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U.S. Hog Marketing Contract Study

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The January data for hog marketing arrangements or marketing contracts in the mandatory price reporting information was summarized.

The definitions for the marketing arrangements in this study are not the same as those used in other studies conducted by the University of Missouri and the National Pork Board. In fact, since our first study using mandatory price reporting data was conducted in 2002, two of the mandatory price definitions have changed. Although direct comparison for all marketing arrangements cannot be made across all the years of our studies, we believe the spot market or negotiated groups are directly comparable through all of our studies since 1994.

Here are the current definitions of the arrangements reported under the mandatory price reporting system and the changes affecting comparisons of data with earlier studies:

1. Negotiated. This is comparable to the spot or cash markets of our previous studies.

2. Swine or pork market formula. This is also quite consistent with the same grouping in previous studies. It is a price that is tied to either the spot or negotiated hog market or to meat prices. Studies prior to 2002 included some packer hogs in this group.

3. Other market formula. This grouping fits with the futures market group in studies prior to 2002. In 2002 this group also included contracts tied to feed prices.

4. Other purchase arrangement. In the 2003 and 2004 studies this category includes the contracts tied to feed prices along with the window risk sharing contracts of previous studies. The mandatory reports do not provide information about ledgers. In 2002 this group only included the window risk sharing contracts.

5. Packer-sold hogs. These are the hogs that are produced by a packer but are probably out of position for the packer to slaughter them in one of his plants. Many of these hogs are priced with a contract, and in studies prior to 2002 most were included in Item 2 above.

6. Packer-owned hogs. These are the hogs that are produced by the packer who slaughters them. In our studies prior to 2002, most of these hogs were included in Item 2 above. The integrated operations use formula pricing methods to determine the amount of revenue to allocate to their hog production divisions.

Total hog slaughter under Federal Inspection in January 2004 was 8,697,902 head. Data for 8,034,924 head (92.4% of FI slaughter) are included in the mandatory price reporting system.

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*Glenn Grimes, Professor Emeritus, and Ron Plain, Professor, University of Missouri; and Steve Meyer, President of Paragon Economics. The study was funded by the University of Missouri and the National Pork Board.

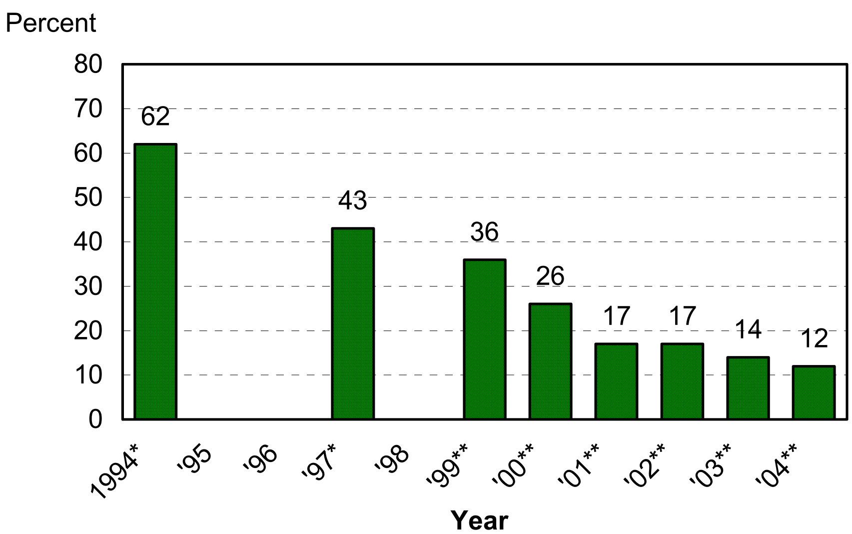
Table 1.
Percent of U.S. Hogs Sold Through Various Pricing Arrangements,
January 1999-2004*

	1999	2000	2001	2002	2003	2004
Hog or meat market formula	44.2	47.2	54.0	44.5	41.4	41.4
Other market formula	3.4	8.5	5.7	11.8	5.7	7.2
Other purchase arrangement	14.4	16.9	22.8	8.6	19.2	20.6
Packer-sold				2.1	2.2	2.1
Packer-owned				16.4	18.1	17.1
Negotiated - spot	35.8	25.7	17.3	16.7	13.5	11.6

*2002, 2003, and 2004 data based on USDA Mandatory Reports, 1999-2001 based on industry survey.

Non-negotiated or non-spot purchases in January 2004 accounted for 88.4% of the purchases of market hogs included in the mandatory price reporting data. The 2003 study showed 86.5%; the 2002 study showed 83.3%; the 2001 study showed 82.7%; the 2000 study showed 74.3%; the 1999 study showed 64.2%; and the 1997 study showed 56.6% were non-negotiated transactions.

Figure 1.
Percent of Hogs Sold on the Negotiated Market



*University of Missouri, Pork magazine, PIC, DeKalb Choice Genetics, National Pork Producers Council, Land O'Lakes studies.
** University of Missouri, NPPC, National Pork Board studies.
'02 - '04 USDA/NASS data.

By adding the percentage of hogs purchased in the negotiated markets to the percentage purchased on a swine-pork market formula, the current study indicates that the price of at least 53% of the hogs in the U.S. was directly determined by the negotiated market. The true percent is higher because a high percentage of the packer-owned and packer-sold hogs are priced with a market formula.

About 27.8% of the hogs in 2004 were purchased under some system that supposedly reduces price risk to producers, 7.2% were bought on a contract tied to the futures market, and 20.6% were other purchase arrangements. These price shifting arrangements amounted to 34.4% of the independently produced hogs.

"Supposedly" is used in the paragraph above because some of the pricing systems do not actually affect the variance of price received by the producers. Only cash contracts (the ones usually tied to futures) and contracts without ledgers reduce producers' price risk. Other arrangements may or may not result in a realized average price that is different from the actual average negotiated price.

The data in the mandatory price reports do not permit one to quantify how many ledger arrangements there are. Any amount by which the market price falls short of the arrangement's lower critical price must be repaid in at least a portion of ledger contracts. Some of the contracts contain a sunset clause to end after a specified time period. We do have data on ledgers and other characteristics for the other purchase arrangement hogs from a 2003 University of Missouri unpublished study. Based on this data, for 77% of the other purchase arrangement hogs the price is tied to feed prices and for 23% the contract is a window type. The ledger contracts amount to 61% of the other purchase arrangement hogs and 39% of these hogs have no ledger.

The continued decline in the negotiated or spot market hogs increases the urgency for the industry to find another form of price discovery for most of the contracts. One possibility is to have mandatory price reporting of meat and tie the contracts to meat prices.

The mandatory price reporting legislation also required packers to report percent lean, carcass weight, base price, and net price for each marketing arrangement type. These data for January 2004 appear in Table 2.

Table 2.
Hog Marketing Arrangements,
January 2004

	% Lean	Carcass weight (lbs.)	Base carcass price/cwt.	Net carcass price/cwt.*
Negotiated	53.34	197.42	$51.66	$53.21
Swine-pork market formula	54.41	201.71	51.24	53.90
Other market formula	53.82	205.54	51.89	54.56
Other purchase arrangement	53.99	202.49	55.18	56.52
Packer-sold	52.34	205.97	54.76	57.61
Packer-owned	53.33	196.56		

*Net price includes credits for quality, transportation, time of delivery, etc.

The negotiated hogs had the second lowest percent lean, the lightest average weight, and the lowest net carcass price. The other market formula hogs had a percent lean close to the negotiated hogs. The other market formula hogs had the highest average carcass weight at 205.54 pounds.

The other purchase arrangement hogs had the second highest net price. This was probably due to the generally low price for hogs during January of 2004. We believe this group of hogs will likely have the lowest average price for those months when the negotiated market price is unusually high.