

Adjusting Market Weights in a Down Market

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Pork supplies are pressuring prices this year and, as in past similar situations, there is a call for lowering market weights to reduce supply. Slaughter weight is a variable under the producer's control and, unlike the number of hogs coming to market, is one that can be adjusted in the short run. It is also a dilemma for producers. Lowering market weights does reduce supplies, but to have a price impact, a large number of producers must participate. A 10-pound reduction from 265 to 255 pounds is a 3.8 percent reduction in total pork supply. All else equal, we might expect a 10-11 percent price increase from such a reduction in supply, about \$3.50/cwt in a \$35 market. This assumes that slaughter capacity is not a constraint

The challenge is that it is difficult to get broad scale participation as producers typically do what is in their own self-interest and under their control. So what is the optimal marketing weight for an individual? In economic terms the most profitable weight at which to sell is when the additional cost of adding one more pound is equal to the revenue from adding that pound, marginal cost = marginal revenue.

This simple marketing rule is complicated by reality. In reality, the cost of adding weight increases at an increasing rate and changes with rising or falling feed prices. In reality, adding weight may impact the lean premium and sort loss. If it does, that changes the price of all pounds, not just the added pounds. In reality, the price can change while you wait. At certain times of the year, odds favor increasing prices; at other times, falling prices are more likely. The table below shows how to evaluate this market timing decision. This model is also available on the Iowa Pork Industry Center web site (<http://www.extension.iastate.edu/ipic/>) where you can plug in your own numbers.

Expected return from selling hogs at a later date

		Case 1	Case 2	Case 3
Expected added weight	A	10	10	10
Current hog price (\$/cwt)	B	\$35.00	\$35.00	\$30.00
Cost of added weight (\$/cwt)	C	\$25.00	\$25.00	\$25.00
Expected final weight	D	260	260	260
Change in premium (\$/cwt)	E	-\$0.50	-\$0.50	-\$0.50
Expected price change (\$/cwt)	F	\$0.50	-\$0.50	\$0.00
A*(B-C)+D*(E+F) = Change in return				
Expected return from selling later (\$/head)		\$1.00	-\$1.60	-\$0.80

In all three examples, the producer is planning on adding 10 pounds of gain from 250 to 260 pounds and the added cost of the gain is \$.25/pound. Feed efficiency at this weight is expected to be 4.0 and feed price is 6.25 cents/pound. The premium is expected to decline \$.50/cwt by going to the heavier weight. In Case 1 the current bid is \$35 and the price is expected to increase \$.50 during the 5-day wait. Under these conditions the producer would earn an extra \$1/head by adding the weight. Case 2 is similar except that the price is expected to fall \$.50 and in this scenario, the producer would lose \$1.60/head by adding the weight and would be better off to sell now. You might think of Case 1 as being at the start of a summer rally and Case 2 at the beginning of the fall price decline. Case 3 reflects a situation where prices are low enough that the added pounds do not offset the cost of putting them on.

Once hogs are in the marketing weight range, individual producers should evaluate their own cost of adding weight and their own changes in lean premiums and sort loss at different weights. Also, watch changing feed prices relative to the market hog price.

In today's market, and depending on the individual's cost of adding weight, some producers may choose to sell at a lower weight. Given the current forecast for fall prices and the expected seasonal decline in late summer and beyond, producers will want to look seriously at lighter marketing weights.