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Farm and Risk Management FOCUS

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Greetings from the FARM Program Team!

Welcome back to the FOCUS!

In this issue, our market analysts are back looking into their econometric crystal balls to once again provide us with an exceptionally accurate forecast.

For some reason, we happen to be a little heavy on articles written or co-written by Co-editor Gregg Hadley. Nevertheless, we hope you will enjoy them just the same. In the FOCUS on Management Education, Gregg discusses the Assessment Center for Dairy Farm Owner/Managers.

In FOCUS on Management Research, a research project conducted by Mr. Corey Salzl , 2006 UW-River Falls Senior Honors Student, and Gregg Hadley is summarized. This research investigated the financial performance of Wisconsin AgFA tie stall farms relative to Wisconsin AgFA free stall farms.

This issue of the FOCUS wraps up with a FOCUS on Management Principles article written by, you guessed it, Gregg Hadley. In this article, Gregg suggests a few questions that managers should regularly ask themselves to keep in the management mindset.

We hope you enjoy this issue of the Farm and Risk Management FOCUS!

- Gregg Hadley and Carl Duley
  FOCUS Co-Editors

The FOCUS wants to share your Farm and Risk Management, research, educational program, or idea with the FARM Program Team's clientele!

Call for Farm and Risk Management Articles

Are you a UW-Extension employee? Have you:

- ✓ completed an interesting farm or risk management research project;
- ✓ developed a unique farm and risk management educational program; or,
- ✓ thought of a new way to look at farm and risk management?

The FOCUS would like to hear about it!

The FARM Program Team would like to invite their UW-Extension colleagues to submit articles concerning farm and risk management research, education, principles, or management idea generation/synthesis. Articles should be no longer than 3 pages in length. If interested, please contact Gregg Hadley at gregg.hadley@uwrf.edu or 715-425-3188.

"The 2006 Wisconsin all-milk price will likely be around the $13 mark."

FOCUS on the Milk Markets with Ed Jesse

Mother Nature clipped a little from the claws of dairy analyst bears over the last couple of months. Six weeks of very hot weather softened earlier pessimism about average milk prices for the year. But large gains in milk production during the first half of the year elevated stocks and muted weather-related gains in dairy product and farm milk prices.

Starting where 2005 left off, 2006 began with five percent year-over-year gains in monthly milk production from January through March. Demand couldn't keep up, and milk prices skidded rapidly in response to growing inventories of cheese and butter. The Class III price fell from $13.39 per hundredweight in January to $11.11 in March, and had not yet recovered by August, when it was reported at $11.06. The blistering pace of milk production eased in April and May, to 3.3 and 2.3 percent, respectively, over 2005. But there was still too much milk to clear markets at Class III prices anywhere close to those experienced in early 2005.

U.S. exports of nonfat dry milk tapered off from the high levels of 2005, causing downward price pressure on the Class IV price as well. The August Class IV price was $10.64 per hundredweight, $1.56 lower than January.

June milk production was up only 1.5 percent from 2005, as high temperatures in the latter part of the month kept milk yield per cow to about even with 2005. July and August production numbers were also up only 1.5 percent and milk per cow showed no gain over

2005. The situation was especially serious in California, which recorded a loss in cow numbers between May and July of 14,000 head. Most of this reduction is believed to represent death losses from extreme temperatures. The smaller California herd also produced 20 pounds less milk per cow in July, causing the state's July milk production to fall 0.3 percent from 2005. But the Golden State recovered quickly, with a 4.1 percent year-over-year gain in August milk production due to 65 pounds more milk per cow than last August.

Wisconsin's dairy herd continued to show modest growth through August, when it numbered 1,244,000 cows, up 8,000 head from last year. But July's heat held milk yield per cow at 2005 levels, resulting in a gain in total July milk production of 0.6 percent over last year, all from more cows. August production was down about 1 percent from 2005 from a 25 pound drop in yield per cow.

Because of ample inventories, prices for butter and cheese were slow to respond to moderations in milk output. Block cheddar cheese prices on the CME languished around $1.16 per pound for much of July before finally rising to $1.30 by late August. Block prices nearly broke the $1.35 mark in early September before falling back later in the month. CME Grade AA butter prices showed a similar pattern, sitting on $1.15 per pound before gaining 15 cents between mid-July and mid-August and nearly breaking $1.40 in September before dropping to $1.30. With smaller stocks relative to butter and cheese, nonfat dry milk prices jumped 15 cents per pound between July and September, and dry whey was up more than a nickel per pound.

Higher product prices — and trade expectations of further increases — have not yet boosted farm milk prices materially, but they are beginning to show up in Class III futures prices. Between late May and late August, the November 2006 Class III contract jumped about $1.25 per hundredweight. September through December 2006 contracts were all trading in the $12.25-$12.50 per hundredweight range in late September.

The bottom line is that farm milk prices for 2006 will average higher than expected earlier this year, but will still end up well under 2005. Expect Class III prices for the year to average about $12 per hundredweight, $2 less than 2005. The 2006 Wisconsin all-milk price will likely be around the $13 mark.

FOCUS on the Cattle Markets with Brenda Boetel

"Obviously, this negative packer margin is not sustainable and either the boxed beef price has to increase, the live cattle price has to decrease or both for the situation to be reversed."

Cattle prices remained strong over the summer and into early fall. In fact, cattle prices have remained higher than most analysts expected. The question remains though whether this strength in prices is sustainable for the remainder of the year. One factor that is significant for strength in cattle prices is the boxed beef price. Beef supplies are up 6.1% over last year. Although we have managed to keep strength in the boxed beef price, we have recently seen a significant drop in this price. This implies that packers are having trouble moving the quantity of beef produced through the system.

The drop in price indicates that beef demand has not kept pace with the increasing supply. One reason we may have experienced stronger beef prices in summer and early fall was the small white meat supplies. Poultry production was down 2% in July and August, which increased beef demand and may have accounted for some of the strength in beef prices. However, this was a short-term decrease in poultry product, and fourth quarter poultry production is expected to be larger than 2005.

For cattle prices to remain in the high $80s, strength in boxed beef prices is needed, which implies that demand will need to increase. To understand why we need an increase in boxed beef price to sustain our cattle prices, we need to first understand packer margins.

Every 1,250 pounds of fed cattle live weight will yield approximately 788 pounds of carcass weight and 536 pounds of retail weight beef. If fed cattle prices are at $0.87 per pound, the feeder will receive $1,088 per head. If the USDA light weight Choice boxed beef cutout value is $1.30 per pound, the packer will receive $1,024 from the sale of boxed beef. The packer will also receive additional money from the sale of by-products, which is approximately $14. Thus, the packer will receive approximately $1038, however, this is not profit. Remember, the packer had to pay $1,088 for the carcass so the packer is already negative $50 on the sale of this beef, and no costs for labor, machinery, etc., have been added. Obviously, this negative packer margin is not sustainable and either the boxed beef price has to increase, the live cattle price has to decrease or both for the situation to be reversed.

At the current boxed beef price, cattle prices are not sustainable. Therefore, it will be important to watch this boxed beef price for the next couple weeks to see if the prices increase. If boxed beef price does not improve in the next couple of weeks, packers will likely reduce kill schedules and cattle prices will drop.

"…if there are any significant increases in both the corn and soybean crop size then there will be big moves in the price…"

FOCUS on the Corn and Soybean Markets with Rami Reddy

With the exception of heat problems in the western region of the country, the growing conditions for corn and soybean were close to ideal this summer. Unlike 2005, there were no serious concerns of drought or pest problems. NOAA (National Oceanic and Atmospheric Administration) predicted that El Nino conditions have developed and these are likely to continue into early 2007. During the previous El Nino, the effect had a positive impact on US grain production. There was an expectation that the U.S. would have another record breaking harvest this year.

The US corn crop is now forecast at 11.114 billion bushels, which is almost identical to the size of the 2005 crop. The U.S. average yield is forecast at 154.7 bushels per acre based on trend projection. This yield is 6.8 bushels above that of 2005 average yield per acre.

Wisconsin corn production for the 2006/2007 year is estimated to be 422.80 million bushels with an average yield of 151 bushels per acre. This figure is 6.4 million bushels below the 2005 production. In 2005, the state received an average price of $1.85 per bushel.

The harvest time contract (December 2006) for corn is currently trading at $2.41 per bushel. From a $2.84 high on July 12th, the futures prices had shown a downward decline. However, lately the corn cash prices were firm due to strong demand factors, and producers are not selling much corn now. In some of the Wisconsin markets, the cash price for corn is in the range of $1.85 to $2.05 per bushel.

The basis levels continue to firm across the country. But this situation will change as the harvest gets near for corn (late October to early November) and the basis levels will weaken with lower cash prices.

The U.S. soybean crop for 2006 was forecasted at 3.093 billion bushels, about equal to the 2005 crop. The yield is forecast at 41.8 bushels per acre which is slightly below the yield of 2005 by 1.5 bushels. The USDA projects that the 2006-07 marketing year average farm price in the range of $4.90 to $5.90. The projected year-ending stocks-to-use ratio of 17.37 percent suggests an average farm price near $5.60 per bushel.

For soybeans, WI crop production this year is estimated around 68.04 million bushels with an average yield of 42 bushels per acre. These numbers are slightly below that of year 2005 with an actual production of 69.52 million bushels and average yield of 44 bushels per acre. The WI average price received for the year 2005 was $5.50 per bushel.

The soybean November 2006 futures contract closed at $5.49 per bushel. There were bearish factors that led to a steady decline in soybean November futures prices from a July 11th high of $6.32 per bushel. The November contract remains poised to move toward long-term support near $5.00. Due to low volatility seen in the market it should continue to be a slow, grinding process. The cash prices for soybeans in some of the Wisconsin markets are in the range of $4.75 to $5.00 per bushel.

Soybean basis levels continue to firm in the country because of very slow producer selling. Harvest activity is limited to only local areas so far.

In the next scheduled report release by USDA in the month of October, if there are any significant increases in both the corn and soybean crop size then there will be big moves in the price direction. Otherwise, both markets had very much factored in all the current information, and the price levels are reflecting a fair value.

The short term fundamentals for both crops are bearish as we are heading into the harvest. Wet weather patterns could delay the harvest efforts. With the current declining crude oil prices, stronger dollar, general weakness in commodities prices and reduced fears of inflation concerns – the general direction of corn and soybean prices is downward.

At the time of peak harvest, both the soybean and corn prices will reach levels that will provide considerable LDP values. In some counties the cash prices are getting below the posted county price (PCP) levels. As a strategy, make use of non-recourse loans for cash needs and put the crops in storage with a protective hedge. As basis and cash prices improve into the marketing year, you will see good opportunities to make the sale of both crops.

"…any farm manager who desires to or needs to improve their management acumen should attend the Assessment Center for Dairy Farm Owner/Managers!"

FOCUS on Farm Management Education with Gregg Hadley

The Assessment Center for Dairy Farm Owner/Managers

I have had the pleasure of knowing a lot of really good farm managers during my feed industry, dairy management and Extension careers. One thing that most of these really good farm managers have in common is the desire to improve their management acumen.

In many large businesses, not-for-profit organizations, and government agencies – assessment centers are used to assess the management strengths and weaknesses of their managers and managers-to-be. Once the assessment has been completed, appropriate professional development programs and career plans can be suggested and/or developed for the participants to enable them to reach their fullest potential as managers.

Unfortunately, most farm managers have not had the opportunity to go to a farm-oriented management assessment center. As such, many farm managers do not know for sure what their management strengths and weaknesses are, and their professional development program consists of some ad hoc activities which may or may not be beneficial to them.

Luckily, a team of UW-Extension professionals have adapted the assessment center approach for assessing the management skills of farm managers. At the **Assessment Center for Dairy Farm Owner/Managers**, farm managers are assessed on nine management attributes that underpin all of the management activities on a dairy farm. These attributes are: leadership, managing resources, empathy, communication, creativity, teamwork, decision making, planning and organizing, and initiative.

The assessment is conducted in a two-day workshop where up to 12 farm and agribusiness managers or stakeholders participate. The assessment center is usually held in a retreat-type setting. Participants are assessed by participating in several individual and group activities that simulate real world farm business management activities. At the completion of the assessment center, a team of assessors develops an assessment profile for each participant. A report is also developed and presented to each participant at a later date. The report is used to discuss the professional development opportunities that will help each participant reach their fullest potential as a manager.

Who should attend the Assessment Center for Dairy Farm Owners/Managers? Well, as described above, there are managers that just like improving their skills. They should go. There are managers who may be contemplating a transition in their business, such as a major expansion or the adoption of a new dairy farming regimen, which may emphasize different management skill sets. They should go. There are managers who may be contemplating taking on a new partner. Both the manager and the prospective new partner should go, but preferably not at the same time. Any farm manager who desires to or needs to improve their management acumen should attend the Assessment Center for Dairy Farm Owner/Managers!

If you would like to attend The Assessment Center for Dairy Farm Owner/Operators or have clients/customers you would like to see participate, please contact Carl Duley (1-608-685-6256, carl.duley@ces.uwex.edu) or Jenny Vanderlin (1-608-263-7795, jmvander@wisc.edu). Sessions are held twice a year. The next Assessment Center for Dairy Farm Owner/Operators will be held on November 14 and 15 at the Byron Retreat Center in Brownsville, Wisconsin. Another session will be held at Luther Park in Chetek, Wisconsin on February 6 and 7, 2007.

FOCUS on Management Research with Cory Salzl and Gregg Hadley

"The free stall farms earned a significantly higher ROROA in both the bad and good price years."

A Bad Year/Good Year Series Report

A Financial Performance Comparison of Tie Stall Dairy Farms and Free Stall Dairy Farms in 2003 and 2004

Background

Two of the most common dairy facility types in Wisconsin are tie stall/stanchion (tie stall) barns and free stall barns. Tie stall barns are an older technology where each cow (when they are not outside) is tied in a single stall and feed, water, and the milking units are brought to the cow. Free stall barns are a more modern technology where the cows are free to roam the barn, choose their own stall, and they walk to a centrally located feed bunk, water trough, and milking parlor.

Dairy farming is a capital intensive business. For those contemplating starting a dairy farm or contemplating making a new investment in dairy cattle housing, it is important to understand the financial performance differences between the two facility types when making facility decisions. This report examines the financial performance of farms employing these facility types in both a poor milk market year (2003) and a good milk market year (2004).

Methods

UW-Extension and the Center for Dairy Profitability maintain the Agriculture Financial Advisor (AgFA) financial records and analysis program. Hundreds of Wisconsin dairy farms participate in this program each year. The 2003 and 2004 AgFA financial data sets were divided by primary facility type (214 tie stall and 109 free stall farms). The average financial measures of the two groups were then compared statistically. The comparisons were made within the sample years but not between the sample years.

Results

Table 1 displays the farm descriptive statistics for the tie stall and free stall farms. Free stall dairy farms had a larger average herd size. Tie stall dairy farms had more crop and forage acres per cow. The tie stalls also had an average asset value per cow that was over 30 percent higher than the assets per cow of the free stall farms. Free stall dairy farms shipped more milk per cow. In 2003, the low price year, free stall dairy farms earned a higher average milk price, but the difference in milk price between the two farm types in 2004 was not statistically significant.

Table 1. Farm Descriptive Statistics

Measure	2003		2004	
	Tie	Free	Tie	Free
Herd Size	69.14	206.83	75.54	228.55
Crop Acres per Cow	3.79	2.64	3.29	2.52
Forage Acres per Cow	2.04	1.59	2.36	1.75
Total Assets per Cow	$10,905	$7,882	$11,078	$8,239
Milk Sold / Cow	19,841	22,281	20,255	22,241
Milk Price per CWT	$12.64	$13.06	$16.64*	$16.82*

* The difference was statistically insignificant.

The rate of return on assets (ROROA)[1] measures the farm's profitable returns to both the owner(s) and lender(s). It is expressed as a percentage of their investment in the farm's assets. The DuPont Analysis links a farm's ROROA to its asset turnover (ATO)[2] – which measures how efficient the farm's assets are at generating gross farm revenue – and operating profit margin (OPM)[3] – which measures the amount of profit the farm earns from each dollar of gross farm revenue generated – by the following formula:

ROROA = ATO * OPM.

The DuPont Analysis results are displayed in Table 2. The free stall farms earned a significantly higher ROROA in both the bad and good price years. Part of this difference can be attributed to the free stall farms ATO, which was over 47 percent higher than the ATO of the tie stall farms in both years. Having a higher ATO indicates that the free stall farms were better at either securing a relatively higher price, obtaining higher production, and/or operating with a relatively lower asset investment. As shown previously in Table 1, the high profit farms did indeed earn a higher milk price in the low milk price year of 2003, shipped more milk per cow in both years, and farmed with fewer assets per cow in each year.

Although the OPM of the free stall farms appears to be higher than the tie stall farms in 2003, the difference in OPM was not statistically significant. In 2004, the free stall farms had a 14.5 % higher OPM than the tie stall farms. This means that the free stall farms were more efficient at converting their gross farm revenue into operating profit in 2004.

[1] ROROA = [(Net farm income from operations + interest paid – the value of unpaid labor)/ (Average farm assets)] * 100 %
[2] ATO = (Gross Farm Revenue)/(Average farm assets)
[3] OPM = [(Net farm income from operations + interest paid – the value of unpaid labor)/ (Gross Farm Revenue)] * 100 %

Table 2. Dupont Analysis Results

DuPont Measure	2003		2004	
	Tie	Free	Tie	Free
ATO	0.31	0.46	0.36	0.53
OPM	7.90%*	10.37%*	16.20%	18.56%
ROROA	3.18	4.96	6.02	9.90

* The difference was statistically insignificant.

Interestingly, in 2004 when the free stall dairy farms had a better OPM, the free stall dairy farms were less efficient than the tie stall dairy farms at producing Net Farm Income from Operations (NFIO). The tie stall farms earned 20.79 cents of NFIO for every dollar of gross farm revenue generated, whereas the free stall farms converted only 18.53 cents of their gross farm revenue into NFIO (Table 3).

Table 3. Select Measures Affecting OPM

Measure	2003		2004	
	Tie	Free	Tie	Free
NFIO as a % of Gross Farm Revenue	15.51%*	7.05%*	20.79%	18.23%
Paid Labor Expense Ratio	10.03%	13.14%	10.39%*	12.41%*
Unpaid Labor Hours per Cow	57.38	22.32	50.05	19.99

How then were the free stall dairy farms able to outperform the tie stall farms in terms of OPM in 2004? The answer can also be seen in Table 3. NFIO does not include a charge to compensate the owners and their family members for any unpaid labor incurred by the farm. The OPM and the ROROA includes a charge for unpaid labor. As shown in Table 3, the tie stall facilities used over twice as much unpaid labor. Since the tie stall farms were more efficient at generating NFIO with their gross farm revenue but less efficient at generating operating profit with their gross farm revenue, this indicates that the tie stall farms could not generate enough gross farm revenue to adequately compensate the owners and their family members for their unpaid labor

Overall, the typical AgFA dairy farms using free stall technology performed better financially in 2003 and 2004 than the typical AgFA farms using tie stall technology.

"Asking these four simple but powerful questions may help you and/or your client become a better manager."

FOCUS on Management Principles with Gregg Hadley

Powerful Questions

I am often asked, *"What are the most important things for a manager to do?"* My answer sometimes surprises people. To me, effective management – whether production management or farm business management – comes down to asking, answering and acting upon 4 seemingly simple but powerful questions:

1) What is our present condition?
2) How did we get in this condition?
3) What if we make some changes?
4) How do we get the good ideas implemented?

What Is Our Present Condition?

Although this question seems straightforward, many managers have difficulty answering this question. Current performance may cloud a manager's judgment. You might hear a manager say, *"We have a lot of money in the checkbook, so we must be doing something right."* Maybe that is true right now, but will that manager still have a lot of money in the bank if the price goes down in the near future?

The key here is that the answer to this question needs to be researched, and it needs to be researched from more than the *"what the yield report says"* or *"what the checkbook says"* perspectives. Go over the production records. Is the herd producing as well as it can given the current state of the herd? Has it met the production goals you set for it a few months ago? Go over the cash flow budget. Is the farm performing like you thought it would when you made that cash flow budget? Think about how the farm's condition will change a month, six months or a year from now if you make no changes? Are you still sure the farm is doing well?

How Did We Get In This Condition?

Once the answer to the first question is determined, the manager needs to determine why your farm is performing well or poorly. Look at those records more closely. Did this year's implemented changes work well? Has a "tried and true" operations protocol become obsolete given the current condition? Rank the issues that seem to have the most impact on the current condition. This helps to narrow the focus when answering the next question.

What If We Make Some Changes?

When I ask farm managers why they feed two parts haylage to one part corn silage, or why they follow a particular crop rotation, or some similar operations question – the most common answer I get is *"Well, I guess because we have always done it that way."* Now, a manager may be doing things *"the way we have always done it"* because it was the optimal way years ago and still is today. If that is the case, fine. There are a lot of managers, however, who do the same thing year-after-year because they never ask the question, *"What if we made some changes?"*

In my opinion, the ability to ask and to find good answers to this question is what separates the good managers from the average managers. Asking this question helps keep managers concentrating on improving their farm or business. It leads to increased creativity. It leads to finding better ways of doing things. Nevertheless, these better ways need to be implemented in a timely and efficient manner, which leads us to the fourth question?

How Do We Get These Good Ideas Implemented?

The ability to answer and follow up on this question seems to separate the excellent managers from the good managers. How many times have you heard or used the excuse of, *"Well, I never quite got around to doing that"* after a good idea has been generated and thoroughly researched. Change can be scary, and it can be disruptive. But, the rewards to a change that has been thoroughly researched should exceed the costs and risk associated with that change. So, get on with it! Figure how to implement the change with the least amount of disruption. Set goals and due dates for making the change, and then stick to it!

Summary

There are many approaches to the management process. Asking these four simple but powerful questions may help you and/or your client become a better manager. Try asking these questions on a regular basis. I am willing to bet that your farm performance will improve!