

Pricing Feeder Pigs

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Recent increases in specialized production of feeder pigs has stimulated interest in various methods of pricing pigs outside traditional marketing channels. Most such methods are either negotiated pricing or formula pricing.

In privately negotiated transactions, both seller and buyer must have approximately equal knowledge of markets and of grade and weight characteristics of the pigs. In addition, each should have about equal bargaining ability.

Formula pricing ordinarily bases feeder pig prices on current slaughter hog prices with some adjustment for weight of pigs. A survey of Kansas feeder pig producers showed two major formulas. We called one "Feeder-pig/Slaughter-hog Price Ratio" and the other "Slaughter-hog-price-minus-a-constant." The first is commonest and uses a base slaughter hog price (taken from a specified terminal market) multiplied by a selected factor (or factors)--the selected factor may be adjusted for weight of pigs. One version of the first formula takes top barrow and gilt slaughter hog price as the base. For pricing 40 lb. pigs, the base price is multiplied by 1.8 to set feeder pig price per hundredweight. That price per hundredweight is then multiplied by 0.4 (40 lb. pig) to determine feeder pig price per head. The factor varied from 1.8 to 2.25 for 40 lb. pigs among those we surveyed. An adjustment for pig weight was to reduce the

factor by 0.1 for each 10 lb. increase in weight above 40 lbs. When we compared feeder pig prices at southern Missouri auction markets with slaughter hog prices at the St. Joseph, Mo., terminal market (1968-1974), we found the average difference in this factor per 10-lb. weight interval to be 0.26 for light pigs and about 0.17 for heavy pigs. Changing feed prices also affect the factor. A 25-cent-per-bushel increase (decrease) in corn prices offset (or was offset by) a \$4.32 increase (decrease) in slaughter hog prices.

One of the simplest formulas we found in the survey was to select a base slaughter hog price (as explained above) and subtract from that base price some constant (fixed) amount. Many producers we surveyed used \$5 as the common constant amount to subtract. The result is the price per head for feeder pigs. Adjustments for various pig weights were identical with those for the Feeder-pig/Slaughter-hog Price Ratio. The following examples apply both approaches to pricing 40 lb. feeder pigs. Two price ratios are used in the Feeder-pig/Slaughter-hog Price Ratio approach, and two constants are used in the Slaughter-hog-minus-a-constant approach. The base slaughter hog price

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in both cases is assumed to be \$50 per hundred-weight. Here are the two hypothetical examples:

Feeder-pig/Slaughter-hog Price Ratio:

Price ratio x Base price x weight factor =  
Feeder pig price per head

$$1.8 \times \$50.00 \times .4 = \$36.00$$

$$2.0 \times \$50.00 \times .4 = \$40.00$$

Slaughter-hog-price-minus-a-constant:

Base price - Constant = Feeder pig price per head

$$\$50.00 - \$5.00 = \$45.00$$

$$\$50.00 - \$7.00 = \$43.00$$

Break-even pricing is sometimes used by potential purchasers. It necessitates estimating prospective selling price for finished hogs, then subtracting the cost of finishing pigs for slaughter.

The futures market can be used in pricing feeder pigs by hedging the selling price of hogs and the cost of feed.

(Additional details of this study are in "Pricing Feeder Pigs," Kansas Agricultural Experiment Station Bulletin 586, June 1975. Copies may be obtained by writing Distribution Room, Umberger Hall, Kansas State University, Manhattan, Kansas 66506).