MARGIN MANAGEMENT

HUBBARD
an Alltech company

Risk and margin management are important business strategies that livestock producers use to protect profitably and mitigate financial losses. The goal of margin management is to reduce the financial impact of market variability and increase the profitable periods of production.

Understanding the Cost of Production
The first step to setting up a margin management plan is to understand all of the costs that go into raising a pig. The two types of cost that need to be calculated are fixed and variable cost.

- *Fixed Cost*

  Fixed cost comprises the ongoing costs that occur whether or not pigs are being produced. These costs include facility cost, equipment depreciation, and interest on assets.

- *Variable Cost*

  Variable cost consists of any costs that occur only when pigs are being produced. These costs include feed, transportation, labor, genetic fees, and veterinary expenses.

Understanding Commodity Pricing
Commodity prices are generally based off of the Chicago Mercantile Exchange (CME). A basis value, which is an adjustable figure based on local supply and demand, is then applied to the CME listed price for a given time frame. Future commodity prices can be locked in through trading futures contracts on the CME. Basis price adjustments can be negotiated through suppliers of commodity ingredients like cooperative grain elevators and livestock packing plants.

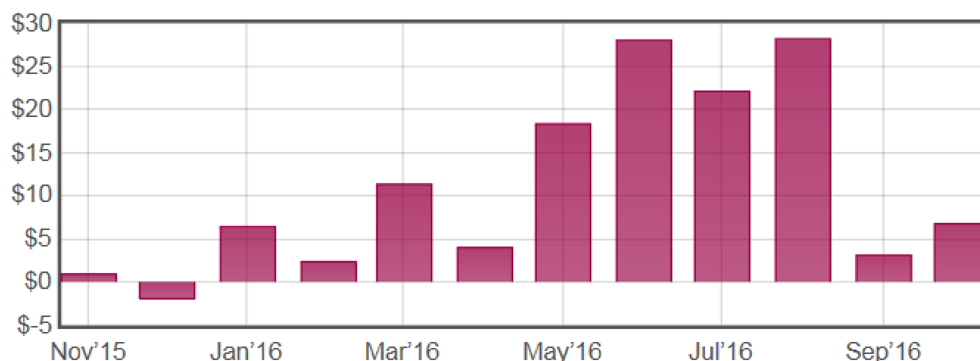
Calculating Margin
Calculating margin consists of subtracting estimated fixed and variable cost from estimated revenue.

Margin = Est. Revenue – (Est. Fixed Cost + Est. Variable Cost).

Both future revenue and variable commodity cost can be estimated by using CME futures prices.

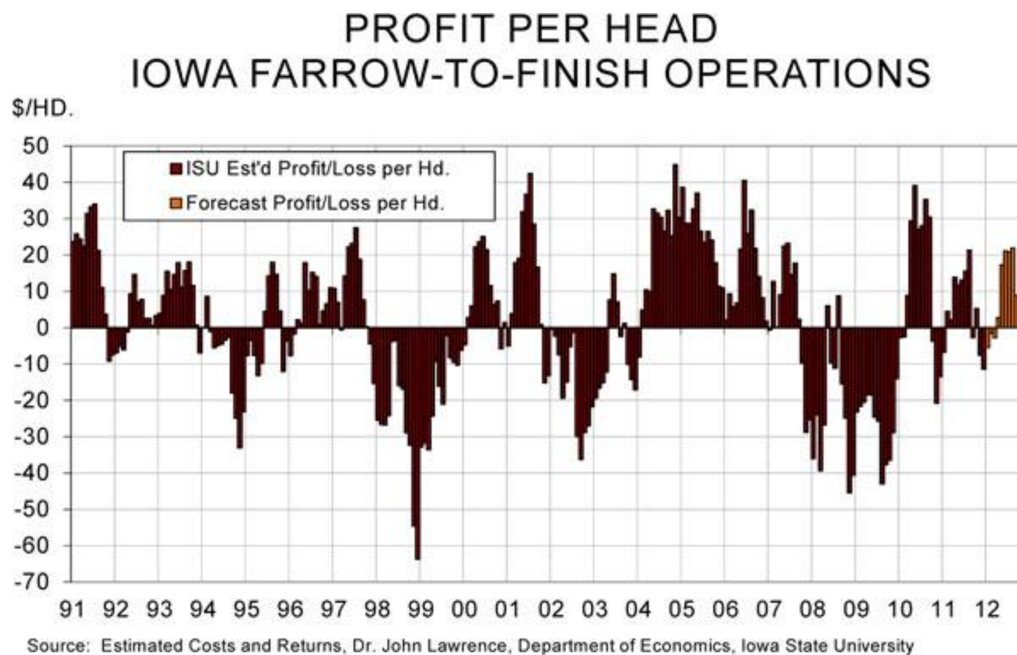
Margin Modeling
Correctly estimating commodity usage and commodity cost on a per pig basis in the future is a difficult task. Mathematical models can be developed to make estimations easier. Hubbard Feeds offers a margin modeling program called The Crush. The Crush program uses individualized fixed costs and projects future variable costs, revenue and margin per pig based on the CME listed prices. Pictured below is a graphical output page of The Crush program describing the financial return over cost per pig.

Return Over Cost Per Pig



Determining a Desired Profit Per Pig

Once an accurate calculation of future costs and revenue is modeled, the next step is determining what margin/profit per pig is desired. As an example, a target margin per pig may be $4-$10 in the fall/winter marketing periods while a $10-$18 dollar target margin could be set for spring and summer marketing periods. As you can see by the information provided from Iowa State, profit per head is quite variable. Attempting to hit the “high market” can often lead to frustration and lost opportunity. More producers are looking to reduce the financial impact of market variability and increase the profitable periods of production as an overall risk management strategy.



Executing Trades and Contracts

Once a target margin opportunity is recognized, the next step is executing trades and contracts. To effectively manage margin, trades need to be completed in both input commodities (corn/soybean meal) and revenue generating commodities (lean hogs). A margin is not secured unless both input and revenue generating commodities are traded in tandem. Commodities can be traded on the CME or through packers and grain elevators. Either option can be effective in locking in both input and revenue commodities.

Margin Management FAQ

- **How do I lock in feed ingredients that are not traded on the CME like DDGS?**
    - The best way to lock in DDGS is to trade corn contracts on the CME that equal the amount of DDGS used per pig. DDGS prices follow the corn market and trading corn futures has proved to be an effective hedge.

- **How much of my production and input costs should I protect?**
    - In general it is a good idea not to hedge over 70% of your projected input and revenue commodities. The reason for this recommendation is because pork production can fall short of projections due to health and business disruption (broken contract/facility loss). If you are unable to fulfill the contracts with production, you are still required to financially make good on any profit or loss accrued.

- **How do I estimate my cost of production?**
  - The best way to estimate your cost of production is to review past records to estimate the costs associated with labor, facility, transportation, and feed usage. To estimate the cost of feed, use the CME posted prices of corn and SBM.
- **I feed my own corn. How do I determine a price?**
  - It is important to price the corn you produce based on your local market, because even if you produce corn under the market price, there is opportunity cost you must account for.
- **How do I account for future basis?**
  - Future basis in corn, soybean meal, and lean hogs is difficult to estimate and it varies greatly by region. Generally speaking, historical corn and soybean meal basis by region is posted by grain cooperatives. Lean hog basis estimates can be garnered from packers. It is important to gather and compile 3-5 years of basis data to build a better estimate.