

Are pork producers playing chicken?

By John D. Lawrence, Extension livestock economist, Iowa State University

A farmer marketing 1,000 hogs a month would have depleted over a half a million dollars of net worth since October 2007, using the Iowa State University Estimated Returns Series as a benchmark. **Hog prices have been below breakeven for 20 of the last 22 months (Figure 1). More importantly, prices were below variable cost of production in 17 months, including the last 12 in a row.** Based on late July futures for feed and hogs, it will be another six months before variable costs are covered and an additional three months to reach breakeven. Yes, feed costs are coming down, but hog prices have fallen faster on weak demand and large supplies.

National pork organizations and USDA will work to expand domestic and export demand, but producers determine supply. Breeding herd inventories are lower, but due to increased productivity, pork supply has not adjusted to economic signals. U.S. pork production through the first 29 weeks of 2009 is down 1.5 percent from the year before and this reduction can be accounted for by fewer Canadian hogs and pigs being imported. In fact, U.S. sow slaughter has decreased, not increased, more than 15 percent since the first of the year. U.S. producers appear to be pushing on the accelerator rather than the brake!

While feed price is well below the 2008 levels, it remains higher than the pre-2007 era. Without new demand for pork, supplies will have to decline to support hog prices at the higher cost levels. The record export pace of 2008 has been slower thus far in 2009. Without smaller supplies, prices will not recover.

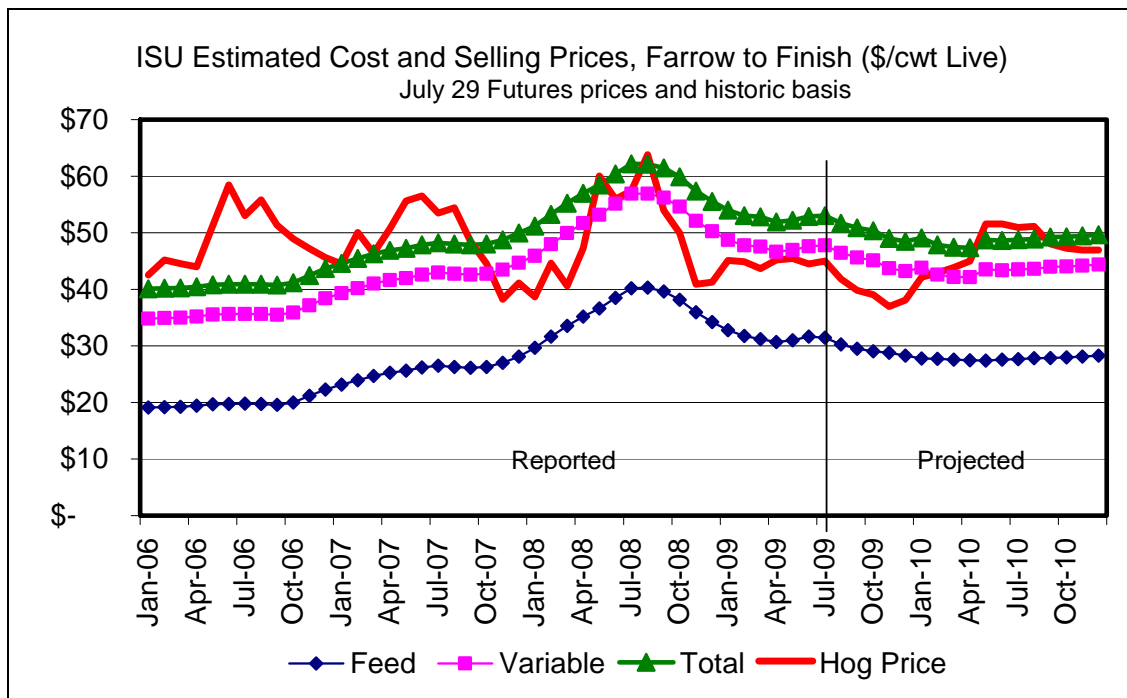


Figure 1

Will prices respond?

The relationship between supply and price is not as predictable as it once was. In half of the last 20 quarters, prices and supplies moved in the same direction. Not what we would expect and a clear indication that demand changes are important to price. The old rule-of-thumb was that for each 1 percent change in supply, price would change approximately 3 percent in the opposite direction. **For example, second quarter 2009 prices averaged \$45/cwt; then with a 1, 3 and 5 percent reduction in supply we would forecast prices to be \$1.35 (3%), \$4.05 (9%) and \$6.75 (15%) higher, respectively, for the second quarter of 2010. The sector needs a 15 percent price increase, a 5 percent supply reduction, just to break even.**

Even small, long-standing cartels like OPEC have trouble controlling supply and today's consolidated pork industry no different. An organized effort to reduce the breeding herd was rolled out at Pork Expo, but was later withdrawn. The perennial game of "chicken" continues. Each producer is waiting for the other guy to quit so prices will be higher for the survivors. What happens when you become the "other guy" rather than the "survivor"?

The cost of cuts

Every producer must understand his or her own cost structure and how reducing the sow inventory within his/her operation will impact the cost of production. Reducing sow inventory will reduce variable costs (less feed, vaccination, etc.), but not fixed costs. By definition, these costs do not change with output. On a per-pound basis, fixed and total costs will increase with fewer pounds produced, but by how much? Consider the ISU Estimated Farrow to Finish Returns as an example. Its costs for buildings, utilities, administration, labor and transportation total \$37.49/head. Reducing pig output by 10 percent would result in a higher fixed cost per pig ($\$37.49/0.9 = \$41.66/\text{head}$). Cost increase \$4.17/head or about \$1.54/cwt live basis. Given the elasticity example above, a little more than a 1 percent decrease in total supply would cover this cost increase, all else equal.

This calculation is for economic costs, but it is cash flow that pays the bills. Selling sows increases near-term income by the value of the sows and reduces near-to-intermediate expenses by reducing feed and other direct costs. However, eventually, you have fewer hogs to sell and income will go down unless the price has increased.

How will a production cut impact your costs? Can you reduce overhead costs in addition to variable costs? Are there benefits from less crowding, culling marginal sows, etc., that may offset some of the increased cost? How is cash flow impacted with sow sales, less feed expense, but less hogs to sell later? Are these permanent or temporary changes?

What are the risks?

What if supplies do not fall? Your costs will go up as will your losses if prices do not rally. You miss an opportunity if the prices do increase and you have fewer hogs to sell. Do you have the flexibility in your marketing contract to reduce deliveries? If we produce fewer hogs, we need less packer capacity and the packer may close a plant where you sell.

Bottom line

Accumulated losses per head in the current crisis for hog producers will surpass that of 1998-99 in September. However, individual farms and the industry are larger and so is the loss of equity. And we are not done yet. We will drain 50 percent more equity than we have already lost by next summer given the current forecast.

Supplies must come in line with the higher cost structure and, at least currently, the weaker demand. Some producers have already cut production or announced their intentions, but the

announced reductions of a few will not lead to profitability for the industry. Inelastic demand for hogs will provide a larger percentage increase in price for a given reduction in supply, all else equal. The productivity of the industry requires a significant cut in farrowings to achieve the supply response needed to return to profitable prices. A 5 percent pork supply cut is needed to return the sector just to breakeven, but the March-May pig crop was down only 0.4 percent. More reductions are needed!