

# Iowa Farm Outlook

August, 2009

Department of Economics  
Ames, Iowa

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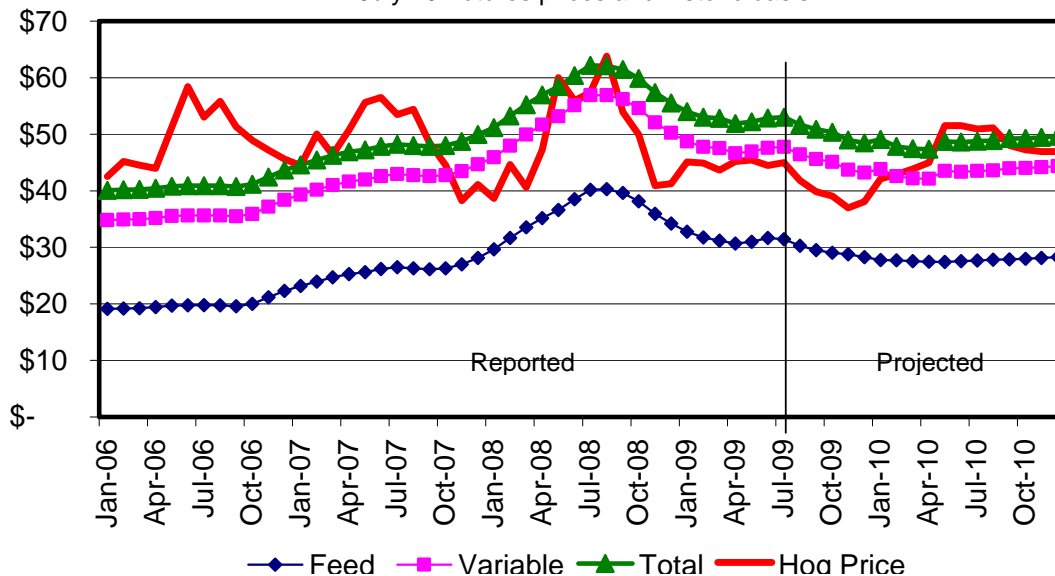
## Are Pork Producers Playing Chicken?

A farmer marketing 1000 hogs a month would have depleted over a half a million dollars of net worth since October 2007, using the Iowa State University Estimated Returns Series as a benchmark. Hog prices have been below breakeven for 20 of the last 22 months (Figure 1). More importantly, prices were below variable cost of production in 17 months including the last 12 in a row. Based on late July futures for feed and hogs it will be another 6 months before variable costs are covered and an additional 3 months to reach breakeven. Yes, feed costs are coming down, but hog prices have fallen faster on weak demand and large supplies.

National pork organizations and USDA will work to expand domestic and export demand, but producers determine supply. Breeding herd inventories are lower, but due to increased productivity, pork supply has not adjusted to economic signals. US pork production through the first 29 weeks of 2009 is down 1.5% from the year before and this reduction can be accounted for by fewer Canadian hogs and pigs being imported. In fact, US sow slaughter has decreased, not increased, more than 15% since the first of the year. US producers appear to be pushing on the accelerator rather than the brake.

While feed price is well below the 2008 levels, it remains higher than the pre-2007 era. Without new demand for pork, supplies will have to decline to support hog prices at the higher cost levels. The record export pace of 2008 has been slower thus far in 2009. Without smaller supplies prices will not recover.

ISU Estimated Cost and Selling Prices, Farrow to Finish (\$/cwt Live)  
July 29 Futures prices and historic basis



### Will prices respond?

The relationship between supply and price is not as predictable as it once was. In half of the last 20 quarters prices and supplies moved in the same direction. Not what we would expect and a clear indication that demand changes are important to price. The old rule-of-thumb was that for each 1% change in supply, price would change approximately 3% in the opposite direction. For example, second quarter 2009 prices averaged \$45/cwt; then with a 1, 3 and 5 percent reduction in supply we would forecast prices to be \$1.35 (3%), \$4.05 (9%) and \$6.75 (15%) higher, respectively for the second quarter of 2010. The sector needs a 15% price increase, a 5% supply reduction, just to breakeven.

Even small, long standing cartels like OPEC have trouble controlling supply and today's consolidated pork industry is no different. An organized effort to reduce the breeding herd was rolled out at Pork Expo, but was later withdrawn. The perennial game of "chicken" continues. Each producer is waiting for the other guy to quit and so prices will be higher for the survivors. What happens when you become the "other guy" rather than the "survivor"?

### **The cost of cuts**

Every producer must understand his or her own cost structure and how reducing the sow inventory within his/her operation will impact the cost of production. Reducing sow inventory will reduce variable costs (less feed, vaccination, etc), but not fixed costs. By definition these costs do not change with output. On a per pound basis, fixed and total costs will increase with fewer pounds produced, but by how much? Consider the ISU Estimated Farrow to Finish Returns as an example. Its costs for buildings, utilities, administration, labor and transportation total \$37.49/head. Reducing pig output by 10% would result in a higher fixed cost per pig ( $\$37.49/0.9 = \$41.66/\text{head}$ ). Cost increase \$4.17/head or about \$1.54/cwt live basis. Given the elasticity example above, a little more than a 1% decrease in total supply would cover this cost increase, all else equal.

This calculation is for economic costs, but it is cash flow that pays the bills. Selling sows increases near term income by the value of the sows and reduces near-to-intermediate expenses by reducing feed and other direct costs. However, eventually, you have fewer hogs to sell and income will go down unless the price has increased.

How will a production cut impact your costs? Can you reduce overhead costs in addition to variable costs? Are there benefits from less crowding, culling marginal sows, etc that may offset some of the increased cost? How is cash flow impacted with sow sales, less feed expense, but less hogs to sell later? Are these permanent or temporary changes?

### **What are the risks?**

What if supplies do not fall? Your costs will go up and as will your losses if prices do not rally. You miss an opportunity if the prices do increase and you have fewer hogs to sell. Do you have the flexibility in your marketing contract to reduce deliveries? If we produce fewer hogs we need less packer capacity and the packer may close a plant where you sell.

### **Bottom line**

Accumulated losses per head in the current crisis for hog producers will surpass that of 1998-99 in September. However, individual farms and the industry are larger and so is the loss of equity. And we are not done yet. We will drain 50% more equity than we have already lost by next summer given the current forecast.

Supplies must come in line with the higher cost structure and, at least currently, the weaker demand. Some producers have already cut production or announced their intentions, but the announced reductions of a few will not lead to profitability for the industry. Inelastic demand for hogs will provide a larger percentage increase in price for a given reduction in supply, all else equal. The productivity of the industry requires a significant cut in farrowings to achieve the supply response needed to return to profitable prices. A 5% pork supply cut is needed just to return the sector back to breakeven, but the March-May pig crop was down only 0.4%. More reductions are needed.

*John Lawrence*

## **ISU Extension Launches New Margin Tracking Decision Aide**

In an effort to help livestock producers improve profitability and/or manage market risk Iowa State University has been developing education tools that focus on the importance of protecting gross margins. Under the ISU Margin Maker project a new margin tracking decision tool is now available that tracks hog finishing gross margins based on the futures market prices for the next year. This new decision making tool and is available at <http://www.econ.iastate.edu/outreach/agriculture/periodicals/ifo/margins>

## Mid Year Cattle Report Summary

Mid year cattle inventories from the July cattle report reflected the continued shrinking of the cattle industry. All Cattle numbers are down 2 percent. Beef cow numbers are down 1 percent, and dairy cows are down 2 percent. These inventory numbers were expected based on beginning of the year inventories and recent slaughter levels. The next question to ask is when will we see the reduction stop? Beef heifer retention is down 2 percent, while dairy heifer numbers are steady with a year ago. On the beef side, the cow herd is not likely to actually increase for at least the next three years. Fed cattle supplies will continue to remain tight as feedlots remain low, down 5 percent for the month of July. With fewer fed cattle available, packers are working harder to buy cattle, while at the same time weak beef demand has made the beef harder to sell.

Calf prices this fall will be down from last year. While the prospects of a 2<sup>nd</sup> largest corn crop and cheaper feed would usually drive up demand for feeder cattle, fed cattle prices have not been strong enough to encourage any run up in calf prices. Cattle feeders are still smarting from losses experienced in the past year and do not seem to be in a big hurry to fill up feedlots. Texas feedlots inventories are down 6 percent from last year, and Kansas and Nebraska feedlots are down 8 and 6 percent respectively. Iowa and Colorado inventories are actually up from last year, but nationally all cattle on feed numbers are down 5 percent.

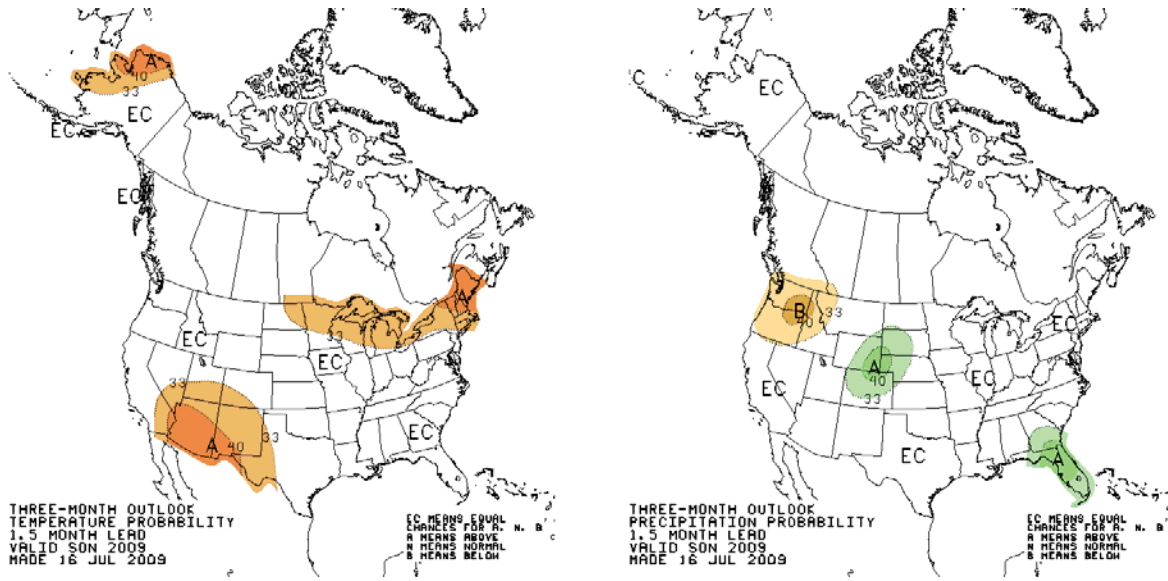
*Shane Ellis*

### **Acreage Resurveys and Weather Patterns: A Repeat of 2008?**

The parallels between this year and last are striking. This summer is closing out much like last summer for crops. The early season concern about delayed planting and crop progress is fading under the steady doses of sunshine and timely rains. And with the crop conditions steadily improving, crop prices have worked their way down. The acreage surprise in the June USDA reports also sent the markets lower. As with last year, the acreage picture was not as clear as USDA would like. Therefore, selected areas in the Corn Belt are being resurveyed, and the new survey acreages to be released in the August reports. News of this resurveying boosted the markets on the hope that less corn area would be projected. As it stands, given the July USDA projections, the U.S. will harvest the 2<sup>nd</sup> largest corn crop and largest soybean crop on record. And with many demand sectors in decline, these projected large crops point to higher ending stocks come Aug. 31, 2010 and lower prices.

Most of the long-range weather forecasts point to a continuation of the relatively mild summer conditions most of the Midwest has enjoyed throughout the rest of the growing season. Figure 1 below shows the latest maps from the Climate Prediction Center for the harvest season. The outlook indicates more seasonal weather patterns will return in the fall. Currently, corn production is projected at over 12 billion bushels and soybean production is targeted at nearly 3.3 billion bushels. But crop conditions have been improving over the summer, with the crop ratings both for the U.S. and Iowa exceeding last year. For the nation at this time last year, 66 percent of the corn crop and 62 percent of the soybean crop was rated good to excellent. This year, the percentages are at 70 percent for corn and 67 percent for soybeans. For Iowa, roughly 60 percent of the corn and soybean crops were rated good to excellent last year at the end of July. Now, roughly 80 percent of the crop are rated that highly. Given the improving crop conditions, there is significant anticipation that USDA will increase their yield projections in the August reports.

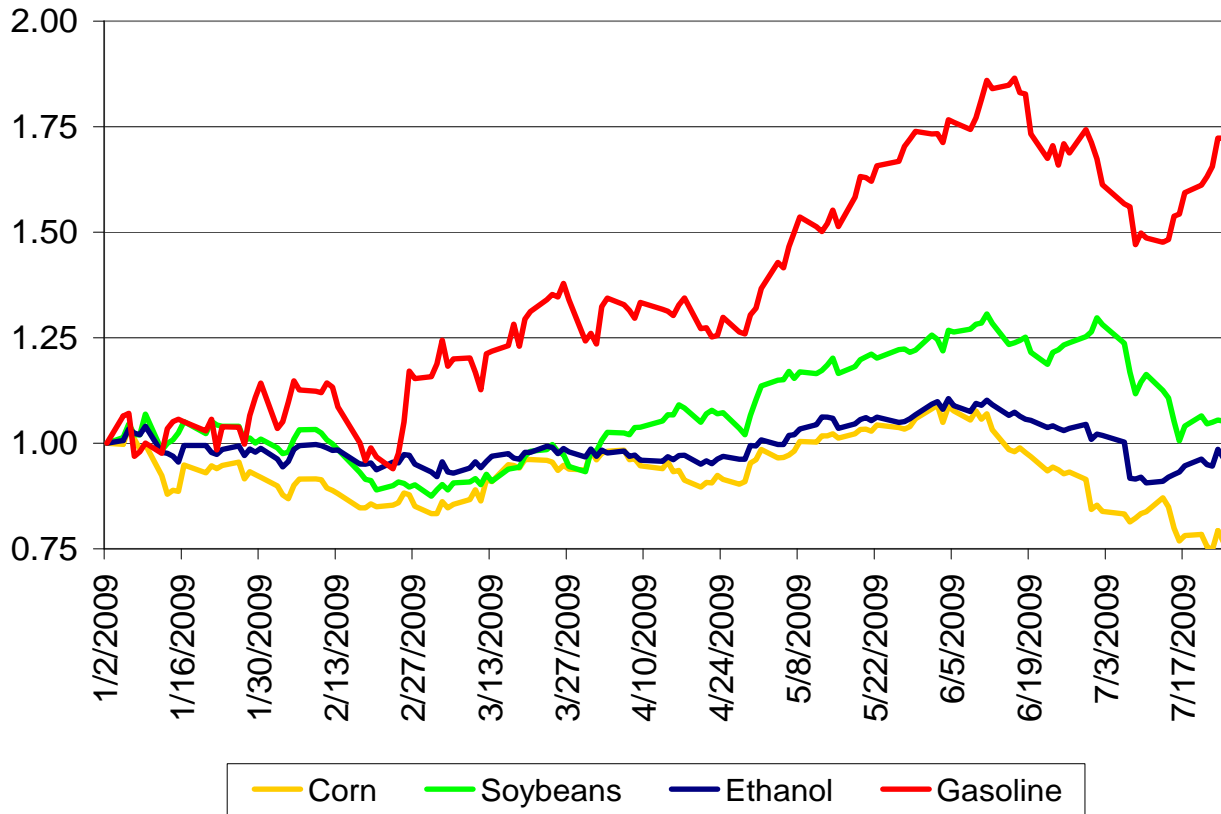
**Figure 1. Weather outlook for September to November**  
(Source: Climate Prediction Center, National Weather Service)



The livestock industry continues to work through financial difficulties. And while feed demand projections are still lower than in previous years, the rate of decline has slowed. Crop demand growth via biofuels has also slowed as the biofuel industries are also going through a consolidation phase. Biofuel data from the first few months of 2009 show the ethanol industry is continuing to grow, just at a slower rate than before; while biodiesel production is behind last year's pace. Exports have been the bright spot recently. Soybean exports from the 2008 crop are on record pace. USDA's early projections for the 2009 crop point to higher corn and soybean exports.

While demand has been weakening, the lower crop prices we are seeing could help spur a reversal in that trend. Lower corn and soybean prices imply lower production costs for livestock and biofuels and that can help the bottom line in those sectors. For corn, with the exception of a brief time last winter, prices haven't been this low since 2006. Both corn and soybeans have seen prices decline by roughly 25% over the past month. These price declines are providing buying opportunities for crop users. For example, the economics of ethanol are now looking a little better. While ethanol prices have also fallen, they have fallen at a slower rate (roughly 10%). This implies better ethanol margins and the potential for more corn demand through ethanol. Another factor moving in favor of the ethanol industry has been the relative pricing of ethanol versus gasoline. Since the beginning of the year, ethanol futures prices have been steady, while gasoline futures prices have increased by 75%. These price shifts have made ethanol blending more financially attractive and should lead to additional demand for ethanol and, by extension, corn.

**Figure 2. Price movements in 2009 (Jan. 2, 2009 price = 1)**



But for now, the markets will concentrate mainly on the supply picture, with the overall economic situation providing some secondary shifts. The August USDA reports will include an update on acreage and the first yield revisions on the year based on field observations. Given the markets' initial reaction to the announcement on the acreage resurvey, we can see that the markets are poised to react quickly on the release of the reports. The improving crop conditions point to higher yields than current USDA estimates, so the prospects for a price recovery in the short term are likely tied to the acreage re-evaluation. Longer term, prospects for some recovery on the general economic front in late 2009 or in 2010 point to the possibility of increased crop demand later in the marketing year. Oil futures prices for late 2009 and early 2010 are holding above \$70 per barrel, implying some strength in energy demand. For soybeans, early export sales on the 2009 crop have exceeded the pace set in previous years.

*Chad Hart*

### **July Production Down 0.1%, Cow Numbers Down Too**

June 2009 23 major dairy states milk production decreased 0.1%. Production per cow was up by only 10 pounds from one year ago. Milk cow numbers were 56,000 less than June 08 and 29,000 less than May 09. May 09 milk production was revised up 0.3% point, an increase of 46 million pounds.

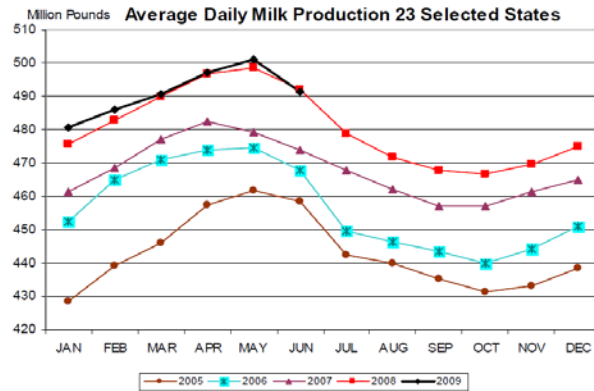
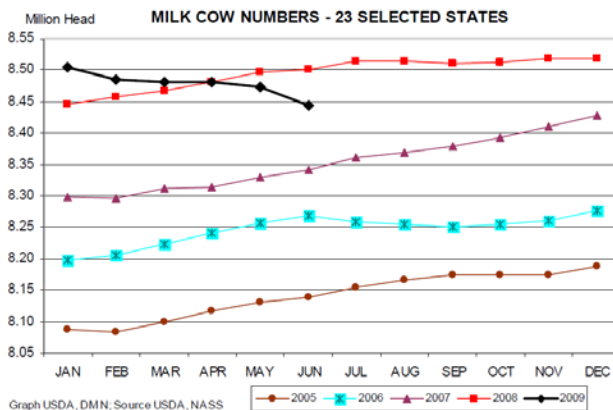
Iowa June 09 milk production was 2.51% higher than one year ago. Cow numbers were down by 1000 compared to one year ago and milk production per cow was 50 pounds higher than one year ago. May 09 Iowa cheese production was up by 4.579 million pounds, 32.2% higher than one year ago and 170,000 pounds, 0.8% less than April 09.

Nebraska 2<sup>nd</sup> quarter milk production totaled 302 million pounds, up 14% or 37 million pounds, the largest quarterly increase in the continental 48 states.

**Milk Production: Selected Dairy States, June 2009**

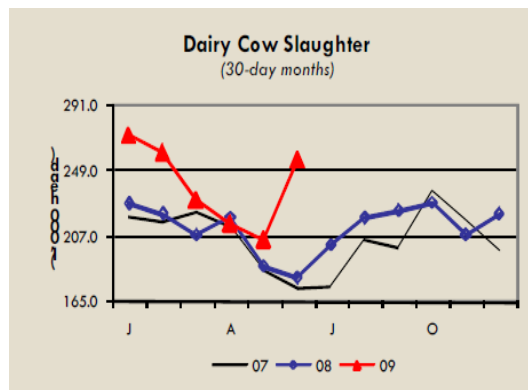
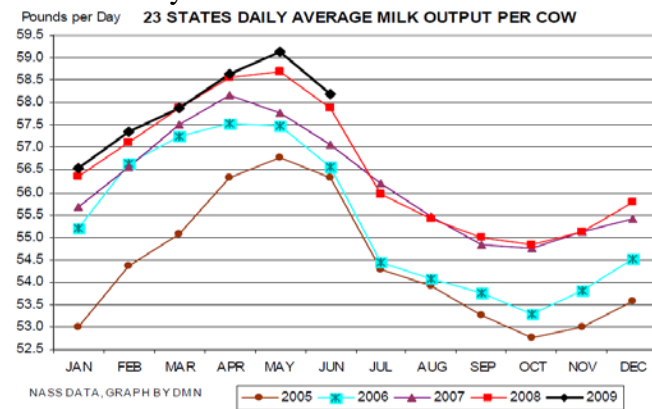
State	thousands			pounds			million pounds		% change total milk
	2008 cow numbers	2009 cow numbers	% change cow numbers	2008 milk per cow	2009 milk per cow	% change milk/cow	2008 total milk production	2009 total milk production	
Iowa	216	215	-0.46%	1660	1710	3.01%	359	368	2.51%
MN	463	469	1.30%	1585	1620	2.21%	734	760	3.54%
WI	1252	1257	0.40%	1650	1690	2.42%	2066	2179	5.47%
IL	102	102	0.00%	1565	1570	0.32%	160	160	0.00%
CA	1847	1810	-2.00%	1850	1810	-2.16%	3417	3276	-4.13%
CO	128	126	-1.56%	1940	1980	2.06%	248	249	0.40%
KS	116	118	1.72%	1680	1735	3.27%	195	205	5.13%
ID	551	552	0.18%	1900	1880	-1.05%	1047	1038	-0.86%
NM	340	327	-3.82%	1970	2050	4.06%	670	670	0.00%
PA	546	545	-0.18%	1630	1630	0.00%	890	888	-0.22%
NY	626	623	-0.48%	1680	1720	2.38%	1052	1072	1.90%
TX	417	428	2.64%	1690	1710	1.18%	705	732	3.83%
23-State	8500	8444	-0.66%	1736	1746	0.58%	14760	14741	-0.13%
US 2nd quarter	9315	9262	-0.57%				48774	48262	-1.05%

Recent CWT cow culling has reduced the 23-state dairy herd which was the major reason behind the year-to-year milk production decline during June. Milk production per cow rose slightly, however US 2<sup>nd</sup> quarter average milk production dropped 170 million pounds. Many of the non-reporting states had large percentage declines in milk production. A second round of CWT was announced and will further reduce dairy herd numbers.



Source: Dairy Market News

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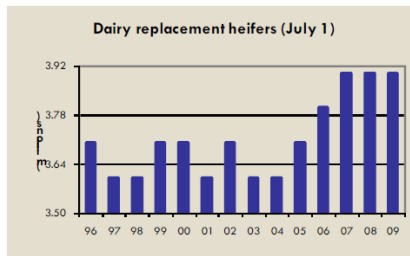
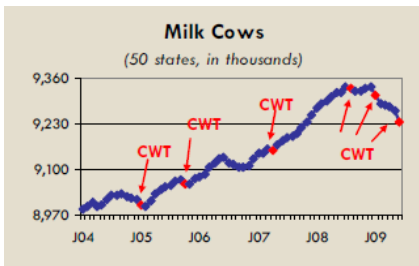


Source: Dairy Market News

Source: Daily Dairy Report

Dairy cow slaughter was up by 41.5% from one year ago, mostly due to CWT. However, slaughter may be offset by a large volume of replacement heifers in the pipeline. Dairymen had 3.9 million dairy replacements on hand in July, the same number as in 2007 and 2008, according to the biannual "Cattle" report. This matches the highest figure of the last 15 years (see chart). There were 42.4 replacements for every 100 cows in the herd, up from 41.7 per 100 last year.



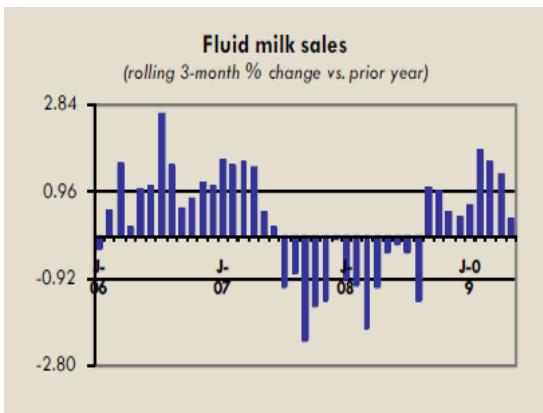


Source: Daily Dairy Report

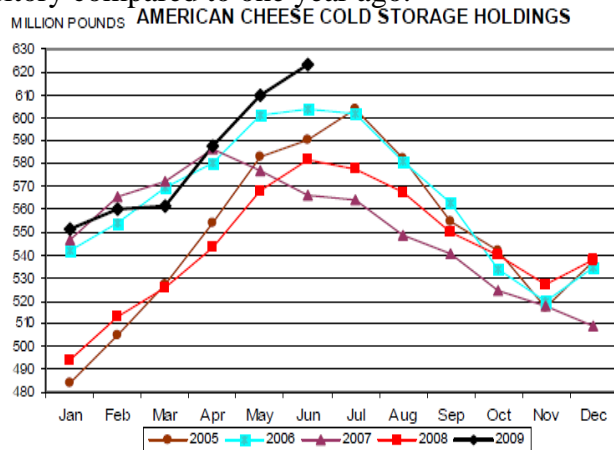
### Demand or Disappearance

May total cheese output was 860.747 million pounds, up 2.6% from one year ago and 1.8% less than March 09. Year to date cheese production is 1.3% higher than the same period one year ago. CA cheese production was -2.6%, ID +1.8% compared to one year ago. WI cheese production was +3.2% from one year ago but 1.4% from April 09. Italian type cheese production totaled 350 million pounds, 0.3% above May 2008 but 0.1% below April 2009. American type cheese production totaled 366 million pounds, 3.9 percent above May 2008 and 4.3 percent above April 2009. Butter production was 139 million pounds, 0.3% below May 2008 and 2.2% below April 2009.

Fluid milk sales continue to be in positive territory compared to one year ago.

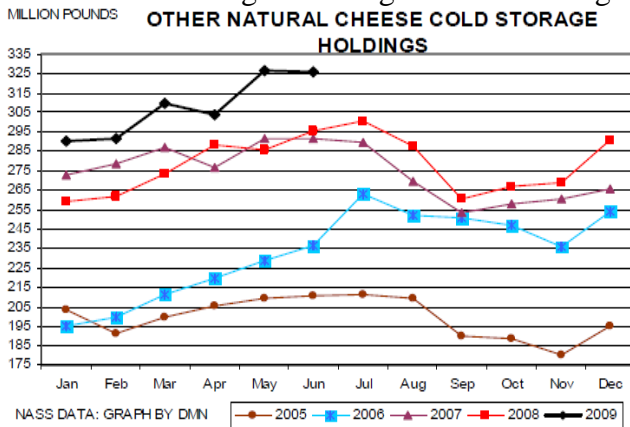


Source: Daily Dairy Report

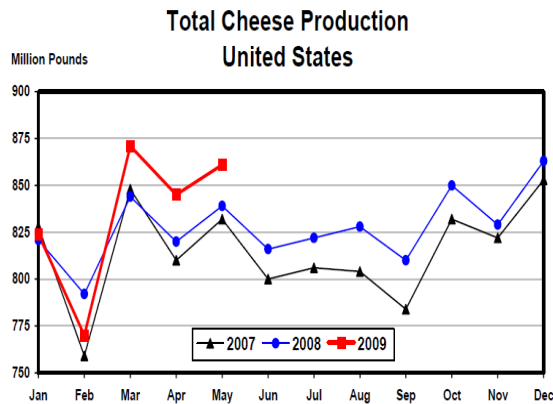


Source: Dairy Market News

Recent cheese production has continued to be high. And that level of production has shown up in cold storage. June total cheese stocks are slightly higher than the revised the May number, about 13 million pounds lower. That extends the highest storage total since August 1985.

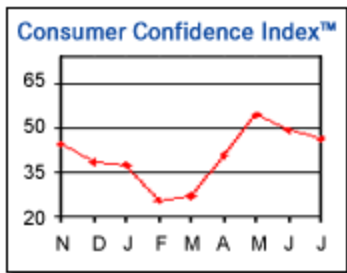


Source: Dairy Market News



Source: Dairy Products

The Consumer Confidence Index reported for July dropped to 46.6, a 2.7 point drop. 46.3% of those surveyed said business conditions are bad while only 8.1% thought business conditions were good. 48.1% said jobs are hard to get.



Source: Conference Board

### Analysis

Dairy farms are rapidly losing equity. And the next several months continue to look like the last few months also. Several policy reactions and hearings have been hitting the message boards and government offices. A variety of proponents have called for some degree of supply management, an increase in the support price and reductions in the use of various technologies. None of the proposals would have a quick enough impact to raise milk prices this late in the season. Milk and dairy product consumption needs to increase to have any impact on the current milk prices. Large inventories of dairy products continue to overhang prices.

Dairy cow numbers are showing declines that will eventually affect milk prices. Several large dairy farms are in turmoil due to the closure of New Frontier bank in Colorado. These dairy farms may close but will eventually return to operation. Many of the larger dairy operations that close due to financial problems will reopen with new owners.

Milk pricing opportunities are not providing positive cash flow for several months as well. A sell off in the Class III futures did not raise the probability we will see positive cash flow prices in the near term. MILC does help dairy producers. Those that run out of the payment due to production limitation for MILC have indicated that when the payment ends, they are in trouble.

Feed cost reductions may relieve some of the financial pressure, but the June milk-feed price ratio remained the same as May 1.47. Feed price used for the calculation was Corn: \$3.93, alfalfa hay \$128 per ton and soybeans \$11.60. Feed prices for future calculations will drop but not enough to soon get to the 2.5 needed for financial stability in the dairy industry.

*Robert Tigner*  
*University Of Nebraska*

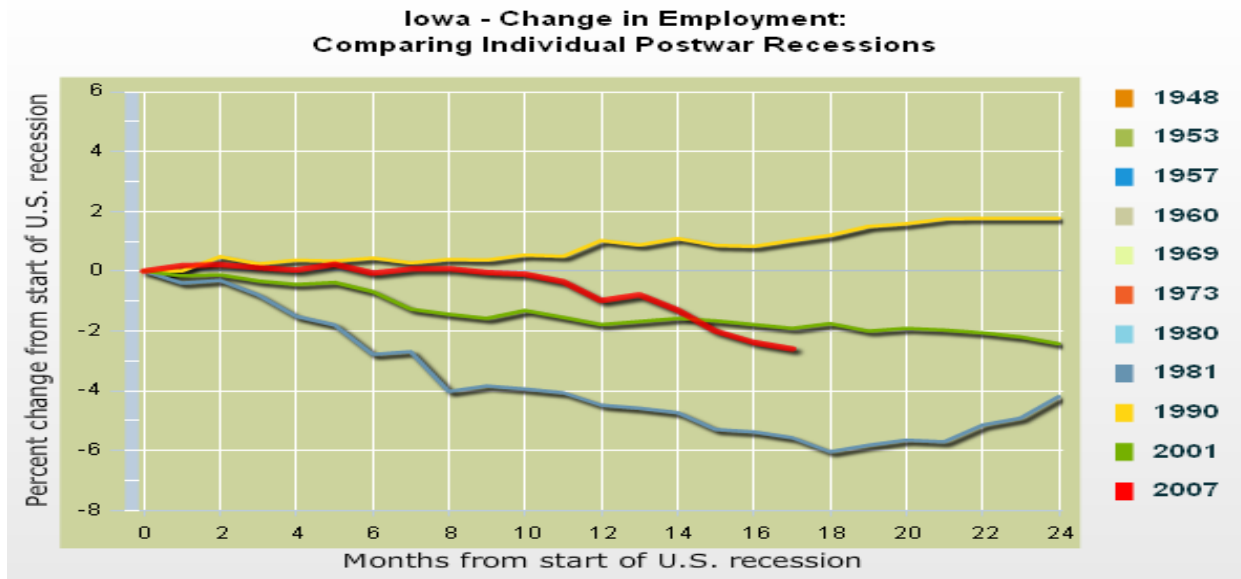
### Prospects for Recovery

Reports are prevalent that the recession may be easing as manufacturing shrinks less than expected, car sales are improving, and construction spending is responding to the stimulus package. Federal Reserve Chair Ben Bernanke has been speaking about signs that the economy is bottoming out and we may even see economic growth by the end of this year.

This seemingly good news makes for great headlines and reassures the markets, but the small print is less reassuring for the average American. Unemployment isn't expected to peak until 2010 which is why many economists refer to the potential for recovery as a "jobless recovery". The projected growth in GDP will be due to the stimulus package; however, real economic growth could be a long way off.



**Figure 1: Employment decline in last four recessions, including current.**



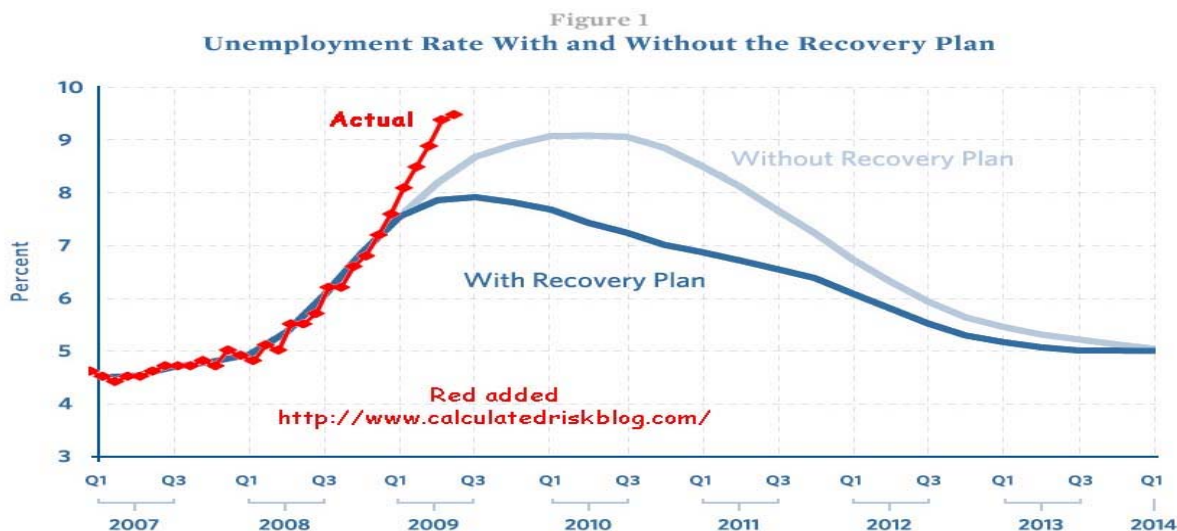
In Iowa we are faring better than the nation in terms of employment but are still experiencing a 22 year high in unemployment. The graph above illustrates that the 1981 recession had the greatest impact on employment in Iowa from the start date of the official recession, however this recession didn't really start to impact Iowa's employment dramatically until recently. A jobless recovery would mean that the trend line for unemployment would continue to fall and then employment would remain at lower levels than prior to the recession. The data suggests that Iowa may not have ever fully recovered from the 2001 recession when viewed in terms of employment.

For most people, GDP growth does not translate into economic recovery. For consumers and households, economic recovery requires broader employment and wage growth, neither of which appears to be on the horizon.

Because employment is what households and consumers feel, the prospects for recovery are not as pleasant as the economic data might suggest. Foreclosures will consider to be a problem as long as employment is falling, consumer spending will remain low forcing many businesses to close doors, and broader economic equilibrium will be unattainable.

Another potential problem for recovery is that the forecasted unemployment rates that the stimulus package was based on were not realistic, unemployment is a bigger problem than anticipated.

**Figure 2: Unemployment projections: Actual versus with and without stimulus**



Because unemployment rates are higher than projected, the Federal Stimulus dollars set aside for expanding unemployment benefits are nearly exhausted in many states and unemployment is still rising. The recovery money set aside for safety net agencies is rapidly being depleted as well with the Social Security Administration only having .1% of its allocation left and Veterans Affairs having 17% remaining.

This problem will only get worse and compounding the problem is that the actual unemployment rate does not account for workers who have simply given up or have remained consistently unemployed. After 26 weeks of unemployment the Labor department no longer tracks those individuals and therefore they don't show up in the statistics. This means that those laid off during the peak of layoffs earlier this year will no longer be counted in the figures shortly, and many will be running out of unemployment benefits. This may lead to the illusion that the employment situation is improving, when in fact those chronically unemployed will still be looking for work.

The true measure of whether or not the economy is recovering is employment and as long as the prospects for employment are dismal, the economy will remain in decline.

*Meghan O'Brien*

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