

---

## **Sponsors**

---

### **University of Minnesota**

College of Veterinary Medicine

College of Agricultural, Food and Environmental Sciences

Extension Service

Swine Center

### **Editors**

W. Christopher Scruton

Stephen Claas

### **Layout**

David Brown

### **Logo Design**

Ruth Cronje, and Jan Swanson;

based on the original design by Dr. Robert Dunlop

### **Cover Design**

Sarah Summerbell

The University of Minnesota is committed to the policy that all persons shall have equal access to its programs, facilities, and employment without regard to race, color, creed, religion, national origin, sex, age, marital status, disability, public assistance status, or sexual orientation.

# Strategies and tactics for controlling costs

Lee Fuchs

AgStar Financial Services, Northfield, MN

## Introduction

Controlling costs is critical to the success of any business. This is especially true for production agriculture where the commodities markets force producers into a low cost approach. Unfortunately, if improper strategies and tactics are used by management, a low cost approach can lead to functionally bankrupt operations that are burdened with deferred maintenance, fraught with operational inefficiency, positioned poorly in the marketplace, and capitalized inadequately. But if management utilizes sound practices in controlling costs, the business will thrive and provide for impressive, long-term returns to all stakeholders. This paper is an attempt to briefly identify sound management approaches for controlling costs.

## Accounting for costs

There are many ways to account for and monitor costs. Typically, a business will account for costs in the following ways:

### Financial accounting

The purpose here is to report costs according to Generally Accepted Accounting Principles. This provides for a consistent method of reporting costs across all businesses. For management purposes, however, this type of reporting is “after the fact,” which is useful for investors but has limited use for management.

### Tax accounting

The purpose here is to report costs with the intent of minimizing the tax burden of the business. This is useful but has very limited application for management of a business that has complex operations such as pork production.

### Management accounting

The purpose here is to provide management with information that is reliable and identifies where real value is being created in the business. In addition, this type of information will help management identify true costs of operational activities so that wasted costs can be minimized or eliminated and useful costs will be identified as critical to the success of the business.

## Types of costs in management accounting

There are several categories of costs in the management accounting processes of a business. The following highlights some of the key cost categories useful in this discussion.

### Variable costs

These are costs that vary in correlation with the change in production. If pounds produced increases, then variable costs will tend to increase to a similar degree. This is generally true in measuring variable costs in absolute terms such as total dollars of variable costs. But when variable costs are measured on a per unit basis, such as on a per pound basis, then variable costs per unit will tend to not change with changes in production. An example of a variable cost in pork production is feed cost.

### Fixed costs

These are costs that do not vary with the change in production. If pound produced increases, then fixed costs will not change since they are fixed. But, contrary to variable costs, fixed costs will decline on a per unit basis with increases in production. An example of a fixed cost in pork production is depreciation cost.

### Controllable costs

These are costs that management can directly influence. An example of a controllable cost in pork production would be feed conversion. Management typically has a direct impact on feed conversion through the selection of breeding stock, feed rations, and in the animal's environment.

### Uncontrollable costs

These are costs that management has very little or no direct influence. An example of an uncontrollable cost in pork production would be soybean meal costs. Soybean meal prices are driven mostly by the commodity markets and are beyond management's influence. To a degree, some larger producers may be able to buy bulk amounts of soybean meal and obtain volume discounts and, as a result, have some influence over soybean meal costs. But, for the most part, management will have very little control of this cost.

## Cost controls in pork production

In pork production it is sometimes useful to identify costs in two categories: feed costs and non-feed costs. In both of these categories, there will be both variable and fixed costs, as well as both controllable and uncontrollable costs. **Figure 1** depicts a simple version of cost categories in pork production.

**Figure 1** indicates the key drivers of feed costs and non-feed costs. The diagram also indicates that the accounting policies and production records employed have an impact on production costs. The pork industry does have recommended standards to be used for both accounting and production records. However, in both cases, there is flexibility allowed and these standards and policies employed can vary from one production company to another. The important issue to remember is that, in management accounting, the purpose is to provide management with useful, sound information to allow management the ability to make sound decisions. No two operations or styles of management are the same. Therefore, the development and use of management accounting information can vary from company to company and still lead to sound business decisions as long as the information is used properly by management. How each company develops and employs that information will determine whether the company is an ultimate survivor in a competitive and rapidly consolidating pork industry.

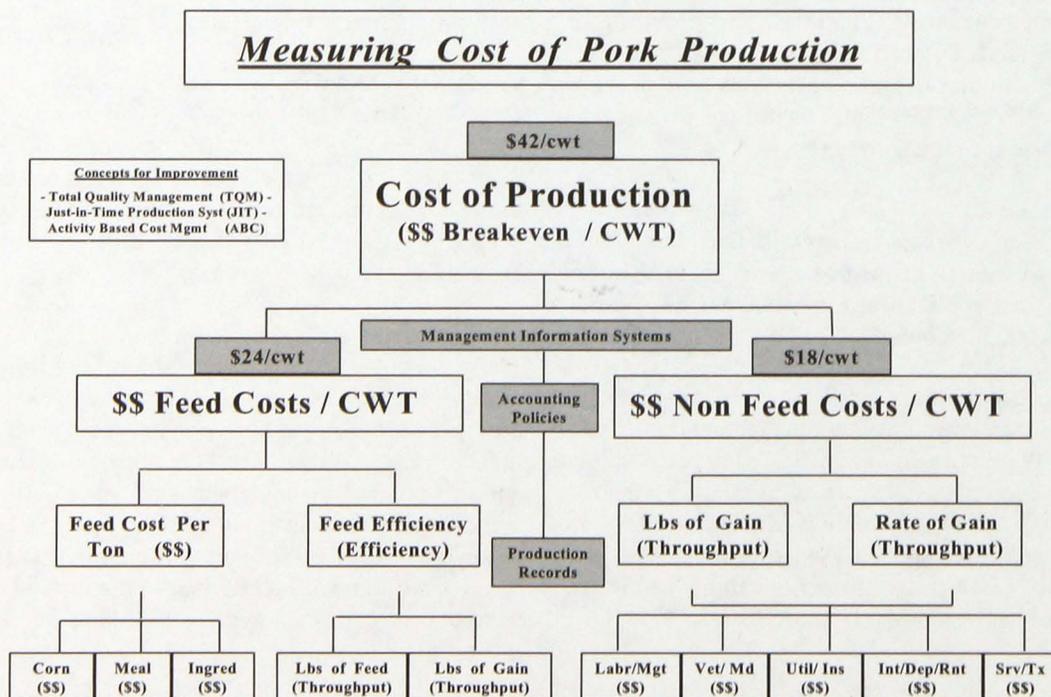
As **Figure 1** indicates, non-feed costs are determined primarily by pound of gain and rate of gain. Both issues are throughput issues. As a result, in order to control non-

feed costs, throughput must be maximized. Since most of the non-feed costs are fixed costs, they will not change in total dollars with changes in production. But fixed cost per unit will change dramatically with changes in production. A common temptation—and often a fatal management error—is to attempt to cut fixed costs when production levels are suffering, which results in high fixed costs per unit. Rather than focus on the causes of poor production levels, management attempts to cut costs such as medication, labor, or other services. This often results in even poorer production which puts additional pressure to cut costs which, again, leads to even poorer production. This can lead to a death spiral of the business; this usually makes it impossible to salvage any real value from the business.

As stated above, in order to control non-feed costs, throughput must be maximized. Throughput is determined by pounds of gain and rate of gain, which are both controllable. Therefore, pounds of gain and rate of gain are critical control points in managing non-feed costs.

**Figure 1** also indicates the primary influences of feed costs per unit is feed cost per ton and feed efficiency. Feed cost is a variable cost. Feed costs per ton can be considered an uncontrollable cost. Feed efficiency can be considered a controllable cost. As a result, a tactic management can use to control costs in pork production would be to access ways to improve feed efficiency. In addition, feed efficiency becomes a more critical control point in cost management as feed costs per ton increases. For example, if soybean meal prices in the commodity markets are \$200/ton then a 10% improvement in feed efficiency

Figure 1



will yield more cost savings than when soybean meal prices are at \$150/ton.

**Figure 2** illustrates an estimate of the impact of feed efficiency at varying levels of feed costs per ton. This figure indicates that, as feed costs increase, the cost savings from improved feed efficiency increases. In periods of high grain prices, feed efficiency becomes even more of a critical control point in controlling costs. In today's environment of low grain prices, however, feed efficiency becomes less critical, albeit still very important.

## Strategies and tactics to control costs in pork production

### Strategies

#### Economies of scale

In theory, the larger the production system is, the more it can spread out fixed costs and reduced breakeven levels. In practice, this has become more difficult to exploit, but economies of scale have proven to be a sound strategy in controlling costs. There is some evidence that, once a production system reaches 50,000 sows farrow-to-finish, the advantages of economies of scale become more difficult to employ. One possible reason for this may be that industry management experience becomes more limited at this level of economies of scale.

### Location

There is little debate that locating a pork production system in Iowa, Southern Minnesota, or Eastern South Dakota has costs advantages due to lower grain prices, lower transportation, and better industry infrastructure. More producers are exploiting this advantage by locating more or their production in these areas.

### Modern production methods

During the 1990s, many producers built production systems utilizing all in/all out pig flows, SEW, and two or three stage operations. These systems required higher fixed investment but are strategies to drive costs lower in the long run.

### Deferred maintenance

Many traditional producers are able to keep costs low by not reinvesting in the systems. This was the case during the 1980s and lead to opportunities to invest in more modern systems during the 1990s.

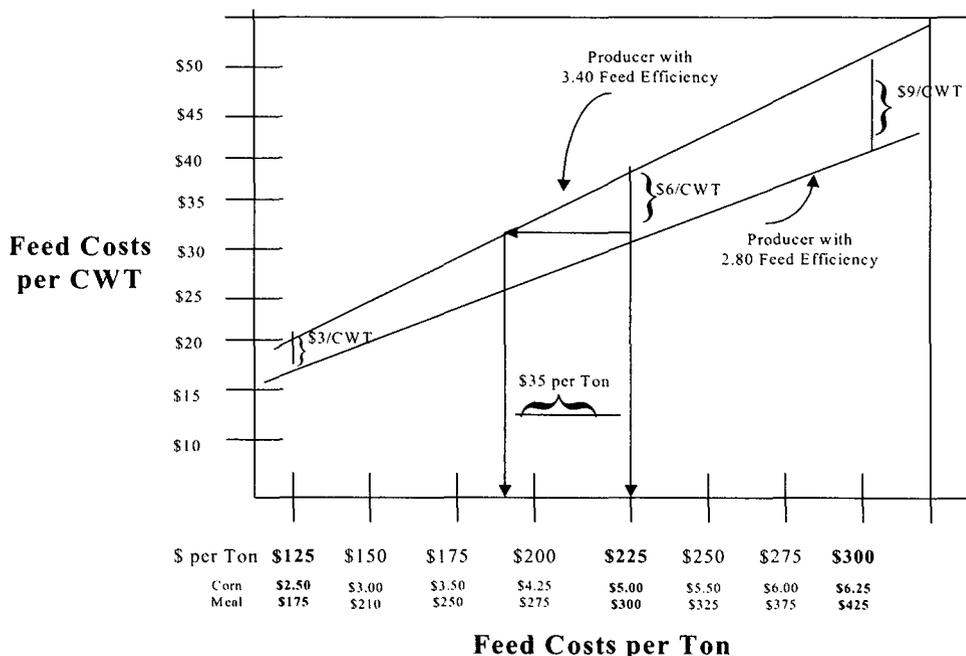
### Tactics

#### Feed pigs to heavier weights

This is a throughput issue and will lower fixed costs per pound. Variable costs per pound will not be reduced. Also, feeding pigs to heavier weights will put additional demands on cash and liquidity as more dollars will be invested in each pig and the slower turnover will mean cash from the sale of pigs will be slower.

Figure 2

## Feed Efficiency Impact



**Keep sows for an additional parity**

This will lower the fixed costs by managing more pigs per sow over the life of the sow. The risk here is that production levels suffer overall and the risk of disease becomes higher.

**Close down poor performing or higher cost sites**

This will tend to reduce variable costs but may increase fixed costs. This tradeoff will need to be properly assessed.

**Refinance long term debt to reduce cost of capital**

This will reduce fixed costs. In the existing interest rate environment, substantially lower interest rates may be possible.

**Assess the cost of the breeding stock**

Often it will lower your costs to own your own gilt multiplier or boar stud. If this is not possible, look to enter into a joint venture with another producer to reduce the cost of the breeding herd. This will lower your fixed costs.

**A word of caution**

---

In tough economic times, producers sometime do not recognize the need to reduce costs versus the need to preserve liquidity. The two sometimes do not go hand in hand. For example, feeding hogs to a heavier weight may reduce costs but will also reduce liquidity. In many cases, costs are not the problem. Rather, poor liquidity is the problem, and this is usually created by poor market prices. Producers need to assess whether preserving liquidity should be a higher short-term priority versus reducing costs.

**Summary**

---

There are many ways to reduce costs in pork production. Most can be painful for management and require high quality information to know if the best management decisions are being made. The key is to obtain useful management accounting information, to recognize the critical control points that determine the key costs in the production system, and to remember each system is different.

