



# Now is the Time to Look at Market Weight



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With feed prices at or near all-time highs now is the time to look at how heavy you should market your pigs. A small survey, conducted as part of the feed cost webinar, indicated two-thirds of producers have not looked at adjusting their market weight and strategy.

Figure 1 shows the change in feed cost, on a monthly basis, year over year. For the first half of the year feed costs were up between 20-30 percent compared 2020. The

challenge really hits home in late summer, as the reality of this year's small crop takes hold, with feed cost increasing by slightly more than 60 percent.

Calculating your optimal market weight is a relatively straightforward exercise, once you have all the required information. Once set up, it is something that should do on a monthly or quarterly basis that will help simplify the marketing process.

## Information you need

- **Carcass Information**
  - Carcass data (weight, fat, lean)
  - Premiums (Weight, Loin, Freight, Proximity ...)
  - Feed conversion
  - Required for different weight classes
- **Finisher diet cost**
- **Market hog price**

The first step to collect all the information that you will need. This includes carcass data for length of time, the more data you have the better. Ideally, if you had a rolling average for a 3-month period works the best. Ensure you have carcass

breakdown that includes weight, fat and lean for individual carcass used in the analysis. You will also need some additional information including your grading grid, premiums (weight, loin, freight, proximity and others), feed conversion rates, diets costs and average hog prices. It is important to note you will need this information for different weights ranges throughout finishing. While feed cost and market prices would remain the same, weights, bonuses, and feed conversions all change corresponding to your market weight. All of this information is readily available through multiple sources. Carcass data is available through producer settlement summaries or your packer can provide electronic data. Feed conversion and feed cost data is available from your feed budgets, or provided to you the nutritionist or feed company that you deal with.

## Summarize the data

Once you have all the required information, the next step is to summarize the data. In order to make this step easier I have built a spreadsheet that will calculate the averages for each weight class. You can see the results of a sample analysis in Table 1. At a quick glance, we can see that index and premiums are consistent across weight classes six to eight, with slight declines in weight class five and nine, and a significant drop off with weight class 10. Looking at feed, feed conversion increases as pigs get bigger resulting in more total feed consumed which is nothing new. Now, how to we put everything together?

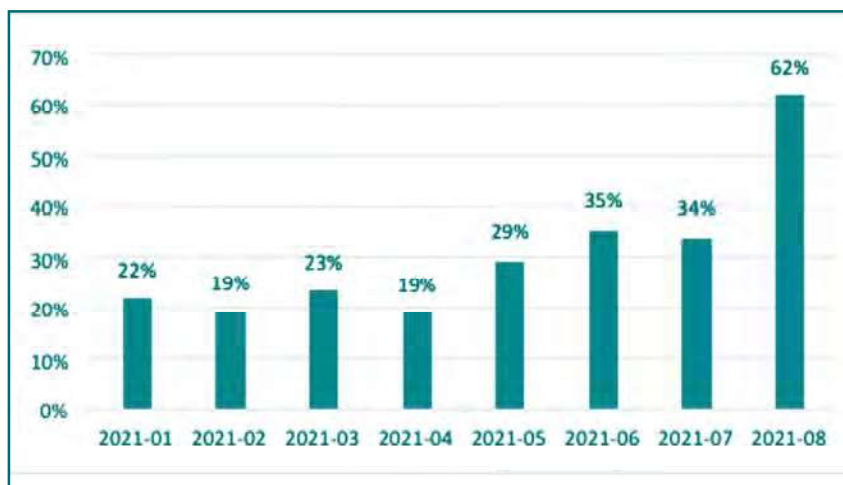


Figure 1. Monthly year-over-year changes in feed costs.

**Table 1. Average carcass data by weight class.**

Weight Class	5	6	7	8	9	10
Min Wt (kg)	95	100	105	110	115	120
Max Wt (kg)	99.99	104.99	109.99	114.99	119.99	124.99
Premiums	\$19.97	\$20.12	\$20.19	\$20.16	\$20.03	\$19.98
Index	108.6	111.0	110.9	110.9	108.8	103.5
Dressed Wt.	97.2	102.3	107.4	112.3	117.2	122.0
Live Wt.	123.0	129.4	136.0	142.2	148.4	154.5
Feed Conversion	3.2	3.25	3.3	3.35	3.4	3.45
Feed Cons.	309.7	330.5	352.1	372.8	394.0	415.0

**Calculating your optimal weight**

The next step in the process is to calculate your margin over feed cost (MOFC). Why is this important? Weight classes that have the highest MOFC will be the weight classes you should be targeting to market your pigs. MOFC considers everything including market price, feed cost and grading results and show the net benefit across different weight classes. Taking a closer look at Table 2 we can see the impact of different finished costs with an average market price of \$210/ckg.

The hog value seen in Table 2 uses a price of \$210/ckg with the rest of the results pulled from Table 1. For instance, if we use weight class eight as example is we see  $(\$2.10/\text{kg} \times (110.9/100) \times 112.3\text{kgs}) + \$20.16 = \$281.73/\text{hog}$ .

We will follow the same process in calculating feed cost. Still looking at weight class eight and assuming a finished feed price of \$450/mt each pigs would consume  $(372.8 \text{ kgs} \times (\$450/1000)) = \$167.76$  worth of feed. In this case, I am also using an additional \$22.70/pig in feed cost attributed to the maintenance of the sow herd for a total feed cost of \$190.46/pig. We calculate MOFC by subtracting feed cost from hog value  $(\$281.73 - \$190.46)$  for a total of \$91.27 (Note the numbers vary due to rounding differences used in the spreadsheet).

MOFC is the amount we have to cover all additional costs in your operation, including labour, utilities, maintenance, etc. Further analysis suggests if all other costs were \$72/pig, even with \$450/mt this producer would still be making a profit with a market price of \$210/ckg

The results in Table 2 also show you where this producer should be marketing their pigs. Assuming \$450/mt weight classes seven to nine generate the highest MOFC, therefore this is we should target when shipping pigs. If we increase feed cost to \$500/mt we can see we require a change in shipping strategy by reducing market, as weight class six to eight generate the highest MOFC.

**Conclusion**

Calculating MOFC is an important part of your marketing strategy. The greater volatility and fluctuations we see in hog and grain prices the more important MOFC becomes as your optimal market weight will change more frequently. It is easy to focus on individual pieces of the puzzle such like feed/hog price, index ore premiums, but it is not until we look at them as a whole that we have the complete answer. By focusing on MOFC we can calculate our optimal marketing weight and maximize returns to your operation.



**Table 2. Margin over feed cost calculations for different weight classes.**

Weight Class						
	5	6	7	8	9	10
Min Live Wt.	120.3	126.6	132.9	139.2	145.6	151.9
Max Live Wt.	126.6	132.9	139.2	145.6	151.9	158.2
Hog Value						
Hog Price \$210 ckg	\$241.59	\$258.54	\$270.48	\$281.73	\$287.99	\$285.25
Margin Over Feed Cost						
Feed Cost (mt)						
\$300	\$126.02	\$136.73	\$142.17	\$147.22	\$147.11	\$138.09
\$350	\$110.54	\$120.21	\$124.56	\$128.59	\$127.41	\$117.34
\$400	\$95.05	\$103.69	\$106.96	\$109.95	\$107.71	\$96.59
\$450	\$79.57	\$87.16	\$89.35	\$91.31	\$88.01	\$75.84
\$500	\$64.09	\$70.64	\$71.74	\$72.67	\$68.31	\$55.09