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A Comparison of Carcass Value Pricing Systems of Southeast Hog Plants

David Kenyon, John McKissick, and Kelly Zering*

Carcass value pricing systems of six Southeast U.S. plants were analyzed. All plants measured hot carcass traits with a Fat-O-Meater. Base live prices were derived by formula from various combinations of Midwest prices. One plant starts with a base carcass price. Standard yield determination varies substantially across plants. Base carcass price is base live price divided by standard yield except for the plant starting with carcass price. All plants but one apply premiums and discounts to base carcass price. One plant makes adjustments to live price. The desired carcass weight is 172 to 194 pounds. Discounts are larger for lighter weights than for equivalent increases in heavier weights. Backfat premiums are given by all plants starting at 25 mm or less. Loin depth premiums and discounts are relatively small compared to weight sort and backfat adjustments. In January 1995, the base carcass price across plants varied from \$50.68 to \$52.93 cwt. After adjusting for premiums and discounts, the adjusted carcass price range was \$49.97 to \$52.73 cwt. for a typical carcass. The price spreads among plants were greater for light compared to heavy carcasses. The price differences between some plants is greater than transportation costs. The price difference between a typical and ideal carcass is approximately \$14. The carcass value pricing system is sending producers a strong signal to produce larger, uniform, leaner, and well-muscled hogs. Given the wide diversity of methods used in determining live price, carcass price, yield, and premiums and discounts associated with weight, backfat, and loin depth, it is difficult for producers to compare prices received from the six systems.

Introduction

The pricing system for swine at the producer-packer interface is undergoing rapid change. In the past, producers were paid for weight without much emphasis on leanness. In recent years, in response to consumer demands for less fat, packers have introduced carcass value pricing systems that pay for meat, and heavily discount excess fat. Schroeder reports that the percentage of hogs sold on a carcass value basis increased from 14% in 1984 to 25% in 1990. The *Pork Chain Quality Audit* conducted by NPPC in 1993 indicates that 74% of all hogs were procured on a grade and yield basis. Hence, from 1990 to 1993, carcass value pricing by packers has become the predominant pricing system.

The rapid change to carcass value pricing has caused much concern among producers. The change has occurred at a much more rapid pace than the flow of information about how

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these pricing systems operate. Without a clear understanding of the various premiums and discounts for fat, muscle, and weight, it is difficult for producers to make informed production and marketing decisions. The purpose of this paper is to compare and contrast the carcass value pricing systems of six large packing plants in the Southeast. These comparisons should be of interest to producers and packers within the region as they try to adjust to these new pricing mechanisms.

Method

All of the large packing plants (more than 1 million head slaughtered per year) in the Southeast region of the U.S. were contacted. The region includes Pennsylvania, Virginia, Kentucky, Tennessee, Mississippi, Alabama, Georgia, Florida, South Carolina, and North Carolina. Several plants outside this region which purchase hogs from the region were also contacted. Each plant was asked to provide detailed information on their carcass value pricing system. Most of the plants do not have informational packets designed for producers that explain their pricing system in any detail. Instead, they prefer to discuss their pricing system individually with each producer. Several of the plants within the region decided not to provide detailed information for this study. Others provided information with the stipulation that they not be identified. Kill sheets from producers within the region were solicited to: 1) determine how some systems operated, and 2) verify the procedures of the other pricing systems. Of the six plants included in this study, each plant either explained their system in detail or we were able to determine how a plant's system operates by using individual carcass data from kill sheets.

Five of the six plants are located within the region. These five plants have the capacity to slaughter approximately 17 million hogs per year. In 1993, the region produced 16.2 million hogs. Regional production has grown rapidly since 1993 and continues to grow. In 1993, these plants plus other smaller plants had adequate capacity to process the hogs produced. In fact, several of the plants import substantial quantities of hogs from outside the region, mostly from the eastern corn belt.

Basic Features

Table 1 describes the basic features of each pricing system. Each pricing system has four or five common components. These included base live and carcass price and premiums and discounts for backfat, loin depth and a weight sort. Five of the six plants tie their base live price (BLP) to a Midwest market price reported at midday. Only one plant is attempting to determine a local market price, but this plant guarantees their price will not be lower than selected Midwest prices.

Five of the plants convert the BLP to a base carcass price (BCP) using a standard yield. Standard yields for some plants are set and change infrequently, while standard yields at other

plants are based on the average of all hogs processed the previous quarter or the individual producers yield on a selected number of previous loads.

All of the plants measure backfat and loin depth using a Fat-O-Meater (FOM) on hot carcasses. Five plants measure at the 10th rib and one at the last rib. Four plants use the FOM readings for backfat and loin depth to compute a lean cut percentage. The premium/discount schedule by percent lean is used to adjust the carcass price. One plant uses percent lean to adjust live prices. Two plants use the backfat measurement directly in determining premium and discounts for fat.

Loin depth is treated similarly by the plants using percent lean formulas. One plant using the percent lean formula gives an additional premium if the load average exceeds a certain level. One plant does not use loin depth in determining adjusted carcass price.

Each plant has a weight sort discount schedule based on carcass weight. Several plants pay no premiums for carcasses under 160 pounds. One plant uses carcass weights to determine discounts, but the discounts were applied to live price. Several plants have sliding weight sort schedules depending upon backfat measurements. For these plants, leaner hogs can be heavier without receiving a weight discount.

Review of the six systems indicates there is great diversity. This diversity makes it difficult for producers to compare prices between plants. In an attempt to compare these six systems, we collected market prices during the month of January 1995 for each system. We then used the standard yields, premiums, and discounts for backfat, loin depth, and the weight sort in an attempt to compare the systems. Since each system is different, in some instances we had to assume an average hog to permit comparison across systems. Whenever this was necessary, we used the characteristics of a typical hog in the 1993 NPPC *Pork Chain Quality Audit* report. The typical hog weighs 247 live, has a 73.4 percent yield, a carcass weight of 181 pounds, 1.1 inch (28 mm) of backfat, and a loin eye depth of 47 mm or approximately 4.8 square inches of loin eye. The loin depth and area measurements are based on USDA's base level for lean value buying programs. The NPPC study did not report actual loin depth measurements.

Using January 1995 prices, the described systems, and the average hog characteristics where necessary, we compared live price, carcass price, and backfat, loin depth, and weight sort premiums for the six systems. A comparison by attribute follows with observations about similarities and differences. To conduct these comparisons, a constant level of other attributes was assumed. In fact, some of these attributes are correlated--e.g. backfat and loin depth generally increase with carcass weight. After each component is discussed, the five components are combined to determine carcass prices for carcasses with various characteristics.

Base Live Price

Figure 1 contains the daily live hog prices paid during January 1995. The average price by plant is reported in Table 2. The range in average price by plant is \$38.09 to \$38.85 cwt., a relatively small range given the wide array of systems for determining the BLP. The most common base price is Iowa/Southern Minnesota plant prices. Four of the plants use this price only or in combination with other prices to determine the BLP. All the plants except Plant F use the live market as a base for determining their carcass price. Plant F starts with a carcass price. The Plant F live prices are based on an assumed carcass yield of 73.4 percent.

Plant E is the only plant attempting to determine an independent local live cash market price. In January 1995, Plant E had the lowest price in 12 out of the 21 days, and the second lowest average price. Their price remained unchanged from day to day more frequently than any of the other plants.

The prices shown do not include any premiums paid to large producers. Plant C is known to pay very large producers a premium above the price reported, but they will not indicate the magnitude of their premium. Their premium is justified on the basis that the large producers can supply hogs on short notice to fill up daily kills. Other plants in the study may be paying premiums above the base price, but we were not able to obtain any details on these premiums.

Base Carcass Price

Figure 2 contains the daily base carcass price (BCP) in January 1995. The average BCP by plant is reported in Table 2. The range in BCP is from \$50.68 to \$52.93 cwt., a spread of \$2.25 cwt. The BCP spread between plants is almost three times the live price spread. The wider spread is because Plant C uses a standard yield of 75.5 percent, fully 1.0 percent more than any of the other plants, and 2.0 percent more than Plants D and E. If Plant C is removed from the comparisons, the spread in BCP is similar to the spread in BLP. Since Plant C is known to pay premiums to large producers, they would need a live premium of approximately .90 \$/cwt. to generate a BCP similar to Plants A and E.

Weight Sort Discount. Consumers want consistency in the products they buy at retail. This is especially true for hotels, restaurants, and institutions. As a result, packers place large discounts on carcasses that do not produce the size of cuts they desire. Because light hogs produce cuts that are too small and increase processing costs per cwt., packers discount light carcasses heavily. In fact, Plants A and B pay no premiums based on backfat or loin depth for carcass that weigh less than 160 pounds. In Figure 3, no carcass weighs less than 150 pounds (204 pounds liveweight) are shown, since few carcasses weigh less than 150 pounds according to the NPPC study. However, the discounts under 150 pounds rise rapidly to \$10-30 cwt. for each of the plants.

Figure 3 indicates that the desired carcass weight range is 172-194 pounds. The weight sorts are for hogs with 1.1 inches or 28 mm of backfat. None of the plants discount in this weight range. Plants D, C, A do not discount until carcass weight reaches 205, 208, and 210 pounds, respectively. Plants B, C, and E discount \$6 cwt. or less up to 260 carcass pounds (\approx 354 pounds live). Plants A, D, and F start discounting more heavily at 240 carcass pounds.

Plant C adjusts the weight sort according to backfat depth for heavier hogs but not for lighter hogs. If backfat is 25 mm (.98 inch) or less, carcasses up to 222 pounds receive no discount. In contrast, if backfat is 31 mm (1.22 in) or greater, weight sort discounts begin at 187 carcass pounds.

Backfat Premiums and Discounts. Comparing backfat premiums and discounts across plants required a number of assumptions. Plants A, B, D, and E determine premiums and discounts based on percent lean. The percent lean formulas are different across plants but each includes both backfat and loin depth. To analyze the impact of backfat on price, the loin depth was held constant at 47 mm. Therefore, in the analysis to follow, backfat and loin depth are assumed to be uncorrelated. Another difficulty is that Plant C calculates discounts as a percent of base carcass price. For this comparison, the January 1995 base price is used. Plant C would have larger premiums and discounts at higher base prices. The other difficulty in comparing is that Plants A to E measure at the 10th rib while Plant F measures at the last rib. According to USDA, the last rib measures .15 inch (3.81 mm) more backfat than the 10th rib. Figure 4 presents backfat at the 10th rib. Plant F calculations have been adjusted to 10th rib measurements.

All the plants either do not discount or pay premiums for hogs with less than 25 mm of backfat. At 15 mm, all the plants are paying premiums of \$2.40 - \$4.50 per cwt. Plants C, E, and F pay the highest premium at 15 mm of backfat. For carcasses with a backfat of 35 mm, the discounts range from \$-2.72 to \$-5.68 cwt. Plants C and E have the largest discounts for hogs with more than 37 mm of backfat. Plant C is the most sensitive to backfat measurements, paying larger premiums for lean hogs and larger discounts for fat hogs. Since Plant C premiums and discounts for backfat are a percent of base carcass price, these premiums and discounts would be even larger at higher hog prices.

Plant B appears to be the least sensitive to backfat measurements. For hogs with less than 30 mm of backfat, they have the smallest premiums. And for hogs with backfat greater than 38 mm, they have the smallest discounts.

All the plants except E compute a carcass price for each carcass. Plant E is very different. The premiums and discounts are based on the average of the last four loads for each producer. The premium or discount is computed based on the average backfat for the whole load. The premium or discount is then added to the base live price for the whole load. Hence, although Plant E has generally the largest premiums and the smallest discounts over the backfat range 15 to 36 mm, it would be much more difficult to lower the average backfat of a load compared to a few individual hogs. It appears that producers with slightly fat hogs (> 27 mm backfat) would receive smaller discounts at Plant E than any of the other plants.

As with weight sort, increases in backfat receive a discount about twice as large as a similar decrease in backfat. Packers are sending a very strong message in terms of producing leaner hogs.

Loin Depth. Figure 5 contains premiums and discounts for loin depth assuming backfat of 28 mm or 1.1 inch. Premiums and discounts for loin depth have the least impact on carcass price. The discounts and premiums range from \$-2.40 to \$+3.50 a cwt. Loin depth is not considered by Plant F. For all but one of the plants, premiums and discounts remain constant over considerable ranges of loin depth. For most of the plants, the desired loin depth is 55 mm or larger, although Plants D and E begin paying premiums at 48 mm and 52 mm respectively. Unlike weight sort and backfat, the premium and discount schedule for loin depth is fairly symmetrical paying comparable adjustments for small versus large loin eyes.

Adjusted Carcass Price

The critical price for producers is the carcass price after adjustment for backfat, loin depth, and weight sort. The average carcass price for a load of hogs depends upon the distribution of weights, backfat, loin depth, and their interrelationships. Without detailed information on these attribute distributions by load, the only alternative is to compare the price for several typical carcasses. We have defined four such carcasses using the NPPC *Pork Chain Quality Audit* data as a base. We have also used some relationships between carcass weight, backfat, and loin depth reported by Zering for hogs from the North Carolina Swine Development Center. The ideal hog is based on some discussions with large producers and packers in the region. The four carcass types are described as typical, light, heavy, and ideal. The description of each carcass is reported in Table 3.

Typical Carcass. The typical carcass price range is \$2.76 cwt., with four plants showing a price difference of \$1.90 cwt. or more (Table 4). Plant D has the highest price, primarily because it had a relatively high base price (both live and carcass) and applied no discounts to the typical carcass. Plants A and B discounted the typical carcass for too much fat and for a relatively small loin eye. A 1 or 2 mm favorable change in either attribute would have resulted in no discounts by plants A and B. Plant F discounted the average carcass for excess fat. Plant C had the lowest price because of the higher standard yield and resultant lower base carcass price compared to the other five plants.

Light Carcass. The light carcass (Table 4) receives a substantial weight sort discount by each plant, ranging from \$-3.41 to \$-6.00 per cwt. Plants A and B pay no premiums for leanness when the carcass weight is less than 160 pounds. Plants C, D, and E pay a \$2.48 to \$2.72 cwt. premium for leanness. Plant E pays the highest price. The spread between lowest and highest price is much larger for the light carcass compared to the typical carcass (\$5.31 vs. \$2.76, respectively). The average discount across all plants is \$2.32 per cwt.

Heavy Carcass. The heavy carcass (Table 4) receives an average discount of \$3.39 cwt. compared to the typical carcass, but the additional weight makes it worth more than the

average carcass, \$98.04 versus \$93.29. Plants B, D, E, and F apply a weight discount. The backfat discount ranges from \$-2.00 to \$-5.68 per cwt. Plant C discounts backfat more than the other plants. Plant D discounts backfat the least, and pays the highest price. The spread from lowest to highest price is \$3.22 per cwt. Prices are more consistent across firms for the heavy versus the light carcass.

Ideal Carcass. The ideal carcass receives a substantial premium for leanness and a large loin eye. Plant C gives the largest premium of \$4.20 per cwt., while plants A and B only give premiums of \$1.80-2.40 per cwt. (Table 4). The average premium is \$4.05 per cwt. compared to the typical carcass. In terms of value, the ideal carcass is worth \$14.56 more than the typical carcass.

Plant D pays the highest average price of \$52.23 per cwt. across all four carcass types (Table 5). It pays the highest price for each carcass type except the light carcass. Plant E pays the highest price for light carcasses. Plants A, B, and C consistently pay lower prices across all carcass types. The difference in price between Plant D and Plants A, B, and C is approximately \$2.25-\$2.50 per cwt. on a carcass basis. For a typical carcass of 170 to 190 pounds, this difference amounts to \$4.00-\$5.00 per carcass.

Implications and Observations

Plant D prices are higher primarily because they start with a high base live and carcass price, and they pay good premiums for leanness and large loin eyes. Plants A and B start with good base prices, but their adjustments for percent lean are less than most of the other plants, with the result that their average prices are lower than the other plants. Plant C starts with an average live price, but the higher standard yield of 75.5 percent produces the lowest carcass price. Plant C premiums and discounts for leanness and loin depth are larger than most of the other firms, especially at the extremes. But their premiums and discounts never offset the initial lower base carcass price. Plant F has the highest base live and carcass price, but their premium and discount schedule produces smaller adjustments than many of the plants, resulting in prices near the average across the six plants.

An important question for producers is: "Are these price differences greater than transportation costs to the various plants?" Given that most of the surplus hogs are in North Carolina, the answer to this question is yes. If transportation costs are \$2.00 per loaded mile, and a load weighs 50,000 pounds, a 300 mile haul would cost \$1.63 per cwt. on a carcass basis. Several of these plants are within 300 miles of surplus production in North Carolina. Some of the average price differences are greater than \$1.63 per cwt. indicating producers should carefully evaluate shipping to alternative plants.

The approximately \$14 per carcass difference between the typical versus ideal hog carcass means that packers are sending a strong economic signal to producers to improve the quality of their hogs. Much of the difference between the typical versus ideal hog carcass is related to genetics. Producers raising hogs with typical or less desirable characteristics should

carefully evaluate the genetic base and genetic potential of their hogs. The large premium paid for larger, leaner, well-muscled hogs may indicate a need to change the genetic pool and adoption of different management techniques to utilize their hogs' genetic potential.

The apparent need to evaluate alternative pricing systems leads to another observation. Only three of the six plants publish the details of their pricing system. The other plants prefer to discuss their pricing program privately with each producer. Given the wide array of base prices, yields, percent lean formulas, weight sorts, and different ways of measuring backfat and loin depth, it would be very difficult for most producers without a computer to compare these pricing systems. The hog procurement pricing systems clearly indicate the industry is oligopolistic in regard to input pricing behavior.

Direct negotiations between producers and each of the packers within their trucking range are becoming more common. In practice, each producer must evaluate what price each packer will pay for the type of hog (carcass weight, backfat, loin depth, typical sort) they produce. Some producers ship to two or more markets: one for lighter hogs and one for top hogs. Some producers may even consider shipping gilts which are generally leaner to one plant and barrows to another plant.

Only one plant in the Southeast attempts to establish a local cash market price derived from local supply and demand conditions. All the other plants base their price off Midwest prices. Since current hog futures prices are based on Midwest delivery points, the basis in Midwest markets is probably still reliable. But one plant in the study already bases prices off carcass prices, and one other plant indicated it would probably move to a carcass price base in the next several years. As packers move toward a BCP and away from a BLP, it will become important to have a reliable basis for the direct market carcass price. This basis will likely be more reliable if the futures price is also a carcass price and weight. Otherwise, there may be incentive to deliver overfilled or poor yielding live hogs against futures contracts.

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Table 1. Features of Carcass Value Pricing Systems by Plants

Plant	Base Live Price (BLP)	Base carcass yield (BCY) Base carcass price (BCP)	Backfat ¹ (BF)	Loin Depth (LD)	Weight Sort (WS)
A	Ave. Ind/Ohio & Io/S. Minn plant.	Ave all hogs previous quarter. Assume 73.4% $BCP = BLP / .734$	Base 47.5 - 49.4%	Variable in % lean.	Base = 170-210 lbs. No prem < 160 lbs.
B	Ave Ill & Ind/Ohio direct top + \$1.25 cwt.	Standard = 74.4% $BCP = BLP / .744$	Report in inches. Base 55.5 - 56.49%	Variable in % lean. Prem/disc. based on wholesale market prices previous week.	Base = 161-200 lbs. No prem < 161 lbs.
C	Ave Io/S. Minn plant.	Standard = 75.5% $BCP = BLP / .755$	If < 27 mm, prem = .07 x BCP. If > 27 mm, disc = .014 x BCP.	If < 47 mm, disc = .02 x BCP. If = 47-54 mm, no disc. If > 54 mm, prem = .02 x BCP.	Base = 167-208 lbs. Base = 167-222 lbs if BF < 25 mm.
D	Top Io/S. Minn plant.	Standard = 73.5% $BCP = BLP / .735$	Base = 46.5-48.4% ²	Variable in % lean. If < 50 mm, no disc. If = 50-60.9 mm, \$0.50 cwt prem. If > 60.9 mm, \$1.00 cwt prem.	Base = 166-205 lbs.
E	Local market price but ≥ ave Io/S Minn or Ind/Ohio or Ill plant or Missouri direct.	No carcass price. Assume 73.4% for comparisons. Prem of 4 cents cwt for each tenth above 73.5.	Base = 45.0-47.9% Prem & disc are rolling ave last 4 loads. Applied to current load's base price. ³	Variable in % lean.	Base = 162-201 lbs. Disc are \$/live cwt.
F	No live price under carcass pricing system.	Assume 73.4% for comparisons. Ave of low 47-48% lean and high 49-50% lean in USDA western corn belt.	Prem & disc based on backfat and carcass weight ranges. Base = 1.01-1.20 in.	No prem or disc.	Base = 172-194 lbs.

¹ All plants use Fat-O-Meater on hot carcass at 10th rib except Plant F, which measures at last rib.² If load average lean 43-44%, lower BCP by \$1.00 cwt and \$2.00 cwt if lean < 42%.³ Program does not pay on the individual carcass but whole load.

Table 2. Base average live and carcass prices by plant in January 1995.

Plant	Live Price	Carcass Price
	\$/cwt.	
A	38.09	51.89
B	38.71	52.03
C	38.26	50.68
D	38.76	52.74
E	38.14	51.89
F	38.85	52.93

Table 3. Characteristics of four different hog carcasses.

Item	Typical	Light	Heavy	Ideal
Live weight (lbs.)	247	204	280	260
Yield (%)	73.4	73.4	73.4	75.5
Carcass weight (lbs.)	183	150	206	196
Backfat (mm)	28	20	35	18
Loin depth	47	47	60	62

Table 4. Premiums and discounts by carcass type and plant.

CARCASS PLANTS	Units	Typical						Light					
		A	B	C	D	E	F	A	B	C	D	E	F
Base live price	\$/cwt	38.09	38.71	38.26	38.76	38.14	38.85	38.09	38.71	38.26	38.76	38.14	38.85
Yield	%	73.4	74.4	75.5	73.5	73.5	73.4	73.4	74.4	75.5	73.5	73.5	73.4
Base carcass price	\$/cwt	51.89	52.03	50.68	52.73	51.89	52.93	51.89	52.03	50.68	52.73	51.89	52.93
Percent lean	%	47.44	54.80	--	47.42	47.42	--	52.32	57.54	--	52.30	52.30	--
% lean prem/disc	\$/cwt	-1.60	-1.20	--	0.00	0.00	--	+1.60	+1.20	--	+2.50	2.72	--
Backfat	\$/cwt	--	--	-0.71	--	--	-2.75	--	--	+2.48	--	--	0.00
Loin depth	\$/cwt	--	--	0.00	--	--	--	--	--	0.00	--	--	--
Weight sort	\$/cwt	0.00	0.00	0.00	0.00	0.00	0.00	-6.00	-5.36	-4.05	-5.00	-3.41	-4.05
Other	\$/cwt	--	--	--	--	--	--	-1.60 ¹	-1.20 ²	--	--	--	--
Adj carcass price	\$/cwt	50.29	50.83	49.97	52.73	51.89	50.18	45.89	46.67	49.11	50.23	51.20	48.88
Carcass value	\$	92.03	93.02	91.45	96.50	94.96	91.83	68.84	70.01	73.67	75.35	76.80	73.32

See footnotes at end of table.

Table 4 Continued.

CARCASS		Heavy						Ideal					
PLANTS	Units	A	B	C	D	E	F	A	B	C	D	E	F
Base live price	\$/cwt	38.09	38.71	38.26	38.76	38.14	38.85	38.09	38.71	38.26	38.76	38.14	38.85
Yield	%	73.4	74.4	75.5	73.5	73.5	73.4	73.4	74.4	75.5	73.5	73.5	73.4
Base carcass price	\$/cwt	51.89	52.03	50.68	52.73	51.89	52.93	51.89	52.03	50.68	52.73	51.89	52.93
Percent lean	%	44.83	53.33	--	44.71	44.71	--	55.45	59.45	--	54.1	54.1	--
% lean prem/disc	\$/cwt	-3.20	-3.60	--	2.00	-2.72	--	+2.40	+1.80	--	+3.00	+3.00	--
Backfat	\$/cwt	--	--	-5.68	--	--	-3.50	--	--	+3.19	--	--	2.50
Loin depth	\$/cwt	--	--	+1.01	--	--	--	--	--	+1.01	--	--	--
Weight sort	\$/cwt	0.00	-1.34	0.00	-2.00	-2.72	-1.34	0.00	0.00	0.00	0.00	0.00	-0.67
Other	\$/cwt	--	--	--	0.50 ³	--	--	--	--	--	+1.00 ⁴	+0.80 ⁵	--
Adj carcass price	\$/cwt	48.69	47.09	46.01	49.23	46.45	48.09	54.29	53.83	54.88	56.73	55.69	54.76
Carcass value	\$	100.30	97.01	94.78	101.41	95.69	99.07	106.41	105.51	107.56	111.19	109.15	107.33

¹ No premiums for carcass < 160 lbs.⁴ Premium for loin depth > 60.9 mm.² No premiums for carcass < 161 lbs.⁵ Premium for yield > 73.5%.³ Premium for loin depth between 50-60.9 mm.

Table 5. Adjusted carcass price by carcass type and plant.

Plant	Type of Carcass				Average
	Typical	Light	Heavy	Ideal	
	\$/cwt.				
A	50.29	45.89	48.69	54.29	49.79
B	50.83	46.67	47.09	53.83	49.61
C	49.97	49.11	46.01	54.88	49.99
D	52.73	50.23	49.23	56.73	52.23
E	51.89	51.20	46.45	55.69	51.31
F	50.18	48.88	48.09	54.76	50.48
Average	50.98	48.66	47.59	55.03	
Deviations from Best Price					
A	-2.44	-5.31	-0.54	-2.44	-2.44
B	-1.90	-4.53	-2.68	-2.90	-2.62
C	-2.76	-2.09	-3.22	-1.85	-2.24
D	0.00	-0.97	0.00	0.00	0.00
E	-0.84	0.00	-2.78	-1.04	-0.92
F	-2.55	-2.32	-1.14	-1.97	-1.75

Figure 1. Live hog prices by plant.

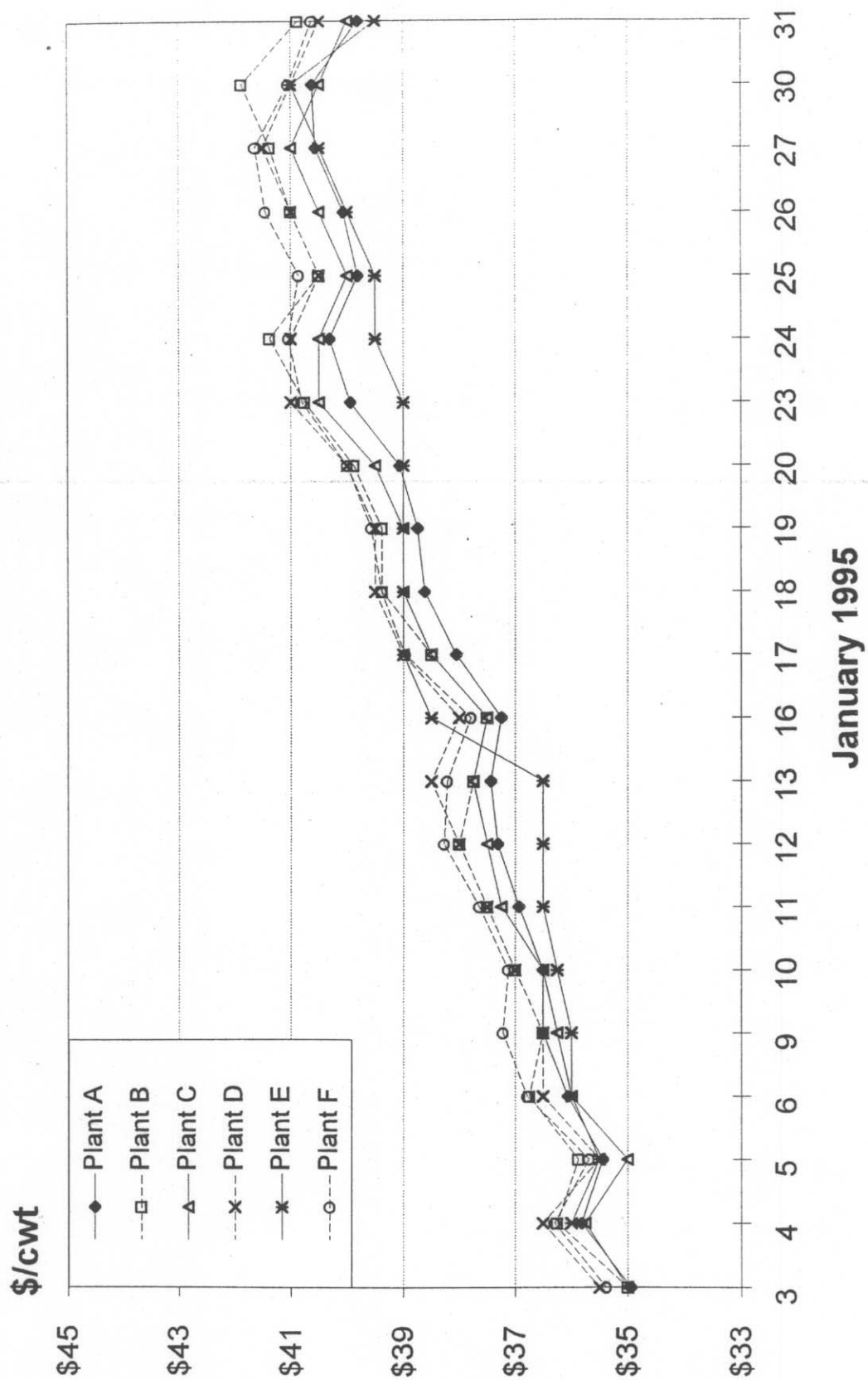


Figure 2. Carcass hog prices by plant.

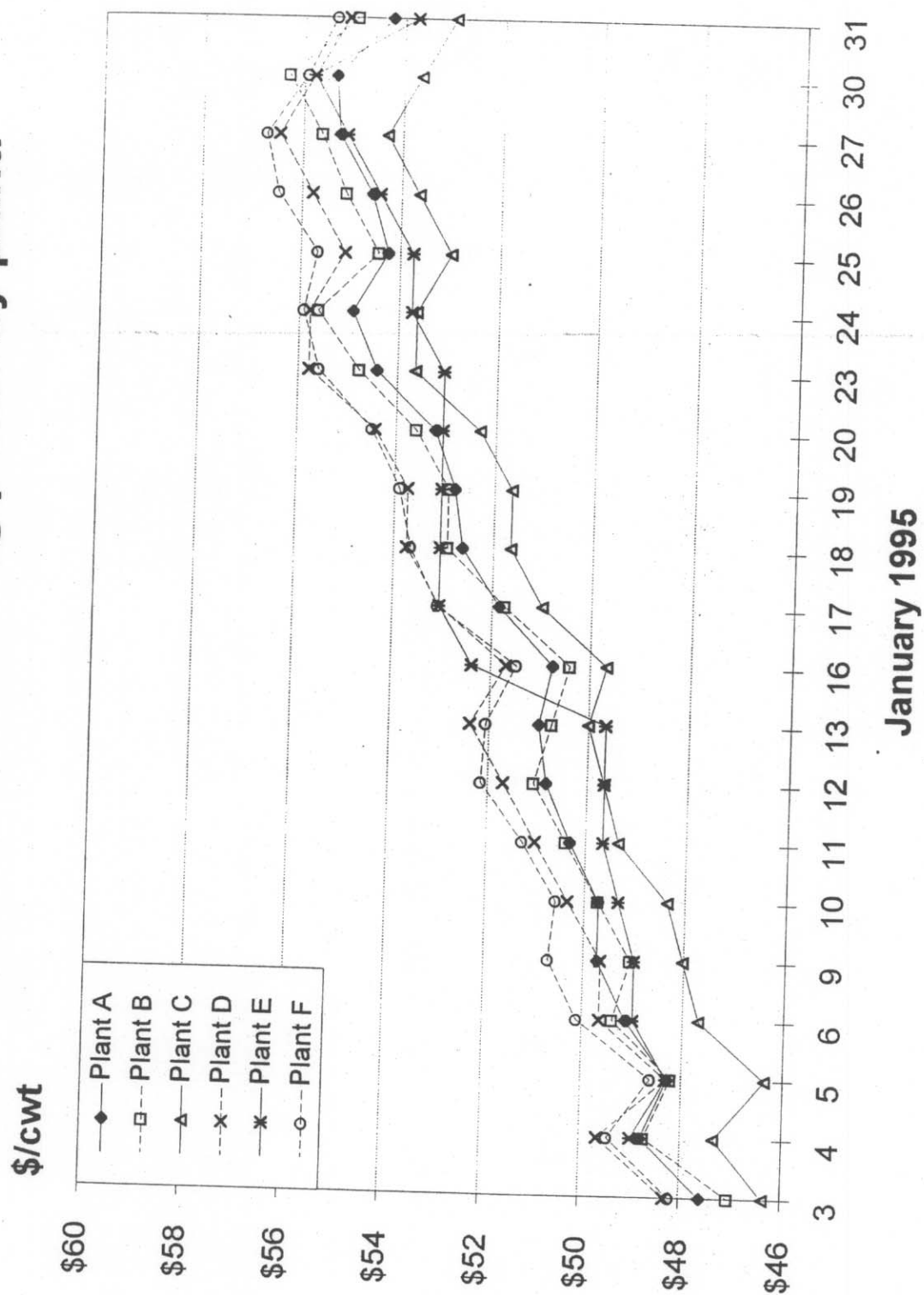


Figure 3. Weight Sort Discount by plant.

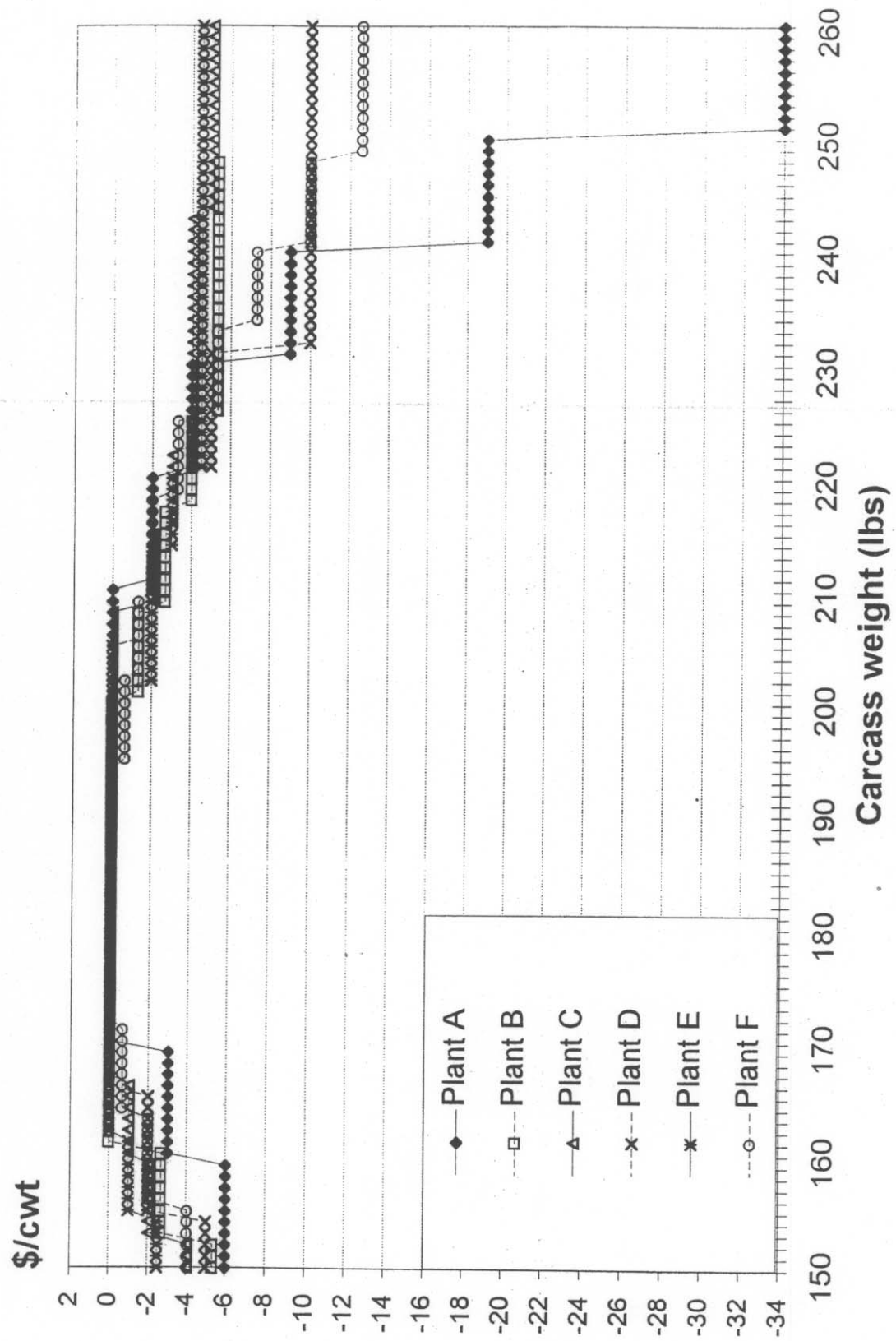


Figure 4. Backfat premiums & discounts by plant.

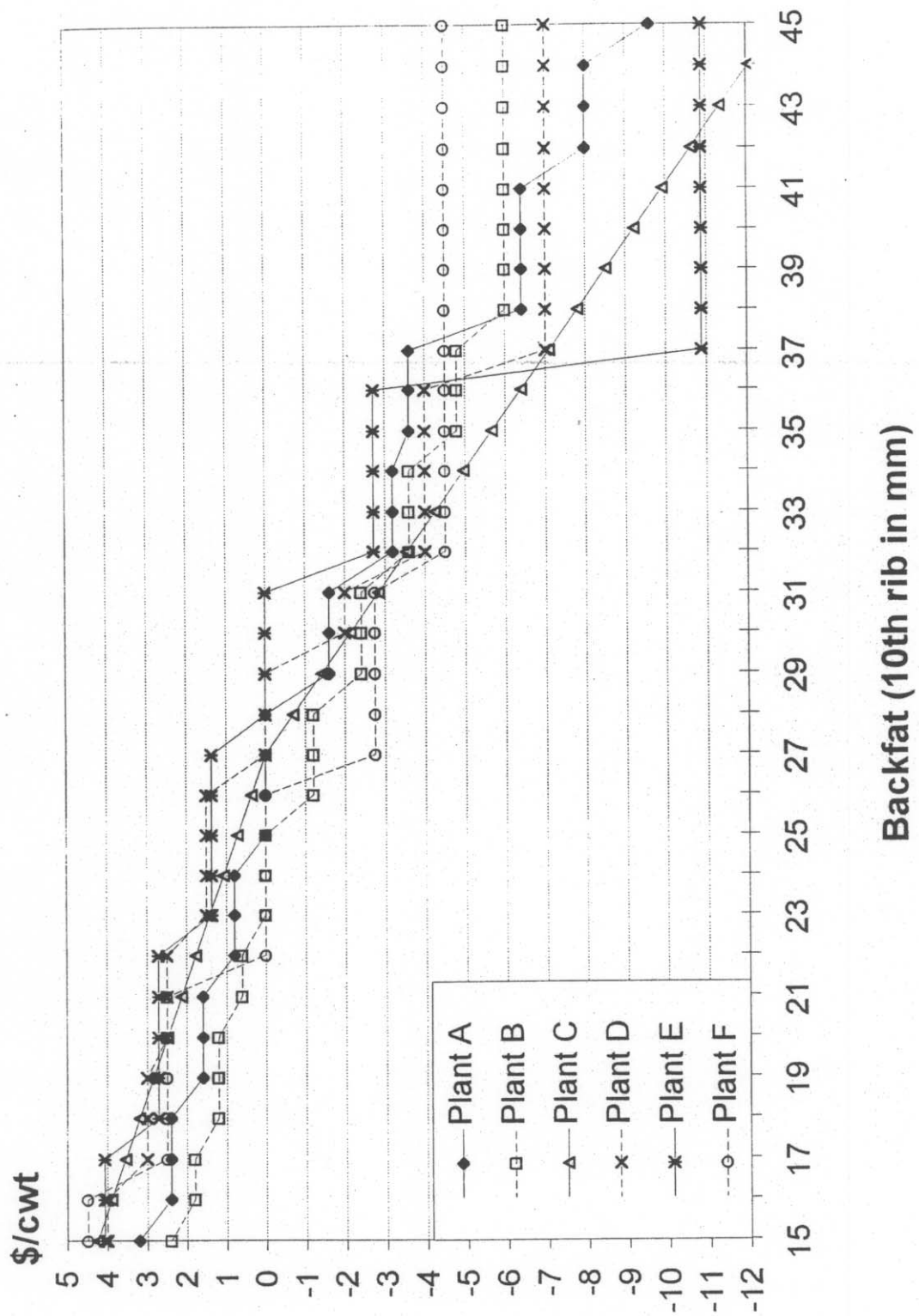


Figure 5. Loin depth premium & discount by plant.

