms

Importance of Commission Firms

Although the volume of cattle handled by commission firms has trended downward over the last 10 years, these firms continue to play an important role in the cattle industry (Figure 25). The expected volume of cattle marketed through firms selling on a commission basis in 2006 is between 37 million and 39 million head.

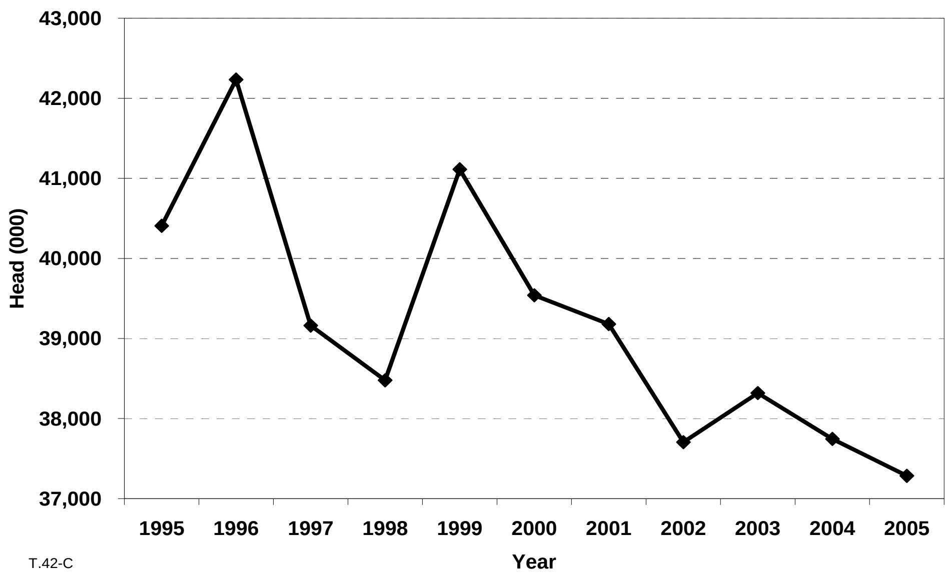

Figure 25. Volume of Cattle (Slaughter and non-slaughter) Marketed Through Firms Selling on a Commission Basis

C. Hog Industry

Major Acquisitions, Divestitures, and Plant Closures in the Hog Industry

Smithfield Foods closed the Smithfield Packing plant in Smithfield, VA, in 2006 and in September announced intent to purchase Premium Standard Farms. Triumph Foods opened a slaughter plant in St Joseph, MO, in 2006 and later that year expanded production by adding a second 8-hour shift.

Carcass-Basis Purchases

Carcass-basis purchases of hogs have stabilized at high levels in recent years, gradually increasing from 70,000 head in 1999 to 80,000 head in 2005, after increasing more rapidly from 1995 through 1999 (Figure 26). With continuation of long-term trends, carcass-basis hog purchases for 2006 would range between 76.3 million head and 93.4 million head. However, given the stability since 1999, GIPSA expects that the number will be near the bottom end of this range.

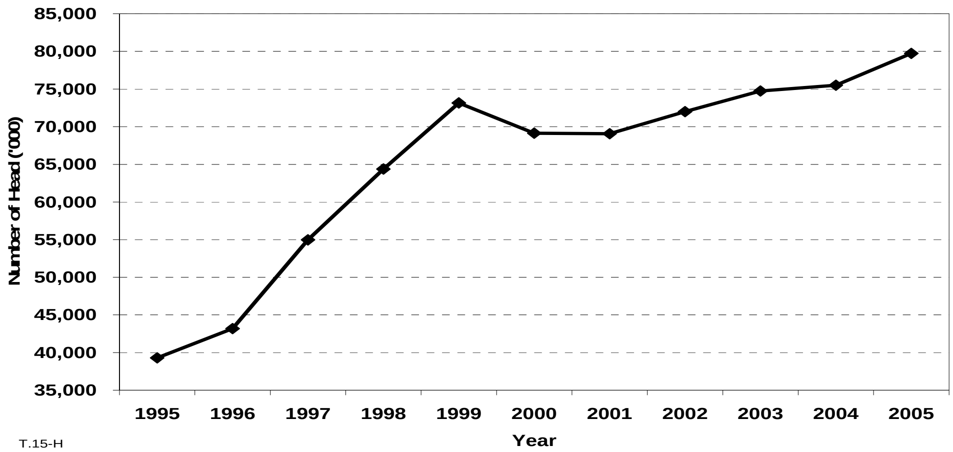

Figure 26. Hog Purchases on a Carcass Basis

Procurement Methods

Production contracts and marketing contracts continue to be the most common methods used by packers to procure hogs. In production contracts, contractors provide hogs, retain ownership, and contract with growers to care for and raise hogs according to contract standards. In marketing contracts, producers who own the hogs contract with a packer to sell them under agreed-upon terms. Although these methods continue to evolve, GIPSA has not observed major changes in use of production and marketing contracts during 2006.[17]

Importance of Commission Firms

As with cattle, the volume of hogs marketed through firms selling on commission has declined over time but has stabilized in recent years (Figure 27). The level at which the industry has stabilized is considerably lower for hogs than for cattle. The volume of hogs marketed through commission firms for 2006 could range between 3.7 million and 7.4 million head, but is expected to remain at the upper end of the range.

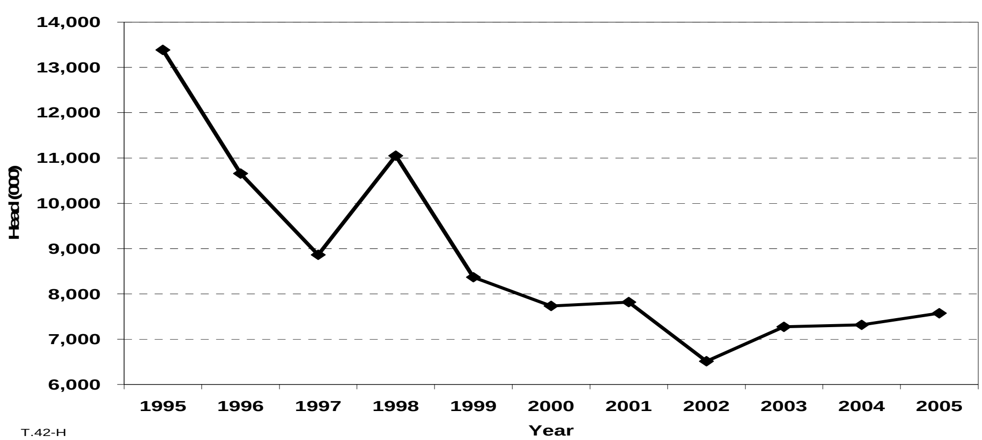

Figure 27. Volume of Hogs Marketed Through Firms Selling on Commission

[17] GIPSA provided a more comprehensive description of hog production contracting and marketing agreements in *Assessment of the Cattle, Hog, Poultry, and Sheep Industries 2003 Report*, October 2004, http://archive.gipsa.usda.gov/pubs/packers/assessment02-03.pdf.

D. Sheep and Lamb Industry

Major Acquisitions, Divestitures, and Plant Closures in the Sheep and Lamb Industry

Producers Lamb & Goat, L.P., which had started business as a new firm in 2005 by re-opening a closed plant previously operated by Rancher's Lamb in San Angelo, TX, ceased operations in the spring of 2006.

Carcass-Basis Purchases

The volume of sheep purchased on a carcass basis has fallen by half since 1995, although with considerable year-to-year variation (Figure 28). The volume was stable from 2003 to 2004 and is expected to range between 1.1 and 1.3 million head in 2006.

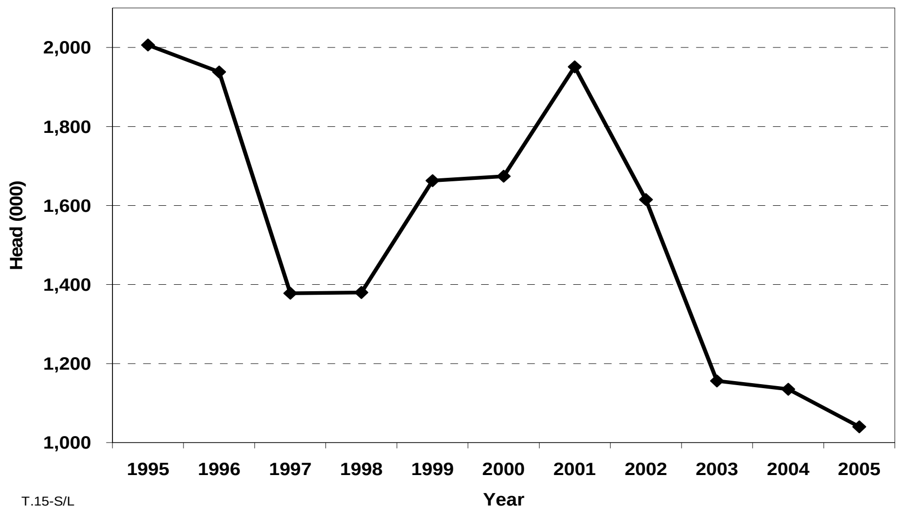

Figure 28. Sheep Purchased on a Carcass Basis

Procurement Methods

Procurement methods used in the purchase of lambs for slaughter are similar to those used for other species and include purchase in spot markets, use of marketing agreements, use of various other forms of advance sales contracts, and packer feeding. Some lamb producers who feed their own lambs market their lambs through a lamb feeding operation or feedlot that has a supply contract agreement with a packer. There are also business arrangements where individuals who have a financial interest in large lamb packing companies also have lamb feeding operations and supply lambs to the packing company. Some producers participate in cooperatives, associations, or pools of lamb producers to collectively market their lambs and lamb products. As with other species, the various procurement methods used for lambs continue to evolve but GIPSA has not observed major changes in the methods during 2006.[18]

[18] GIPSA provided a more comprehensive description of sheep and lamb procurement methods in *Assessment of the Cattle, Hog, Poultry, and Sheep Industries 2003 Report*, October 2004, http://archive.gipsa.usda.gov/pubs/packers/assessment02-03.pdf.

Use of Commission Firms

Use of commission firms for sale of sheep has followed a downward trend similar to the trends for cattle and hogs (Figure 29). The anticipated number of sheep and lambs marketed through firms selling on commission for 2006 is between 3.2 million and 3.5 million head.

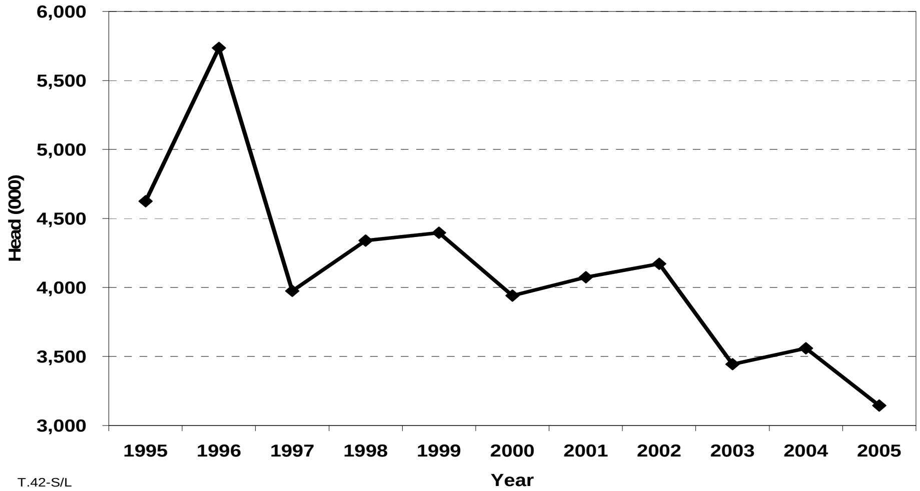

Figure 29. Volume of Sheep Marketed Through Firms Selling on a Commission Basis

E. Poultry Industry

Major Acquisitions, Divestitures, and Plant Closures in the Poultry Industry

In 2006, Koch Foods, Inc. purchased Alabama-based broiler processor Sylvest Farms, Inc. That same year ConAgra Foods sold its turkey operations to Carolina Turkeys, and Carolina Turkeys then created a new company, Butterball LLC, while Pilgrim's Pride Corporation purchased Gold Kist Inc.

Procurement Methods

The poultry industry has been almost completely vertically integrated for several decades, and the use of spot markets for poultry is virtually nonexistent. Live poultry production is coordinated through production (grow-out) contracts, company-owned farms, and marketing agreements. With production contracts, the integrator (poultry slaughter and processing firm) owns the birds and the feed and provides them to the contract grower. The growers' compensation is based on the services the grower provides, including labor, housing, water, and in some cases other purchased inputs. With marketing agreements, growers retain ownership of both the birds and the feed, and growers' compensation is determined by the difference between the stipulated price of the finished product and the cost of producing it. There are no marketing agreements in broiler production, but they are used in turkey production. GIPSA did not observe any major changes in the basic industry structure and procurement methods used in the poultry industry in 2006.[19]

[19] GIPSA provided a more complete description of industry structure and coordination methods for poultry in *Assessment of the Cattle, Hog, Poultry, and Sheep Industries 2003 Report*, October 2004, http://archive.gipsa.usda.gov/pubs/packers/assessment02-03.pdf

Changing Production Technology

Genetic and nutritional improvements in broiler production have increased the efficiency of broiler meat production, but reaching the full genetic and growth potential of broilers requires a controlled environment in the broiler house. Housing construction, equipment, and operating methods affect the efficiency of broiler houses. Contract growers continue to face rapidly rising energy costs. Some older houses that are currently structurally capable of growing birds are rapidly becoming “energy obsolete” because of high operating costs. Although modernization of broiler houses may benefit some growers by improving their productivity, the modernization cost of upgrading broiler houses will most likely fall directly on the growers with a possible net negative effect on the cash flow of some broiler operations.

III: Operations or Activities in the Livestock and Poultry Industries That Raise Concerns Under the Packers and Stockyards Act

Adequacy of Bonds for Regulated Entities

The Packers and Stockyards Act (P&S Act) provides that the Secretary may require that packers, market agencies, and dealers have a reasonable bond (7USC§204). The regulations under the P&S Act prescribe bond requirements and bonding formulas for packers purchasing over $500,000 of livestock annually; market agencies buying or selling on commission or acting as clearing agencies; and dealers. These entities must maintain a bond or bond equivalent to protect livestock sellers. The regulation that establishes formulas for computing required bond amounts was last modified in 1983. These bonding formulas do not always provide full coverage to livestock sellers when bonded entities fail financially. Between FY 2000 and FY 2005, sellers who were not paid as a result of financial failures by market agencies selling on commission recovered 31–78 percent of their total claim amounts each year. During the same period, the recovery rate was 8-28 percent for dealers that failed financially. Members of the livestock industry have raised concerns about the adequacy of bonds.

GIPSA Actions: GIPSA implemented a Bonding Task Force, to evaluate and recommend an appropriate course of action on current bond regulations to increase bond recoveries. The Bonding Task Force completed its evaluation of GIPSA's bonding program and submitted recommendations to GIPSA managers for their review and approval. The Task Force identified specific conditions they thought lead to the financial failure of a firm or create financial risk factors that increase the likelihood of financial failure. Risk factors were identified for each type of entity (livestock dealer, auction market, or packer) subject to the P&S Act. The task force also proposed using these conditions to make heuristic assessments of firms for required bond amounts. GIPSA extended the approach taken by the task force, using methods that the insurance and financial industries use to calculate "credit ratings," to calculate risk factors that can be used to identify firms most likely to fail. Those risk scores can then serve as criteria to set bond rates. The methods used to estimate this "credit" score have been submitted to independent review for additional assessment. GIPSA is prioritizing its audits based on the preliminary risk assessment to also evaluate the method and potential refinements. GIPSA is also exploring potential bond substitutes such as an indemnity fund.

Delayed Receipt of Annual Reports

Regulations issued under the authority of the P&S Act require that every packer, live poultry dealer, stockyard owner, market agency, and dealer, unless exempt, file a report annually with GIPSA (9 CFR 201.97).[20] Entities that operate on a calendar-year basis generally must file their report not later than April 15. Those that operate on a fiscal-year basis must file their report not later than 90 days after the close of their fiscal year. GIPSA frequently grants extensions of up to 90 days to firms that report difficulty in completing reports by the normal due date. After receiving the reports, GIPSA conducts a report review to ensure data accuracy and completeness. During this process, GIPSA frequently finds it necessary to contact the reporting firms for clarifications or corrections. As a result of delays in receiving reports and the length of time necessary to ensure data are complete and correct, bonding requirements often lag behind actual business volumes, and final data on industry structure and practices are generally not available for public release until significant time has elapsed after the end of a given reporting year.

[20] As noted in Section I of this report, since 1977 packers that purchase less than $500,000 of livestock on an annual basis have been exempt from filing an annual report with GIPSA.

Additionally, the lack of completeness requires knowledgeable auditors and economists, rather than data entry clerks, to interpret the reports for data entry into electronic systems, substantially increasing costs of data processing for GIPSA.

GIPSA Actions: Although the P&S Act and regulations under the P&S Act require that subject firms file reports, GIPSA has historically relied heavily on voluntary compliance, including granting extensions and working with respondents to correct and complete reports. GIPSA is reviewing alternatives for improving the timeliness and efficiency of Annual Report collection and processing.

Integrator Requirements To Upgrade Broiler Housing Types

A range of poultry housing technologies is currently in use in the broiler industry. Older conventional houses are generally equipped with fans for circulating air and have clear side curtains on the house for ventilation. Older conventional houses are being replaced with broiler houses that use technologies (called tunnel ventilated and cool cell) to enhance the grower's ability to control the birds' environment. This control allows growers to produce birds using less feed with lower chick mortality rates and, in turn, reduces the integrator's costs of growing broilers. These new houses may also benefit growers by allowing integrators to place more birds per square foot in houses in the summer, increasing output per square foot of house and thus payments to growers.

Adoption of the new technologies requires the grower to make substantial investments in housing improvements or build entirely new broiler houses. In order to encourage growers to adopt these technologies, integrators often offer a higher base pay or a base pay adjustment to growers producing in houses using the improved technologies. These practices may result in different growers receiving different base compensation per pound for producing the same size broiler. Moreover, the growers using improved housing technologies have an advantage in competing with growers using older technologies under the relative performance payment systems used in many broiler contracts.[21] In addition, more favorable contract terms, such as longer contract length, may be offered to growers using the improved housing technologies but not to growers who retain conventional housing.

GIPSA Actions: Differences in contracts or payments are not prohibited by the Packers and Stockyards Act unless they constitute engaging in or using an unfair or unjustly discriminatory or deceptive practice or device, in commerce, or unless they constitute a making or giving, in commerce, of an undue or unreasonable preference or advantage, or result in undue or unreasonable prejudice or disadvantage as between persons or localities. Integrators may have valid business reasons for requiring upgrades to broiler houses, and growers may benefit from increased productivity and reduced growing costs. To constitute a violation of the P&S Act such practices must be shown to result in an adverse impact on competition or that they are likely to produce an adverse competitive impact. Specific examples of practices that potentially could be deemed unfair include:

- Live Poultry Dealers may contract with some of their poultry growers with less advantageous contract terms than those offered their other poultry growers without a justifiable and reasonable business reason.

- Live Poultry Dealers may enter into poultry growing arrangements with poultry growers and subsequently change the terms of the arrangement in a manner that disadvantages growers in follow-on contracts; and

[21] Under relative performance payment systems, a group of growers receives birds for feeding simultaneously, and payment to an individual grower is in part determined by the cost per pound to the integrator for birds grown by that grower relative to the cost per pound for birds grown by other growers in the group.

- Live Poultry Dealers may abuse their negotiating power by requiring poultry growers already under contract to make significant capital improvements in their operations as a condition for continued placement of chicks, for premium payments, or other benefits, with no guarantee that the growers will continue to be offered contracts or placements of chicks for a period long enough to recover their investment.

GIPSA is actively monitoring developments in this area of concern to determine whether action is warranted, and if so, the nature of the action.

Structural Change and Increased Coordination in Meat Packing

Concerns about increases in concentration and related changes in industry structure, and the perception that these changes are inherently anticompetitive, continue to be among the leading, if not the leading, criticisms of economic efficiency within the livestock and meat industry. Although concentration has stabilized somewhat in recent years in some segments of the livestock and meat industry, continued mergers and acquisitions, plant closings, and plans of leading firms to build new plants all suggest concentration and structural change will continue to be a source of concern. With increasing concentration (share of total market or production at a given stage) there has also been an increase in consolidation of control by individual firms. Consolidation refers to changes that often reduce the number of firms but also increase individual firms' coordination and control of activities across stages of the production and marketing system. Increased cross-stage coordination and control are often associated with use of production contracts, marketing contracts and outright ownership of production operations at another stage in the production and marketing system.

GIPSA Actions: GIPSA has administrative authority in the livestock sector under the P&S Act and acts to ensure that these markets operate competitively. GIPSA does not have authority over mergers and acquisitions but often cooperates with and lends its industry expertise to the Department of Justice (DOJ) in DOJ's review of mergers in the livestock, meatpacking, and poultry industries.

Concentration, vertical integration, and other changes in industry structure may lead GIPSA to focus more attention on particular firms or behavior. However, these industry-wide changes, in and of themselves, are not prohibited by the P&S Act. It is important to note that many of the changes in coordination associated with industry consolidation may also provide for improved performance of the industry. For example, structural change can lead to downstream market alliances to facilitate penetration of retail markets with branded products. Merger and acquisition activity in recent years has increased the market shares of firms with management expertise in supply channel management across channels, including value-added processing and branded product retailing. The capability to increase branded retail products depends on high levels of input supply management to achieve uniform and high levels of packing plant utilization, and production of carcasses that can be processed into uniform retail products.

In fiscal year 2003, GIPSA received $4.5 million in appropriations for a broad study of marketing practices in the entire livestock and red meat industries from farmers to retailers, food service firms, and exporters. The study is addressing many questions and concerns that have been raised about changes in the structure and business practices in the livestock and meat industries. An award to the Research Triangle Institute (RTI) to conduct the study was announced on June 18, 2004. RTI provided an interim study report, which describes alternative marketing arrangements and their terms, and reasons that industry participants give for using alternative arrangements, on July 28, 2005. The second and final report was submitted to GIPSA in January of 2007. That report describes analysis of prices, costs, efficiency, livestock and meat quality, and of risk levels associated with alternative arrangements, and assesses the implications of potential future changes in the use of various types of marketing arrangements.

Increased consolidation calls for increased vigilance by the P&S program due to the increasingly complex nature of new marketing and procurement practices, and to the arguably increased potential for anticompetitive behavior. GIPSA will continue to evaluate complaints alleging anticompetitive behavior, including those that arise from concerns about high levels of concentration, such as attempted restriction of competition, failure to compete, buyers acting in concert to purchase livestock, apportionment of territory, price discrimination, price manipulation, and predatory pricing. While GIPSA is not able to direct the form of continuing consolidation and increased coordination, it can and will play a role in helping to ensure that the marketing system operates in a competitive manner to the maximum potential benefit of the industry members and also to the benefit of U.S. food consumers.

U.S. DEPARTMENT OF AGRICULTURE GRAIN INSPECTION, PACKERS AND STOCKYARDS ADMINISTRATION PACKERS AND STOCKYARDS PROGRAM	**ANNUAL ASSESSMENT REPORT COMMENT FORM**

Thank you for your interest in GIPSA's Report, *Assessment of the Cattle, Hog, Poultry, and Sheep Industries*. As a means of both improving the publication and gaining insight on the issues arising in the cattle, hog, poultry, and sheep industries we invite your comments and ideas for future publications.

1. Please indicate which area of the report you found to be the most useful (please check one box):

❑ General Economic State ❑ Changing Business Practices ❑ Operations or Activities that Raise Concerns

2. Please indicate which area of the report you found to be the least useful (please check one box):

❑ General Economic State ❑ Changing Business Practices ❑ Operations or Activities that Raise Concerns

3. Please rate your overall satisfaction with the report (please check one box):

❑ Excellent ❑ Good ❑ Average ❑ Poor ❑ Very Poor

4. Please identify each industry you are involved with (please check all that apply):

❑ Cattle ❑ Hog ❑ Poultry ❑ Sheep ❑ Other: ____________

5. Please identify your primary role(s) in the industry:

❑ Producer ❑ Processor ❑ Packer ❑ Stockyard ❑ Feedlot ❑ Other: ____________

6. **What changing business practices have you witnessed in the livestock, poultry, or meat industry?**

7. **What concerns in your industry would you like us to address in future publications?**

8. Additional comments or suggestions:

9. If you would like to provide your contact information, please do so below.

Name: ____
Last Name First Name

Business Name (if applicable): ____

Mailing Address:____
Street

____
City/Town State Zip Code

E-mail Address: ____

Telephone Number: (including area code) ___________________________________

Thank you for your response to this questionnaire.

Please submit the completed questionnaire using one of the following methods:

1) Mail the document to the following address:
   Grain Inspection, Packers and Stockyards Administration
   Packers and Stockyards Program, Assessment Report
   1400 Independence Ave. SW, Stop 3647
   Washington, DC 20250-3647
2) E-mail the form to: pspiad.gipsa@usda.gov with the subject line as "Assessment Report," or
3) Fax the form to: (202) 690-1266, ATTN: Assessment Report Coordinator.

Instructions for Completing
The Annual Assessment Report Comment Form P&SP-6020

You may use any of the following methods to submit the form:

1) Mail the document to the following address:
   USDA Grain Inspection, Packers and Stockyards Administration
   Packers and Stockyards Program, Assessment Report
   1400 Independence Ave. SW, Stop 3647
   Washington, DC 20250-3647
2) E-mail the form to: pspiad@usda.gov, with the subject line as "Assessment Report," or
3) Fax the form to: (202) 690-1266, ATTN: Assessment Report Coordinator.

Line No.	Subject	Instruction
1.	Most Useful Part of the Report	Check the appropriate box to indicate which part of the report you found most useful.
2.	Least Useful Part of the Report	Check the appropriate box to indicate which part of the report you found least useful.
3.	Overall Satisfaction	Check the appropriate box to indicate your overall opinion of the report.
4.	Industry Segment	Check the appropriate box(es) to indicate each livestock category you work with.
5.	Industry Roles	Check the appropriate box(es) to indicate your primary roles in the livestock, poultry, or meat industries.
6.	Changing Business Practices	Enter a description of the changing business practices that you noticed during the past year.
7.	Industry Concerns	Enter a description of the concerns you experienced in the livestock, poultry, or meat industries over the past year that you would like us to address in future publications.
8.	Additional Comments	Enter any additional comments that will help to improve future annual assessment reports.
9.	Contact Information	Enter your name, business name, mailing address, e-mail address, and telephone number.