



AEDE Agricultural, Environmental,
and Development Economics

Ohio State University Extension
Ohio Agricultural Research and Development Center

Cam Thraen# with John Newton*
#OSUE State Specialist, Dairy Markets and Policy
*Ph.D. graduate student
Agricultural, Environmental and Development Economics
The Ohio State University thraen.1@osu.edu

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Dairy Commodity and Milk Price Outlook for December 2012 – February 2013.

In this edition of *Market & Policy Watch 2012*, I will review a couple of trends in U.S. milk production and milk price and provide an outlook for milk prices and dairy farm returns the next six to twelve months. Also covered will be an update on the Dairy Security Act and an exciting new program for dairy farmers to be available very soon.

U.S. Milk Cows and Milk Yield

Chart 1 shows the monthly history of i) milk production per cow (right scale dashed line), and ii) total number of milk cows (left scale, solid line), for the United States, January 2011 – October 2012. After showing a steady increase, the number of milk cows has declined for the last six months. Over the past year the U.S. national dairy herd has been reduced by 55,000 head. During this same period, milk production per cow has exhibited the typical seasonality (adjusted to a 30 day month). For the first five months of 2012, average daily milk production per cow was 60.9 pounds, and declined to 57.9 pounds per cow for the last five months. Dairy cow culling is running ahead of the normal for this time of year suggesting that nationally cow numbers will continue to decline through the end of 2012.

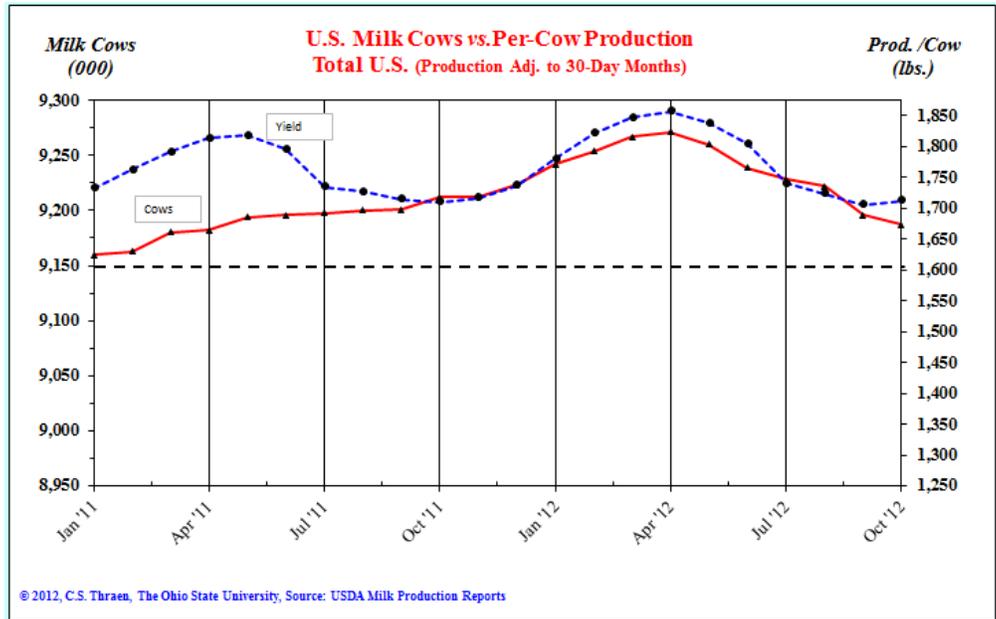


Chart 1. U.S. milk cows and milk yield, monthly 2011 - 2012.

Milk Production Growth and the Class 3 Milk Price

Chart 2 depicts the recent relationship between i) the Class 3 milk price (line, left scale) and the annualized rate of change in U.S. milk production (bars, right scale) over this same time period.

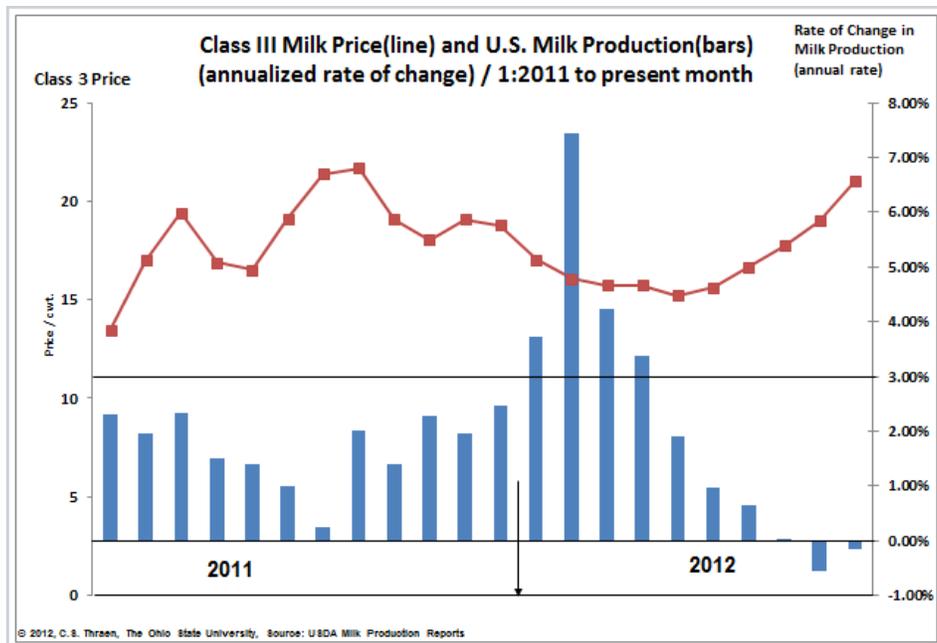


Chart 2. Class 3 price and annual rate of growth in U.S. milk production, 2011 - 2012.

Milk production growth in the U.S. was quite robust in early 2012, exceeding 3% annual rate for four of the ten months to date. During this same period, the Class 3 milk price lost ground and fell to under

sixteen dollars per hundredweight in the last four months. With both cow numbers and productivity expanding in the last half of 2011 and into the first four months of 2012 the growth in U.S. milk production grew considerably. Milk prices responded, moving down from \$19 per hundredweight in November 2011, to bottom out at \$15.23 in May 2012. Since then, with the annualized rate of growth in milk production slowing to under 1%, and then negative for the last two months, the Class 3 milk price has responded by moving up to just over \$21 per hundredweight. The current CME futures market expectation for the December - May Class 3 average price is \$18.35. The expectation for the next 12 months is \$18.38.

What lies ahead for 2013?

Taking a look at the Chicago Mercantile Exchange (CME) Group Class 3 futures prices can provide an insight as to what the market participants are anticipating for the coming year. Chart 3 shows the CME Class 3 futures price for 2012, as of settle on November 26, 2012 (the unconnected blue dots), the median Class 3 price over the period 2007-2012 (the solid line), the upper 25 percentile price line (upper dashed line), and the lower 25 percentile price line (lower dashed line). Currently, the market is pricing Class 3 milk above the recent historical price range. As we move into the first half of 2013, the CME futures prices are above the 25% upper level at \$18.68 to \$18.85 range. Overall, the CME market participants are pricing milk for a tighter supply demand balance over the coming 12 months. In Ohio, and the Mideast Federal Milk Marketing Order 33, the average dairy operator’s milk check, as measured by the announced FMMO Mailbox price, is currently adding, on average, about \$1.5 to \$2 to the Class 3 milk price. With the current CME market anticipating an \$18.50 Class 3 milk price, the mailbox price for financial and production planning purposes will be in the range of \$19.90 to \$20.50 per hundredweight.

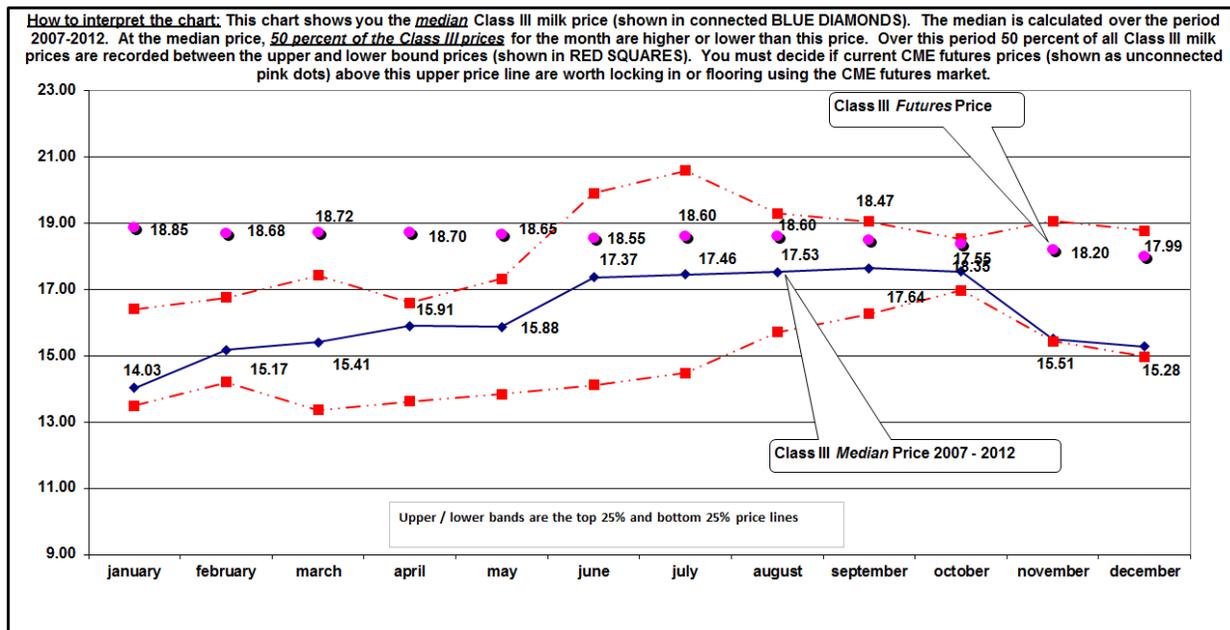


Chart 3. CME Class 3 futures price, median Class 3 price, and 25% upper/lower percentiles.

What does this mean for a typical dairy farm in Ohio?

Milk prices are obviously very important to the financial health of a given dairy. However, as we witnessed in 2008, milk prices at the twenty dollar level mean little if expenses for feed and other inputs are soaring. The data in Chart 4 are *my estimates* of the total dollars available to contribute to allocated costs on a per cow basis for Ohio dairies. Allocated costs include capital payments and returns to equity plus returns to management. These are the dollars from the sale of milk which, after paying for feed and non-feed operating expenses, contribute debt reduction and building equity for a dairy farming operation.

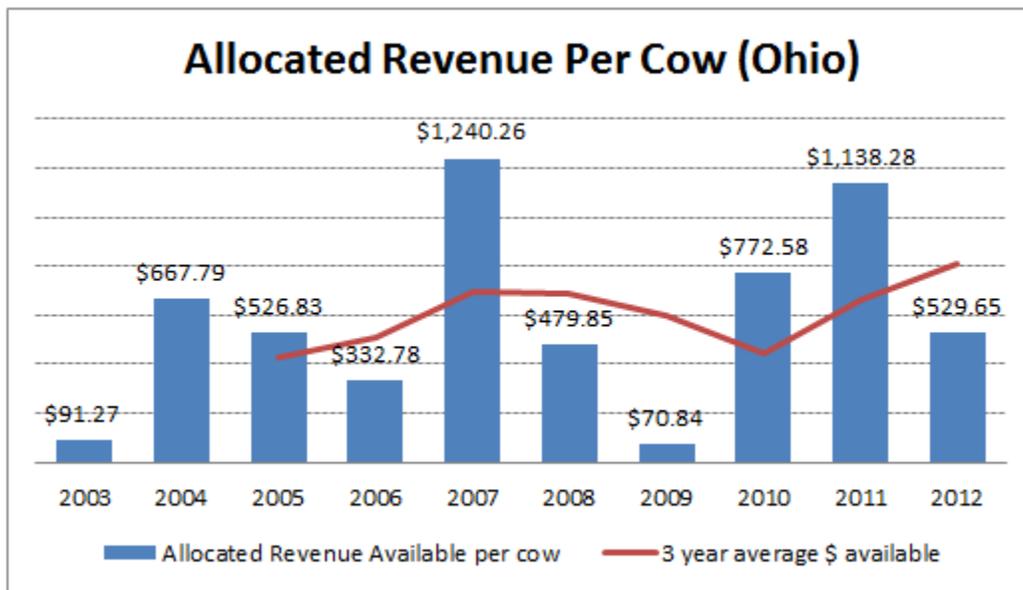


Chart 4. Estimated allocated revenue available per cow 2003 – 2011 & 2012(p): Ohio

The financially difficult years of 2003, 2006 and 2009 are evident. In these years there was very little revenue remaining, after paying operating costs, to contribute to allocated costs. This was especially true for 2003 and 2009. Also evident are the years of 2007 and 2011. Here we see that in 2007 there remained \$1240 per cow available to pay down debt, build equity, and provide for a return to management of the dairy operation. With milk prices recovering in the second half of 2012, I would project that the allocated cost per cow for 2012 will be closer to 2008 in magnitude when the Ohio mailbox price averaged \$18.83 against very high feed prices. If you plan your business operation based on three year averages, the 2010-2012 average allocated revenue is estimated at \$813 per cow (red line, Chart 4).

Update on U.S. Dairy Policy:

Coming Soon ! Dairy Security Act Decision Education Program

The decisions to participate in the margin protection and market stabilization programs included in Farm Bill legislation presents an opportunity to examine possible costs and benefits of program participation for an individual dairy farm under a variety of possible income-over-feed-cost (IOFC) margin scenarios.

In order to help dairy operators make informed program decisions a team of dairy economists from The Ohio State University, University of Wisconsin, University of Minnesota, and Michigan State University is actively developing an internet-based tool that will provide a cost-benefit analysis for each of the coverage levels available unique to a farm’s historical and future milk production patterns.

This program, *the Dairy Security Act Decision Education Program*, along with written educational materials will be accessible through the Ohio Dairy Web website at OSU as well as many other websites nation-wide. This educational program will provide valuable assistance to the dairy farm operator in choosing an insurance coverage level that provides for best cost-effective coverage and maximizes expected financial returns or potentially minimizes losses associated with program participation.

As an example, this program is able to provide an assessment of the risk associated with anticipated IOFC margins. Based on the calculation of the IOFC margin, as currently defined in the Senate and House versions of the Dairy Security Act, the information in the following table shows the forecast IOFC margin for first 10 months of 2013. This margin is calculated using the current futures market prices for feed inputs and the milk price.

Forecast IOFC Margins (\$/cwt): 2013

January	February	March	April	May	June	July	August	September	October
6.29	6.12	6.16	6.18	6.19	6.17	6.30	7.00	7.59	7.66

Table 1. Forecast IOFC average margins for 2013.

When fully operational the *Dairy Security Act Decision Education Program* will provide daily updates to these monthly IOFC margins and their ranges reflecting changes in feed and milk prices as they occur through the production year. The current forecast shows that, while running below the historic average, IOFC margin is not projected to be low enough to trigger margin insurance payments for coverage levels below \$6.50. Also these levels are not low enough to trigger the proposed companion supply management program. Keep in mind that these are mean values and the forecast error is such that the actual margin could be higher or lower than the values shown in Table 1. If much lower this would trigger both margin payments and stabilization penalties. Stay in touch as there will be much more coming from this program.

Notice: Ohio Dairy Web has moved....

My website has been moved to a new server. For more information on the market outlook as well as insights on U.S. dairy policy please visit my Ohio Dairy 2012 website. You can visit: <http://aede.osu.edu/programs-and-research/ohio-dairy-web/> for the latest market and policy information of importance to Ohio dairy industry.