

# Farm and Risk Management FOCUS

A University of Wisconsin – Extension FARM Program Team Publication

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## Greetings from the FARM Program Team!

Welcome back to our second issue of the FOCUS, the UW-Extension Farm and Agricultural Risk Management Program Team's newsletter. Thanks for all of the positive feedback concerning our first issue. We hope that you enjoy this issue even more!

Our commodity market experts have been busy analyzing the last four months of 2005 and preparing forecasts for 2006. Our dairy and cattle market experts – UW-Madison's Ed Jesse and UW-River Falls' Brenda Boetel appear to be a little bearish in this issue's Focus on Milk Markets and Focus on Cattle Markets. In our featured commodity report this month – Focus on Grain Markets – UW-Platteville's Rami Reddy is also bearish concerning soybean markets, but he is more optimistic about the corn outlook.

In this issue, we also begin a multipart, in depth examination of UW-Extension farm and risk management producer education programs. Jenny Vanderlin of the Center for Dairy Profitability describes two women-in-agriculture programs, Heart of the Farm and Annie's Project.

Do Wisconsin dairy farms earn more than their cost of borrowed capital? In this issue's first Focus on Management Research article, Lee Milligan, St. Croix County Agricultural Extension Agent, examines the relationship between dairy farm debt and dairy farm profitability from 2002 – 2004.

Have you priced farmland lately? Agricultural land prices have been one of the hot topics the past few years. In our second Focus on Management Research article, the Center for Dairy Profitability's Arlin Brannstrom examines the trend in Wisconsin farmland sale prices from 2000 to 2005.

I also want to take this time to thank to Carl Duley, Buffalo County UW-Extension Agriculture Agent. Carl has agreed to serve as the co-editor of the FOCUS. Welcome aboard Carl!

I hope you enjoy this issue of the UW-Extension Farm and Risk Management FOCUS.

- Gregg Hadley
- FOCUS Co-Editor

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

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## 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, or idea/program synthesis and integration. Articles should be no longer than 3 pages in length. If interested, please contact Gregg Hadley at [gregg.hadley@uwrf.edu](mailto:gregg.hadley@uwrf.edu) or 715-425-3188 or Carl Duley at [carl.duley@ces.uwex.edu](mailto:carl.duley@ces.uwex.edu) or 608-685-6256.

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*Low milk prices in 2006 will challenge dairy farmers, but MILC payments will help soften the blow*


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## FOCUS on Milk Markets with Ed Jesse

Despite falling milk prices at year-end, 2005 turned out to be a good year for Wisconsin dairy farmers. Class III (cheese milk) prices averaged \$14.05 per hundredweight for the year, down \$1.34 from 2004's record \$15.39 but more than \$2.00 higher than the previous 5-year (2000-2004) average. The 2005 Wisconsin all-milk price averaged \$15.62 per hundredweight.

Strong milk prices were primarily the product of robust commercial disappearance of dairy products. When all the numbers are in, commercial use is expected to jump about 2 percent from 2004. Consequently, even though milk production was gaining steam in the last six months of 2005, demand was strong enough to absorb most of the added milk supply, leaving markets in reasonably good balance.

An especially bright spot on the demand side was nonfat dry milk, which has been a drag on the market in the last several years with embarrassingly large government purchases and stocks. Due to a very tight world supply of milk proteins, U.S. exports of nonfat dry milk totaled more than 600 million pounds in 2005, a 20 percent gain over 2004. The USDA bought no surplus nonfat dry milk in 2005, and emptied its warehouses of previously-acquired purchases. Profitable protein export opportunities extended to dry whey, which traded at much higher price levels in 2005 compared to 2004. This elevated



the price of “other solids” in federal order markets using multiple component pricing, adding more than 50 cents per hundredweight to Wisconsin farmers’ milk checks. More milk moving to dryers had the added benefit of keeping the milk out of cheese vats, which helped to support cheese prices.

Supply and demand conditions will not be as well-balanced in 2006. Following on the heels of big year-over-year monthly gains in milk production during the last half of 2005, January and February 2006 saw 6 percent increases over last year. Dairy farmers are adding lots of cows and getting a lot more milk from them. Production increases more than double demand growth are sobering for price outlook, and the market has turned decidedly bearish. Early April Class III milk futures prices are under \$12.00 per hundredweight for all 2006 contracts. A repeat of the dismal prices seen in 2000 and 2002 is a real possibility. Fortunately, the MILC program has been reinstated and will help soften the blow. Expect monthly MILC payments in the \$0.60-\$0.80 per hundredweight range through the end of the year.

Wisconsin has been participating actively in recent milk production gains, with year-over-year monthly increases exceeding the national average since June 2005. Total Wisconsin milk production in 2005 was just shy of 23 billion pounds, 3.5 percent more than 2004 and the largest annual output since 2000. In 2005, Wisconsin ended the year with 3,000 more cows than when the year began. This is the first time this has happened since 1994, and while perhaps premature, may signal the beginning of the reversal of a downward trend in the state’s dairy herd that began more than 20 years ago.

## **FOCUS on Cattle Markets with Brenda Boetel**

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*“ Expect a drop to the upper-\$70s to lower-\$80s in the third quarter.”*

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For one interested in the cattle markets, 2005 was a year full of drama. Several market influencing events occurred including: the border to live cattle trade with Canada opening in late July, an additional case of BSE in the U.S., foot-and-mouth disease in South American, avian influenza in several countries, beef exports to Japan beginning in December (only to be halted in January 2006), and the changing of status for Minnesota in December from a TB free state to a “Modified Accredited Advanced” state.

In spite of all of the drama, the cattle market was sensational in 2005. USDA Choice box beef prices averaged over \$1.44 per pound for the year. That compares to an average price of \$1.41 last year and \$1.28 for the past five years. The spread between Choice and Select prices was in line with the five year average. That increase in average price occurred even though beef production was about a half of a percent

larger. Fed cattle prices in Wisconsin averaged \$87.15 per cwt. in 2005, compared to \$83.32 in 2004. The Wisconsin price for 750 pound steers averaged \$111.45 per cwt. and 550 pound steer calves averaged over \$128.95 per cwt. for 2005, as compared to \$104.78 for 750 pound steers and \$111.77 for 550 pound steer calves in 2004.

So what can we expect for 2006?

On the supply side, live cattle trade with Canada was approaching near average levels in the last half of 2005, while the live cattle imports from Mexico and boxed beef imports from Canada have dropped to average levels. While the foreign cattle and beef supplies are returning to normal, the U.S. cattle inventory is growing. The USDA's semi-annual cattle inventory released January 27, 2006 showed that the U.S. cattle inventory was up 2% as compared to January 1, 2005. The number of beef cows that have calved was up 1% from January 2005. Further, there was an increase in placements of cattle on feed in 2005, which implies that 2006 slaughter numbers will be higher.

On the demand side, the hopes of a slowly returning Japanese market have vanished with the re-imposition of the ban on U.S. beef. Since this was expected to be a slow growth and not a quick return to pre-BSE levels, the newly-imposed ban has not affected the market dramatically. Domestic consumption, which accounts for more than 90% of the U.S. total beef production weakened slightly in the latter part of 2005. In 2006, beef demand will likely not grow, but should remain relatively stable.

Due to an increase in supply and a steady to weaker demand, 2006 will likely bring lower fed cattle prices. In general, expect prices 1-2% lower in the first three quarters of 2006 compared to prices seen in 2005. While fed cattle prices around \$90/cwt are likely to persist for much of the first quarter, prices in the mid \$80s are more likely for the second quarter. Expect a drop to the upper-\$70s to lower-\$80s in the third quarter.

## **Featured Commodity Market: FOCUS on Grain Markets with Rami Reddy**

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***“ With strong demand outlook and talk of lower planted acreage for next year in the US the corn prices will improve.”***

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The harvest and marketing season for corn and soybeans from September 2005 till now can be characterized as a steady decline in the prices with fundamental demand factors improving for corn but deteriorating for soybeans. This report will cover a brief overview of the grain market action from September 2005 to early January 2006.

## **September:**

This month, good harvest progress and yield reports were given across the country and WI. With high production and beginning stocks numbers, severe storage problems developed. Cash prices for corn were at seasonal lows in many parts of the country. Cash bids for corn were at the \$1.37-\$1.72 per bushel range, and soybeans are at the \$4.93-\$5.36 per bushel range in WI. For corn producers, the month of September was a good time to take LDP's. The cash prices were low, and, in most of the counties in WI, the LDP's were at the 43-47 cents range or more. Basis levels were weak for both crops.

The cash prices went low due to higher yields and no storage space causing some producers to sell some portion of their crops. In WI the cash corn prices were at an average of \$1.47 per bushel, and soybeans prices were at an average of \$ 4.90 per bushel.

The bird flu (Avian Influenza) problem around the world was seen as a negative factor for feed grain usage. Bean oil remained as a hot commodity in international markets as there was increased bio-diesel demand due to high crude oil prices.

The South American weather was good for planting with beneficial showers in Argentina and good moisture conditions in Brazil. Producers in those countries faced some economic hardships such as low credit availability and high input costs.

## **October:**

The US supply picture became clear with the major harvest of corn and soybeans completed in the nation. From the WASDE report (Nov 10<sup>th</sup>), the outlook for U.S. corn indicated increased production, higher domestic consumption, larger stocks, and lower prices. The crop estimate for 2005 corn production was 11.032 billion bushels (the second largest crop on record). Corn ending stocks were up. Soybean production was forecast at 3.043 billion bushels. Soybean oil production, consumption, exports and stocks were all raised in this USDA report.

In most of the Wisconsin markets, the cash bids were in the \$1.45 to \$1.55 per bushel range. Closer to the river terminals, the cash bids were higher at \$1.65 to \$1.75 range. The cash bids for soybeans were in \$5.15 to \$5.35 range.

The basis levels in Midwest states were steady to higher as many producers withheld sales. For corn, the average basis was 30 to 35 cents below nearby December futures price. Soybean basis values were stronger as harvest was completed and many producers held on to their beans.

Improved weather in South America and continued export competition on the world market by China had left the market in bearish tone. News of bird flu related human death toll in China prompted the grains markets to go lower.

## **November:**

The USDA supply and demand report released Friday, Dec 9<sup>th</sup>, projected that there were more corn and soybeans at the end of the year in US than previously estimated, and world ending stocks were also raised from previous estimates. US corn ending stock numbers were increased and pegged at 2.419 billion bushels. This is the highest ending stocks in 18 years. Soybean ending stocks for the 2005/2006 season were at 405 million bushels. Ending stocks last year were 256 million. This was the highest ending stocks in 19 years. Soybean oil stocks were pegged at a whopping 2.329 billion pounds.

At the end of this month the markets had witnessed a short term support in the prices. In the cash markets, the producer sales were limited due to good LDP's taken for corn and expectation of improving prices into the New Year. In WI the cash prices across several locations ranged from \$1.45 to \$1.90 per bushel. Most of the markets have seen the prices in the \$1.70-\$1.75 per bushel range.

The corn basis levels became better across the country. The corn cash bids were well above those of a year ago.

China exported corn and the export volume was higher due to weaker internal demand because of the bird flu problem. Hong Kong had followed Japan in lifting its two year old ban on importing beef from USA.

In WI cash markets, the soybean prices ranged from \$5.50 to \$5.70 per bushel. Soybean basis values were unchanged to slightly better as merchants competed for available supply and producers continued to hold soybeans off the market awaiting higher prices.

The export situation seemed better for soybeans during this month compared to the corn situation. South American weather, especially in Argentina was dry. Brazil growing conditions looked favorable.

## **December:**

The January 12<sup>th</sup>, 2006 USDA world supply and demand report released for corn and soybeans indicated an increase in the production and ending stocks for both crops.

World ending stocks for corn during the 2005/2006 were higher at 128.26 million tonnes from 118.73 million tonnes. The ending stocks for soybeans were higher at 53.15 million tonnes from 48.11 million tonnes.

From the USDA crop production annual (2005) summary report, U.S. corn for grain production was estimated at 11.1 billion bushels. The average U.S. grain yield is estimated at 147.9 bushels per acre. The 2005 production and yield estimates were the second largest on record, behind last year.

<b>World S&amp;D Summary 01/12/05</b>
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<b>Million metric tons</b>	-----Corn-----			-----Soybeans-----		
<b>Crop Year</b>	04-05	05-06	05-06	04-05	05-06	05-06
<b>Report Date</b>	01/12	12/09	01/12	01/12	12/09	01/12
<b>CARRYIN</b>	103.74	126.63	130.97	35.68	42.09	44.90
<b>PRODUCTION</b>	708.32	677.65	683.51	215.33	221.71	223.02
<b>TOTAL SUPPLY</b>	812.06	804.28	814.48	251.01	263.80	267.92
<b>FEED</b>	466.32	464.53	465.60			
<b>CRUSH</b>				176.04	185.35	184.77
<b>OTHER</b>	214.77	221.02	220.62	30.07	30.34	30.00
<b>TOTAL USE</b>	681.09	685.55	686.22	206.11	215.69	214.77
<b>END CARRYOUT</b>	130.97	118.73	128.26	44.90	48.11	53.15

**Note: corn one metric tonne = 39.3083 bushels, soybean one metric tonne = 36.7437 bushels.**

Big production, stocks and reduction in the export numbers were bearish developments in the corn market. However, the demand numbers were quite supportive with domestic demand projected at a high level with limited export potential.

Corn cash prices in the state of WI ranged from \$1.65 to \$1.85 per bushel.


Bird flu concerns and the human death toll in Turkey and Indonesia raised concerns and kept pressure on corn prices.

On the bullish side, the removal of trade restrictions by South Korea and Singapore was favoring beef trade. The crude oil prices traded at higher levels, and more ethanol plants were coming into production during 2006.

From the USDA crop production annual (2005) summary report, soybean production in 2005 totaled 3.09 billion bushels, the second largest U.S. soybean crop on record. The average yield per acre is estimated at a record high 43.3 bushels.

The USDA posted the second highest ending stock forecast in history for the U.S., and world ending stocks were expected to exceed the previous record high by about 8 million tonnes, which drove up the world stocks to use ratio to 24.7% from 21.8% last year and 18.8% from the previous year.

Soybean prices were on steady decline due to hefty stocks and improving weather conditions in the growing regions of the South America. Soybean cash prices in the state of WI ranged from \$5.10 to \$5.30 per bushel.



Crop conditions improved in Argentina and Brazil with beneficial rains during this month. This pressured both corn and soybean prices downwards.

**Outlook:**

Currently, the corn demand factors are improving. Livestock demand is up and ethanol production is expected to expand rapidly. November ethanol production rose to 275,000 barrels/day which is the highest monthly production. Ethanol is expected to represent nearly 6% of the U.S. gasoline consumption by the year 2012, which is about double the current usage. The 2007 farm bill will see a shift in the U.S. policy on alternative energy usage to higher levels.

US exports seem to be picking up as indicated in the weekly export reports. The cumulative shipments reached 39.1% of the current USDA forecast for the year, as compared to 32.8% on average for this time of the year.

World feed grains demand is still strong. As of now, many buyers are buying the corn from competitors such as China and the European Union due to cheap prices relative to the U.S. Of late, the U.S. is seeing the action coming back to its shores.

Recently, the crop conditions in Argentina deteriorated with hot and dry weather during the critical pollination stage of the corn crop. This is supporting the corn prices. With strong demand outlook and talk of lower planted acreage for next year in the US, the corn prices will improve.

The soybean markets are in bearish mode. As we progress into the South American soybean harvest, the markets will turn weak. Cash basis levels were weak due to more active producer selling. The weekly export inspection numbers also became weak for soybeans. The cumulative export shipments have reached just 47.9% of the current USDA forecast for the year, as compared to 59.9% on average for this time of the year. With bearish longer term fundamentals, the soybean market will see price declines.

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**FOCUS on Farm Management  
Education with Jenny Vanderlin**

*“... female partners have influence on  
63 % of the investment choices on the  
farm.”*

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**Farm Women’s Program Provides Risk Management Education**

Recent research indicates female partners have influence on 63% of the investment choices on the farm. This research supports findings that the University of Wisconsin Cooperative Extension reported in the Fall of 2003. Beginning in 2002, the University of Wisconsin Cooperative Extension began sponsoring *Heart of the Farm Women – Women in Agriculture* one-day conferences. The *Heart of the Farm – Women in Agriculture* program is committed to addressing the needs of farm women by providing education on farm business topics, connecting them with agricultural resources and creating support networks.



Evaluations from the 2002 and 2003 conferences indicated women are involved in major farm decisions. The majority of the women are responsible for almost all of the household decisions (93%) and are least involved with decisions about crop management. What is interesting is that these women are most likely to be a part of the decision making in areas that relate to long-term planning and farm investments, and, to a slightly lesser degree, they influence the decisions that relate to farm labor, livestock or dairy management.

Farm women were also asked how they would describe their involvement in the decisions that were made on the farm. More than half (57%) said that they were “very involved.” Another one-third (30%) said that they were “involved to somewhat involved.” Only 2% said that they were “not involved at all” in farm decision-making.

Similar to their involvement in farm decision-making, farm women play a crucial role in the farm tasks that they perform. ‘Women’s work’ includes farm work, household tasks, and for some, off-farm work as well. The majority of women (85%) indicated that they regularly” or “sometimes” do the farm bookkeeping and bill paying. Because of their close connection to and understanding of the farm business finances, women’s involvement in the decision-making for their farm operation is critical.

The challenge that Extension educators and agricultural stakeholders face is reaching these busy farm women with the same education and information that they provide their male partners. The participants in the *Heart of the Farm* noted that the three most important factors that influence a farm women’s attendance to a program or workshop are: (1) relevance to their farming operation, (2) knowledge that other women would be in attendance, and (3) that the site of the meeting is in a familiar town or facility or directions to the location are provided.

During 2005-2006, there were six one-day *Heart of the Farm Conferences* held across the state. Organizers used local input to plan each conference, so each agenda was slightly different. Topics included balancing farm, family and off-farm work, agricultural law issues, value-added opportunities, strategies for affordable health care, improving communication skills, managing farm debt, farm transfer issues, impacts of animal diseases on farm markets, off-farm investment options and effective methods to influence decision-makers.

In addition to the one-day conferences, *Heart of the Farm – Women in Agriculture* also provides a more in-depth workshop series for farm women. It is called Annie’s Project, and it provides farm women the opportunity to learn about risk management and agriculture technology in a setting that is comfortable for them. The target audience for Annie’s Project is farmwomen with a passion for agri-business and/or involvement in an agri-business they married into, were a part of all their life, or just plain wanted to start on their own.

*Heart of the Farm – Women in Agriculture* is sponsored by the UW Extension’s Farm and Risk Management Team and the UW Center for Dairy Profitability. It is funded by a North Central Region Risk Management Education Center grant.

If you would like more information on the *Heart of the Farm - Women in Agriculture* Program, contact Joy Kirkpatrick, [joy.kirkpatrick@ces.uwex.edu](mailto:joy.kirkpatrick@ces.uwex.edu), 608.263.3485 or Jenny Vanderlin, [jmvander@wisc.edu](mailto:jmvander@wisc.edu), 608.263.7795 at the Center for Dairy Profitability. Or, visit the *Heart of the Farm* website at <http://www.uwex.edu/ces/heartofthefarm>.

## FOCUS on Management Research with Lee Milligan

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*“For the last three years about 50% of the dairy producers in the AgFA database have been able to generate a ROROA exceeding the COCAP.”*

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### Leverage: Friend or Foe?

Would you borrow money at 6% only to earn 2% on it? The answer is a resounding “NO”! How about if you could earn 10%? The answer is “YES”. This is an illustration of the concept of leverage. It is a basic economic concept used in the business world when determining if an investment should be made, especially when using borrowed capital. It can be a friend or foe to the farm business.

Positive leverage is earning more than the cost of borrowed capital (COCAP) for the investment. If the return is greater than the COCAP, the owner is increasing the wealth of the business and the investment is considered to be profitable. For example, you borrow \$100,000 at 6% interest for an investment into the farm. At year-end your financial analysis indicated you earned a rate of return on assets (ROROA) of 10%. Everyone is satisfied. The lender was paid the principal plus 6% interest and you earned 4% or \$4000 on the investment to put into your pocket or reinvest into the farm.

The basic economic principle of positive leverage is to continue borrowing money until you reach the point where the average ROROA is equal to the average COCAP. This is a great concept except for one factor that must be considered-RISK. As you continue to borrow capital your equity declines increasing your risk of survival should there be a significant downturn in the agricultural economy.

Negative leverage is earning a ROROA on the investment that is less than the COCAP. It reduces your increase in wealth. This is best illustrated by looking at the above example where you borrow \$100,000 at an interest rate of 6%. At year-end your financial records indicated you earned a ROROA of 2%. The lender was repaid the scheduled principal plus 6% interest. What was the source of the shortfall between the 6% interest rate and the 2% rate of return on assets? It came from your already existing equity. You dipped into your “pocket” and made up the difference of \$4000 on the \$100,000 of borrowed capital.

Farm businesses with a consistent history of positive leverage will be profitable. These farms are able to weather crop disasters and collapses in commodity prices. They are in a position to adequately fund retirement and pass the farm onto another generation.

The financial health of farms with a history of negative leverage will suffer. They will be dependent upon the appreciation of assets to fund the long- term operation of the farm and retirement.

How have Wisconsin dairy producers done in terms of generating ROROA's exceeding the COCAP? Table 1 is a summary of data from the Center For Dairy Profitability's AgFA database regarding the rates of return on assets in relation to the cost of borrowed capital. For the last three years about 50% of the dairy producers in the AgFA database have been able to generate a ROROA exceeding the COCAP. This indicates there is a substantial group of producers with the physical and financial resources and decision-making skills to use borrowed capital profitably.

**Table 1: Relationship of Rate of Return on Assets and Average Cost of Borrowed Capital**

Year	2002	2003	2004
Average Cost of Borrowed Capital	6.17%	5.64%	5.25%
Rate of Return on Assets	1.76%	3.68%	7.00%
No. Farms Exceeding Average Cost Of Borrowed Capital	261	292	310
Percent Farms Exceeding Average Cost Of Borrowed Capital	50.0%	49.6%	47.8%

Source: Center For Dairy Profitability AgFA Database

Leverage can be a friend or foe to a farm business. If you are consistently in a negative leverage position you need to be very careful in your use of borrowed capital. The goal would be to limit your use of borrowed capital or remain out of debt. If you are consistently in a positive leverage position, you have the ability to profitably use capital; however, this needs to be tempered with your risk bearing capacity and knowing your management skill limits.

For more information on evaluating your leverage position contact your local county UW-Extension office.

## **FOCUS on Management Research with Arlinn Brannstrom**

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*... the rise in land values is a mixed blessing...*

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### **Wisconsin Agricultural Land Prices 2000-2005**

Except for a very major correction in the mid 1980's, Wisconsin land values have been increasing for nearly 70 years. The upward run in land prices is both a blessing and a curse for the Wisconsin dairy community. Increased equity from land appreciation provides security and potential borrowing power to the current owners, but high land prices also raise significant entry barriers for young farmers. Many factors combine to determine land values – earnings potential, financing costs and real estate taxes to name just a few. In this paper we've examined more than 10,000 Wisconsin farmland sales between 2000 and 2005.

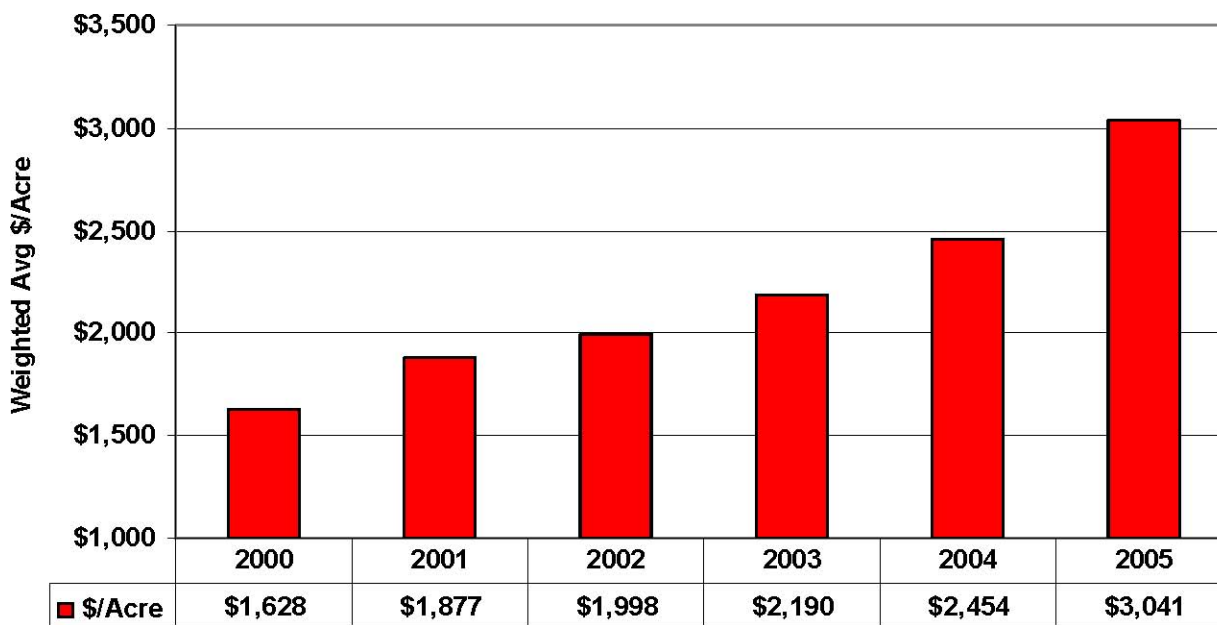
The data for this analysis comes from the Wisconsin Department of Revenue's real estate transfer returns. For every real estate transaction in the State of Wisconsin, a two page transfer return document is filed with the Wisconsin Department of Revenue (DOR). The transfer return includes basic information about the transaction including the names of the grantor and grantee, size of the parcel, predominant use and sales price.

This analysis includes only arm's length transactions between non-related parties of parcels greater than 35 acres. It excludes all reported sales less than \$300/acre and more than \$20,000/acre – assuming they are not used for agricultural purposes. Parcels with water frontage are also excluded. The DOR transfer return documents indicate whether the property was bare land or improved property, but contain no information about the types of improvements. This analysis concentrates on bare land sales. The statewide price of large agricultural land parcels increased 51% between 2000 and 2004 and another 23.9% between 2004 and 2005. The increase in 2005 was the largest in several years.

Figure 1 is a summary of the average sale price of bare farmland larger than 35 acres between 2000 and 2005. Complete county by county listings are included in Table I.

The DOR transfer return does ask for both past and intended future use of the parcel. Unfortunately there is no consistency in how intended future use is reported. Indeed the State's use value taxation scheme encourages new land owners to declare their intent to farm the land as long as possible. Therefore all that can be assumed is that all sales were coded as agricultural at the time of the sale.

**Figure 1. Wisconsin Farmland Average Sale Value 2000 – 2005**



**Table 1. Wisconsin Average Farmland Sale Prices By County**

County	Average Price of Agricultural Land Per Acre					
	2000	2001	2002	2003	2004	2005
Adams	\$2,454	\$1,534	\$1,667	\$1,777	\$1,818	\$2,264
Ashland	\$556	NA	\$740	NA	\$1,021	\$1,500
Barron	\$1,061	\$988	\$1,153	\$1,273	\$1,411	\$1,763
Bayfield	\$601	\$1,508	\$732	\$759	\$1,058	\$1,460
Brown	\$4,223	\$3,517	\$4,008	\$5,491	\$5,862	\$3,304
Buffalo	\$1,094	\$1,257	\$1,483	\$1,532	\$1,811	\$2,283
Burnett	\$703	\$1,008	\$1,258	\$1,210	\$1,188	\$1,571
Calumet	\$1,644	\$1,456	\$2,989	\$3,346	\$2,116	\$1,976
Chippewa	\$830	\$921	\$1,167	\$1,212	\$1,308	\$1,679
Clark	\$796	\$934	\$1,102	\$994	\$1,198	\$1,369
Columbia	\$1,841	\$2,662	\$2,471	\$3,975	\$3,301	\$4,670
Crawford	\$1,094	\$1,216	\$1,218	\$1,346	\$1,552	\$1,775
Dane	\$2,631	\$5,778	\$4,619	\$6,637	\$6,481	\$7,665
Dodge	\$1,890	\$2,117	\$2,121	\$2,397	\$2,929	\$3,420
Door	\$2,275	\$2,032	\$1,903	\$2,879	\$2,618	\$2,525
Douglas	\$694	\$783	\$797	\$600	\$847	\$1,141
Dunn	\$997	\$1,739	\$1,583	\$1,808	\$2,049	\$2,161
Eau Claire	\$846	\$1,060	\$1,214	\$1,585	\$1,936	\$2,235
Florence	\$886	\$850	\$2,091	NA	NA	\$1,000
Fond du Lac	\$1,526	\$1,987	\$1,752	\$1,809	\$2,409	\$2,729
Forest	\$825	\$1,022	\$1,231	\$667	\$811	\$1,147
Grant	\$1,253	\$1,582	\$1,391	\$1,690	\$2,144	\$2,276
Green	\$1,534	\$1,557	\$1,759	\$2,563	\$2,429	\$3,109
Green Lake	\$2,159	\$1,418	\$2,384	\$2,377	\$2,422	\$2,447
Iowa	\$1,940	\$2,131	\$2,096	\$2,116	\$2,515	\$2,862
Iron	NA	NA	NA	NA	NA	NA
Jackson	\$894	\$1,016	\$1,198	\$1,393	\$1,313	\$1,669
Jefferson	\$1,761	\$2,699	\$1,166	\$2,780	\$3,330	\$4,717
Juneau	\$920	\$1,501	\$1,353	\$1,801	\$1,661	\$1,966
Kenosha	\$9,449	\$6,328	\$8,775	\$6,217	\$5,018	\$11,316
Kewaunee	\$1,691	\$1,626	\$1,756	\$2,286	\$2,475	\$2,772
Lafayette	\$1,638	\$1,669	\$1,991	\$1,797	\$2,854	\$2,921
Langlade	\$1,400	\$1,309	\$1,174	\$944	\$1,707	\$1,325
La Crosse	\$1,429	\$1,661	\$1,995	\$3,134	\$2,882	\$4,260
Lincoln	\$558	\$1,029	\$1,332	\$1,302	\$1,511	\$1,611
Manitowoc	\$1,398	\$1,262	\$1,558	\$1,750	\$1,890	\$2,672
Marathon	\$928	\$945	\$1,175	\$1,887	\$1,551	\$1,539
Marinette	\$930	\$1,257	\$2,203	\$1,308	\$1,653	\$1,940

**Table 1 (Cont). Wisconsin Average Farmland Sale Prices By County**

County	Average Price of Agricultural Land Per Acre					
	2000	2001	2002	2003	2004	2005
Marquette	\$1,004	\$1,406	\$1,513	\$1,817	\$2,388	\$2,291
Menominee	NA	NA	NA	NA	NA	NA
Milwaukee	NA	NA	NA	NA	NA	NA
Monroe	\$1,197	\$1,243	\$1,290	\$1,766	\$1,684	\$1,678
Oconto	\$1,198	\$1,794	\$1,486	\$1,843	\$1,999	\$2,285
Oneida	NA	\$1,196	\$1,125	\$1,302	NA	NA
Outagamie	\$1,778	\$3,904	\$3,209	\$4,593	\$4,937	\$2,291
Ozaukee	\$2,216	\$2,165	\$4,824	\$2,449	\$6,000	\$5,146
Pepin	\$1,247	\$1,253	\$1,471	\$1,650	\$1,811	\$2,133
Pierce	\$1,611	\$1,256	\$2,271	\$4,204	\$2,373	\$7,413
Polk	\$1,070	\$1,201	\$1,226	\$2,111	\$2,553	\$2,093
Portage	\$1,367	\$3,935	\$1,549	\$1,895	\$1,861	\$2,000
Price	NA	\$597	\$805	\$827	\$1,217	\$825
Racine	\$3,933	\$4,619	\$7,315	\$6,280	\$10,218	\$5,590
Richland	\$1,195	\$1,382	\$1,531	\$1,620	\$1,701	\$2,204
Rock	\$1,919	\$2,482	\$2,214	\$3,079	\$3,059	\$4,692
Rusk	\$676	\$617	\$660	\$809	\$831	\$1,018
Sauk	\$1,720	\$2,266	\$1,686	\$2,671	\$2,636	\$3,676
Sawyer	\$1,015	\$2,903	\$971	\$705	\$6,519	\$1,424
Shawano	\$1,352	\$1,445	\$1,692	\$1,836	\$2,228	\$2,740
Sheboygan	\$1,561	\$1,573	\$2,200	\$2,555	\$2,975	\$3,754
St. Croix	\$1,878	\$2,387	\$2,912	\$2,643	\$3,438	\$7,374
Taylor	\$639	\$657	\$859	\$743	\$820	\$1,288
Trempealeau	\$1,026	\$1,248	\$1,260	\$1,517	\$1,591	\$1,729
Vernon	\$1,304	\$1,265	\$1,411	\$1,502	\$1,639	\$2,044
Vilas	NA	NA	NA	NA	NA	NA
Walworth	\$3,551	\$3,247	\$3,837	\$4,582	\$4,722	\$7,136
Washburn	\$725	\$1,319	\$1,680	\$1,042	\$1,000	\$2,091
Washington	\$5,054	\$4,424	\$5,750	\$7,315	\$5,513	\$10,161
Waukesha	\$9,274	\$6,805	\$6,124	\$11,130	\$10,278	\$7,808
Waupaca	\$1,537	\$1,813	\$1,897	\$2,273	\$2,252	\$2,659
Waushara	\$2,726	\$2,660	\$3,375	\$3,856	\$4,008	\$3,466
Winnebago	\$1,195	\$1,750	\$1,239	\$2,134	\$1,854	\$2,034
Wood	\$820	\$1,015	\$1,422	\$1,023	\$1,318	\$1,608



## Implications for Farmers

For established farms, the rise in land values is a mixed blessing. Appreciation is only realized when the assets are sold. The ongoing business is neither directly responsible for nor directly benefited by changes in land values. High land values provide the retirement cushion for “*last generation*” farm businesses. Unfortunately, high land prices also make it more difficult for new entrants to get started in farm production without significant help from family members or other benefactors.

Agricultural lands in North Central and Southwestern Wisconsin are more competitively priced than other more populated portions of the state. Farming in Southeastern Wisconsin and South Central Wisconsin appears to be under great pressure from competing land uses. If these trends continue, farming will continue to shift away from these parts of Wisconsin.

Farmland use value assessment has greatly reduced the costs of holding agricultural real estate in the past decade. Record low interest rates and changing population demographics have also increased demands for open space.

Although farming is well suited to the climate, topography and infrastructure of Wisconsin, the continued survival of a viable agricultural industry is impacted by land use policies and land prices. Land prices have been known to soften during economic downturns. Factors which may negatively affect future land price increases include increased interest rates, higher transportation costs and changing demographics. At least in recent years, land has been a much better investment than most other investment alternatives.