

Market Access - Survey Results

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Summary and Implications

Iowa pork producers surveyed in 1995 indicated that while 42% of producers typically receive two or more bids for their hogs, 85% sell to only one packer. Eighty-three percent sold hogs on the spot market only. More than 70% of producers believe that they receive a price higher than reported in the media. Killsheets from approximately one-third of the respondents indicated an average lean premium and sort loss over \$1.70 and under \$.50 per cwt. carcass weight.

The results imply that Iowa continues to have an active spot market for hogs and that two or more bids are typically available. It also indicated that the net price producers receive is higher than is reported by the USDA in the media. If producers are not receiving prices above the media price, they are selling below the average of their peers.

Introduction

Most pork producers have, in one form or another, expressed concern about market access. The subject of market access involves many different, sometimes complicated factors. A previous market access study conducted at Kansas State University resulted in a recommendation that the issue be studied in greater detail at the transaction level. Therefore, the board of directors of the Iowa Pork Producers Association has taken two proactive steps to address the issue. First, the Board has formally requested USDA Secretary Dan Glickman to conduct a comprehensive industry-wide study on the overall matter of market access.

Second, the Board has directed the IPPA Market Hog Committee to conduct a market survey among Iowa producers. Accordingly, a survey was designed to investigate several issues that form the components of market access. While certain factors such as time of delivery, plant or buying station delivery, captive supply, size of load, grade, and weight sales and market reporting each directly affect the final price, they also constitute the elements of market access.

Materials and Methods

The survey was mailed to more than 8,000 Iowa pork producers in August 1995, with a response of nearly 1,000 completed questionnaires. The results were then tabulated by the department of Economics at Iowa State University. Ninety-five percent reported sales for 1994; the remainder were surveys returned by allied industries or producers who did not indicate how many hogs they sold. Those responding sold more than 2.3 million head of hogs in 1994 and had nearly 128,000 sows on hand January 1, 1995. The tables summarize results of the survey. The statistical

average is the simple average of the variable. The median is the point that has an equal number of observations on either side of it. The range is simply the low and high number reported for each category.

Results and Discussion

Demographics

Iowa pork producers are young men and women with a wealth of experience who plan to raise hogs for many years to come (Table 1). The average age was 45 compared with an average age of 57 for all of agriculture. On average, they had raised hogs half of their lives and plan to produce hogs until they are age 62.

Iowa hog enterprises are part of diversified farms. More than 60% of the respondents received less than half of their gross family income from hog production (Table 2). Crop production is also an important part of Iowa hog operations with combined acreage, owned and rented, totaling 675 acres, and comprising a significant part of family income.

Table 1. Demographic profile of the 1995 Iowa Pork Producer Survey respondent.

Operator and Farm	Avg.	Median	Range
Years Hog Experience	23	21	0-60
Current Age	45	43	20-80
Yrs. Continue Raising Hogs	17	20	0-60
Acres Owned	269	180	0-2,016
Acres Rented	406	320	0-5,500

Table 2. Percent of 1994 gross family income by source.

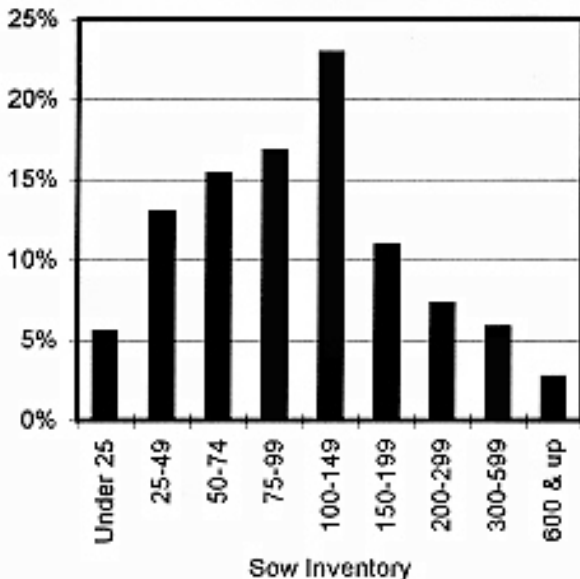
Percent of Family Income	Hog Production	Other Livestock	Crop Production	Outside Income
0 - 25	23.00	70.85	31.42	63.00
26 - 50	38.50	22.97	45.60	18.50
51 - 75	24.16	5.79	19.56	10.44
76 - 100	14.35	0.39	3.42	8.06

Producers selling market hogs sold on average more than 2,000 head in 1994, with a median of 1300 head. Approximately one-fourth of the producers reported selling feeder pigs in 1994 and those who did averaged nearly 1,700 marketings. About 10% sold seed-stock. More than 80% of the herds had sows and the median inventory was exactly 100 sows—half had more, half had less. By comparison, the December 1995 *Hogs & Pigs* report showed that the average Iowa breeding size was 92 head. Thus, the survey has fewer finish-only operations and fewer small sow herds represented. Figure 1 shows a distribution of the sow herd by size.

Table 3. Hog enterprise summary.

1994		Avg.	Median	Range
Marketings	Operations			
Market Hogs	919	2,043	1,300	5-112,000
Feeder Pigs	240	1,690	400	6-120,000
Seed stock	95	211	60	2- 3,000
Jan 1995				
Sow inventory	763	167	100	6- 9,954

Figure 1. Sow inventory January 1995.

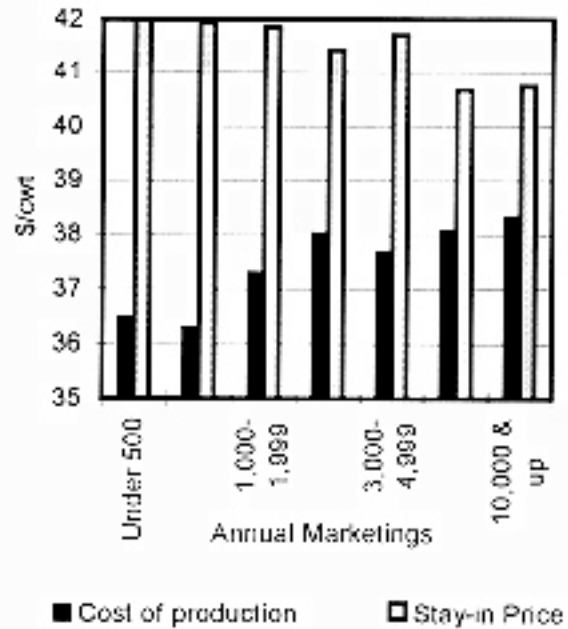


Competitiveness

Iowa producers are becoming more businesslike. A 1993 survey of Iowa pork producers reported that only about half knew their cost of production. More than 70% of the respondents in this survey reported knowing their costs. The average cost of production for 1994 reported by respondents was \$37.42/cwt. and the median was \$38/cwt. By comparison, the average farrow-to-finish cost of production reported in the Iowa State University Swine Enterprise Records was \$40.63/cwt.

In addition to cost of production, producers were asked what average price they would have to receive to stay in business for five more years if corn prices were \$2.30/bu. Figure 2 is a distribution of cost of production and stay-in price by size of operation. First, there is very little difference in cost of production by size. In fact, smaller producers reported having lower cost than larger producers. Second, there is even less difference in the stay-in price by size. Larger producers may be willing to continue producing on slightly narrower margins. The bottom line is that prices can average more than \$5/cwt. below the average of the last 10 years and Iowa producers will still be in the hog business.

Figure 2. Cost of production and stay-in price by size of operation.



Marketing Practices

Just over half of those surveyed reported buying or selling feeder pigs. Sixty-five percent of these respondents buy or sell directly farm to farm. Another 21% use auction markets with the remainder reporting terminal markets or other sources.

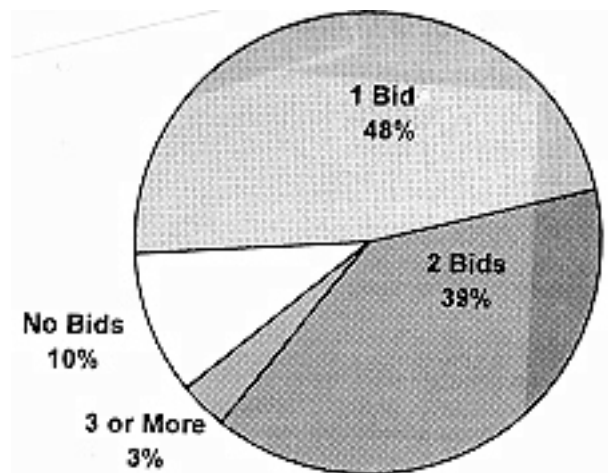
Nearly 90% of the slaughter hogs were sold Monday through Thursday. More than 70% were delivered between 7 a.m. and 10 a.m. with another 20 percent delivered before 7 am. Eighty-seven percent of the producers reported pricing their hogs the day of or the day before delivery. A gooseneck trailer may be the marketing tool of choice as 53% reported a typical load size of 26 to 50 head. Another 23% sold 25 or less at a time and about an equal number sold more than 50 at a time.

Market Access

More than 40% of Iowa producers reported that they normally get two or more bids when selling hogs (Figure 3). Forty-seven percent stated that they normally call for only one bid, and 10% said that they did not normally get any bids when selling hogs. However, the survey did not ask if the producer chose not to call for additional bids or if there were no additional bids available. A 1994 Iowa State University study found approximately 200 buying stations in Iowa in addition to 11 packing plants.

This study also found five to six competing buyers in a 50-mile radius of a centrally located producer in each quadrant of the state. It appears that receiving one or fewer bids for hogs may be the producer's decision.

Figure 3. Typical number of bids when selling hogs.



About 84% of the market hogs represented are sold on a carcass merit system, either based on previous loads or on the actual cutout of the current load. Only about 12% of the hogs are sold on a live basis. Nationwide studies have estimated the level of carcass merit pricing at approximately 70-75%. The producers responding to this survey likely have above-average hogs that reward them for selling on carcass merit.

Table 4. Percent^a of hogs and operations by marketing method.

Pricing Method	Head Operations	
Based on Previous Loads	35.3	51.5
Actual Cutout of Current Load	50.8	60.6
Live Market, No Carcass Merit	11.9	39.1
Other	0.7	2.3

^aPercent of operations exceeds 100% because producers use more than one marketing method.

Packers and Distance Hauled

Nearly 85% of the slaughter hogs that a producer sells are sold to the same packer (Table 5). Fourteen percent are sold to the second packer and less than 2% are sold to other packers. More than 40% of the of the producers delivered hogs directly to the packing plant. The second choice buyer was less likely to be a direct delivery. However, the average distance hogs are hauled to market was the same for both the first- and second-choice packer.

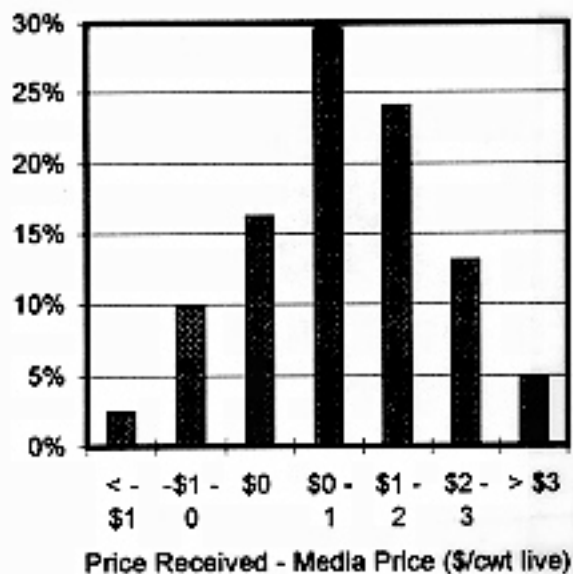
Table 5. Marketing location and distance hauled.

Packer	Percent of Hogs	Direct to Plant (%)	Miles Hauled
Choice A	84.4	43.1	27.1
Choice B	14.0	36.4	27.0
Choice C	1.5	46.9	20.7
Total	100.0	42.1	27.0

Pricing and Price Reporting

More than 70% of the producers surveyed believed that they received a net cash price for their hogs above the price reported by the media (Figure 4). Sixteen percent report that they receive the same price that the media reported.

Figure 4. Net price received compared to the price reported by the media.

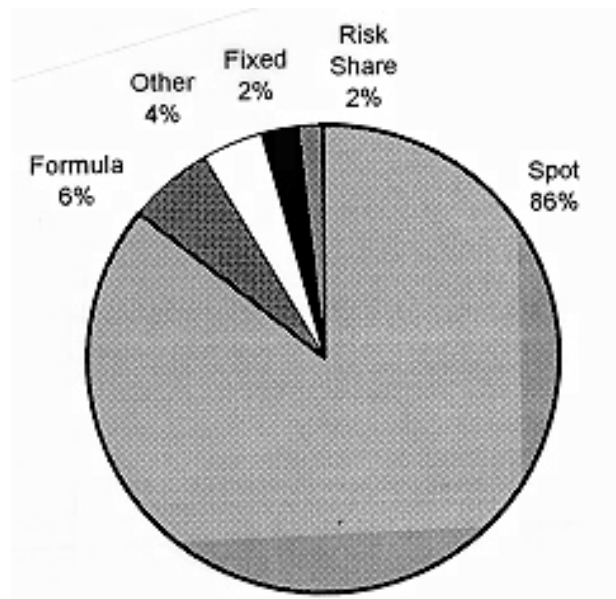


Long-term Packer Contracts

There is a widespread belief that everyone else has higher paying, long-term packer contracts. This survey suggests otherwise. While more than a fourth of those surveyed knew of another producer who had a long-term marketing contract, only approximately 5% reported being involved in such an agreement. Only about a third of those with a contract (19 of 51 producers with a contract) had a window or cost-plus contract. The others were short-term formula contracts with little if any risk-sharing provisions. These tend to be 3 to 12 months in length. Several contracts required minimum meat quality standards and Pork Quality Assurance Level III compliance. Some stated minimum genetic standards.

Eighty-three percent of the hogs represented in the survey are sold on the spot market (Figure 5). Just over eight percent of the hogs were sold on a formula price (agreement tied to a current or recent cash market). Fixed price contracts accounted for less than 2% of the hogs in the survey. Risk sharing contracts (window and cost-plus) covered 3.1% of the hogs marketed and 2% of the producers reported using these contracts.

Figure 5. Percent of hogs marketed by pricing method.



A recent study of national marketing practices by the University of Missouri reported that 62.8% of all hogs sold in 1994 were sold on the spot market, 26.2% were sold on a formula, 3.0% on a fixed price contract, 1.3% on a window or cost-plus agreement, and the remaining 6.7% were sold by other means.

Pork Quality Assurance

Nearly 90% of producers surveyed had heard of the Pork Quality Assurance Program (PQA) and 51% were involved in it. Approximately half of those on PQA were at level I or II and the other half were at level III. In the

1993 survey, 43% were unfamiliar with PQA, 26% were at level I or II, and 9% were at level III. Just over one-third of the respondents said that a packer had mentioned the PQA program to them, and 13% said that a packer was offering a premium for being a PQA III producer.

Killsheets and Lean Premiums

We asked that producers send in killsheets with their surveys. More than 300 producers sent in a total of 846 killsheets representing 35,200 hogs marketed between December 15, 1994, and September 28, 1995. More than 80% were from June - August marketings. The killsheets (Table 6) likely represent better than average hogs because those selling on a live basis would not have killsheets to send. Those who took the time to complete and return the survey are likely more dedicated to the pork industry and their pork producing operation. The killsheets also suggest that these are above-average producers since the lean premium averaged more than \$1.70/cwt. and the sort loss was less than 50 cents/cwt. on a carcass basis.

Determination of Base Price and Final Price

Carcass pricing systems are designed to differentiate the value of individual carcasses. The base price, determined by market supply and demand, is adjusted by lean merit and sort factors to arrive at the net price. The base price and net live price calculated from the killsheet were compared with the top of the price range reported by the USDA Market News on the date sold for the appropriate market (country points, plants). The leanest load from 257 farms with sufficient information (annual sales, market date, etc.) were examined (Table 7, Figures 6 and 7).

Table 7 shows the net live price difference by size of operation. The substantial variation between prices for all farms makes it impossible to detect statistically significant differences due to size of operation. Note that the range in price difference is similar, more than \$9.00/cwt. for all but the 1,001-1,500 size group which had less variation.

Table 6. Killsheet summary by load and farm.

Number Carcasses	846 Loads 35,201			292 Farms 14,890		
	Average	Median	Range	Average	Median	Range
Load size ^a	42	34	1 - 204	51	40	5 - 204
Weight	249	247	194 - 306	249	246	194 - 306
Backfat 10th rib	0.90	0.90	0.25 - 1.39	0.90	.89	0.58 - 1.39
Yield	74.50	74.67	63.75 - 78.41	74.53	74.7	64.11 - 78.34
Carcass Lean Prem.(\$)	1.72	1.53	-1.98 - 7.42	1.74	1.57	-1.80 - 7.42
Carcass Sort Loss (\$)	0.47	0.31	0 - 3.94	0.46	0.32	0 - 2.49

^a The largest load was selected from each farm with multiple killsheets resulting in a larger average load size. The average live weight was 249 pounds and the average yield was 74.5% for an average carcass weight of 185.5 pounds. Back fat measured at the 10th rib was 0.90 inches.

Table 7. Carcass base price difference from USDA reported top price and 10th rib backfat by annual marketings.

Annual Marketing	Number of Operations	Avg. Difference from USDA Reported Top (\$)	Difference Range (\$)	Sort Loss (\$)	10th Rib Backfat	Lean Premium (\$)
1000 or less	67	0.04	-6.14 to 3.30	-0.46	0.93	1.56
1001 - 1500	61	0.78	-3.01 to 3.75	-0.45	0.91	1.36
1501 - 3000	77	0.67	-2.74 to 7.06	-0.42	0.88	1.83
3001 and up	52	1.77	-2.82 to 6.86	-0.48	0.87	2.22

Figure 6. Lean merit carcass premium or discount.

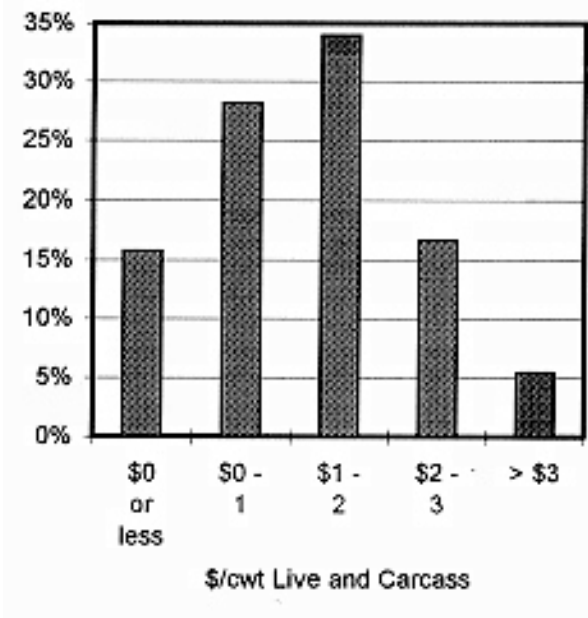
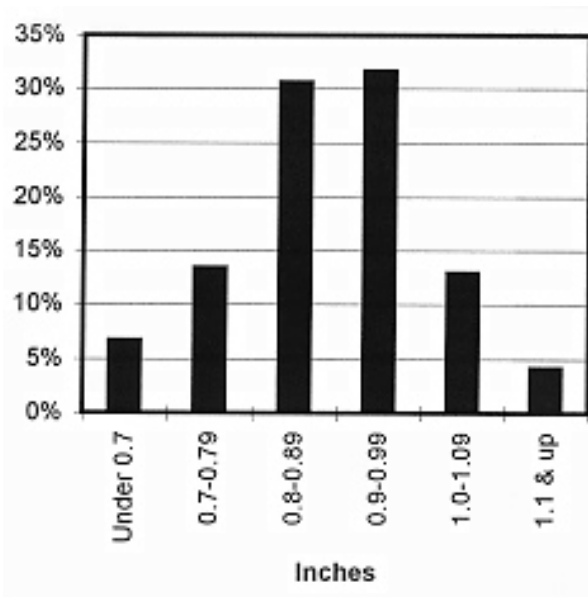


Figure 7. Average load backfat 10th rib.



There were producers marketing more than 5,000 head who received less than producers marketing less than 500 head. No relationship could be found in comparing base price to size of operation. Size explained less than 1% of the variation in base price and the variable was not significant. While numeric price differences existed between the size groups chosen, the differences were not significant. The trend is for larger producers to receive a higher, but not significantly different price. Also, numerically, but not significantly different, larger operations have leaner hogs. The lean premium accounts for part of the higher prices.

Conclusions

The results of the producer survey and killsheet analysis provide more information on the marketing practices of Iowa pork producers, although many questions remain unanswered. However, the analysis of the data generated by this project will support certain conclusions:

- 1) The vast majority of hogs are still sold on the spot market.
- 2) It appears that it is the producer's decision to seek out only two or fewer bids prior to sale.
- 3) Most producers receive a higher price than reported in the media.
- 4) Nearly all producers receive a lean premium.
- 5) Size of operation is not a key variable in determining prices received.
- 6) Iowa pork producers are relatively young and plan to raise hogs for years to come.
- 7) Iowa producers are becoming more businesslike and are very competitive in the global pork market.
- 8) There is very little difference in cost of production based on size of operation.

- 9) Iowa producers will still be in operation even if prices average more than \$5/cwt. below the average of the last 10 years.
- 10) There may be a widespread belief that "everyone else" has higher paying, long-term packer contracts. This survey suggests otherwise.
- 11) Some producers marketing less than 500 head realized higher prices than some producers marketing more than 5,000 head.

Continued analysis of this data may provide additional insight about producer marketing practices and the prices they realize. It is obvious that producers do not all receive the same price for their hogs. Factors such as lean premiums, sort loss, and the distance that producers are willing to haul their hogs in order to realize better prices account for *some* of the difference, but only about half of the difference. Larger operations, on average, received higher net prices, but annual marketings were not a significant variable in explaining the difference.

Additional studies based on the findings of this survey may shed more light on the market access and price discovery issue. Future studies should gather more detailed information from a broader number and cross-section of Iowa pork producers.