

Iowa Farm Outlook

Department of Economics
Ames, Iowa

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Pork Demand: Impact of Disease Outbreak and Public Perception

Health concerns related to food tend to receive significant media attention, even if the relation between a health issue and a food source is in name only. Recently a new strain of influenza with the viral characteristics of the swine flu has received significant attention from the media, government health officials and the general public. This new influenza virus H1N1 was first diagnosed in Mexico but has now been found in several countries around the world, initiating worries of a pandemic. Because the initial media reports referred to the new influenza as “swine flu” with accompanying pictures of pigs and hogs, there was a potentially adverse influence on the public’s perspective of pork. Time will tell if this impact will be short or long term, but the knee jerk reaction has been for an initial decrease in hog prices. The appearance of this new virus occurred just when the industry was anticipating a much needed seasonal up-turn in early summer hog prices.

An illustration of market reaction was the down turn in nearby futures contracts during the last week of April after the virus was discovered in the US. Figure 1 tracks the change in the May lean hog futures price. The drop in futures price was not entirely due to an immediate decline in actual demand, but rather a decline in anticipated demand. There had been a nearly \$6 spread between the Iowa cash and May futures hog price on April 24th. One week later that basis spread had narrowed to about a dollar. During that week, hog prices stair stepped down to a lean hog price below \$60/cwt. Over the weekend Canada announced that H1N1 spread from a human that had visited Mexico to hogs on a farm in Alberta. The futures markets were sharply lower on Monday May 4 following this news and the May contract fell to \$55.50 compared to the \$69.00 close April 24.

Figure 1. May Lean Hog Futures Contract, Apr 24-May 1, 2009

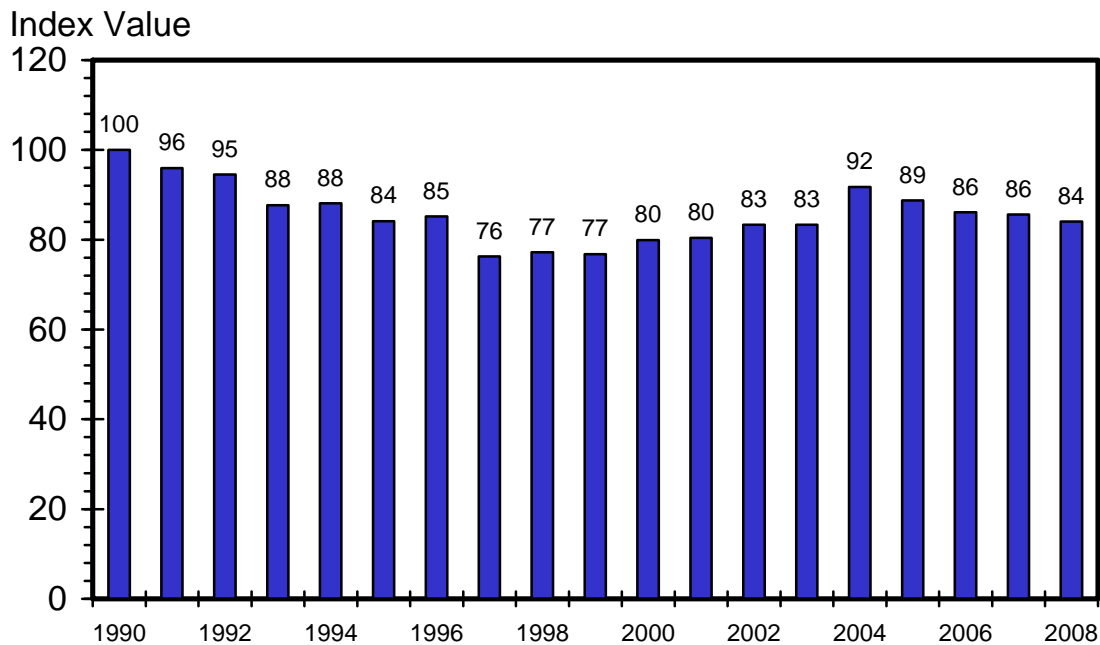


There is some hope of market recovery as consumers learn the facts pertaining to how this type of flu is actually transmitted and after the spread of the disease is controlled. Hog futures in the other summer months were also down, though not to the same degrees as the May contract.

Historic Perspective

Similar disease events have happened in the past. In December 2003, bovine spongiform encephalopathy (BSE) was discovered in the US. While the chances of humans contracting the disease from US beef were extremely slight, there were concerns raised about beef safety and plenty of media coverage. The immediate closure of all foreign markets to US beef and the chance that US consumers would also turn away from beef raised an initial fear of catastrophe in the industry. Live cattle January futures fell from over \$92 on Dec 23rd to less than \$74 on Dec 31st. Despite this initial down turn in the futures market, the January contract rebounded to \$88 before maturing at over \$81. Through the spring and summer, fed cattle prices were well above those of the previous year, despite the loss of nearly all export markets. Figure 2 illustrates the change in first quarter beef demand. Based on the quantity and price of beef consumed in the months immediately following the BSE discovery, demand improved rather dramatically and was the strongest it had been since 1992.

Figure 2. First Quarter Beef Demand, 1990=Base 100

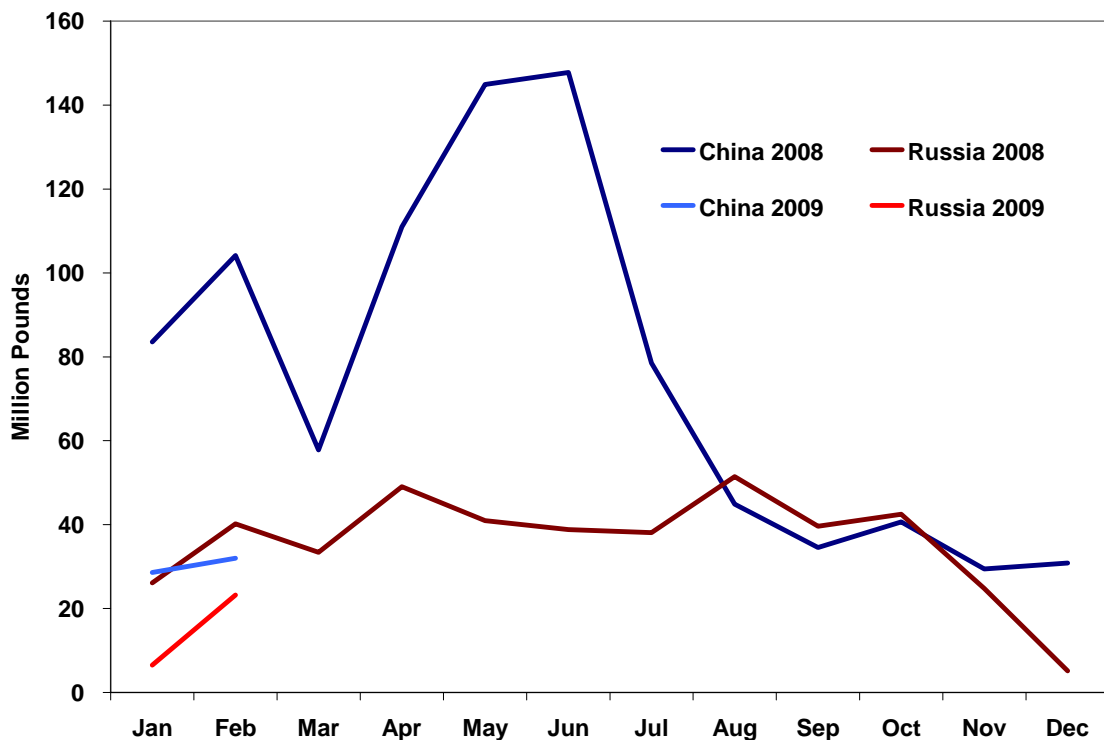


There have been outbreaks of “swine” flu strains in the US before. A 1976 flu scare resulted in nationwide vaccinations, but the disease only affected a small area around Fort Dix in New Jersey. Another outbreak occurred in 1988, but once again the spread was limited to a small area in Wisconsin. There was no perceptible long term impact on demand in either case.

Export situation

China initially halted all imports of pork as soon as cases of the new flu virus were found in the US. Russia halted pork, beef and poultry from selected states. This is likely to be a temporary interruption until trade representatives are able to present the facts and prove that catching the illness from pork or any other meat is not probable. Even the transmission of the virus from a live animal to a human is much less likely than a human to human infection. So how much impact will this trade injunction have on the swine industry? Last year Russia and China consumed 6 percent of US pork production and accounted for 29 percent of US exports. In the first two months of this year, exports to these two markets were down 67 percent and made up only 23 percent of all exports.

Figure 3. US Pork Exports to China and Russia



In summary, the summer rally in hog prices will be delayed a few weeks, and may be not be as strong, but is still expected to occur for the grilling season. Exports to the countries that have stopped pork trade were already significantly depressed, so there really was not that much to loose in the short run. These markets should reopen fairly quickly so the long-run impact would be minimal. Finally, the negative stigma of associating a food product with an animal disease has occurred in the past, and did not have a lasting adverse effect on the market.

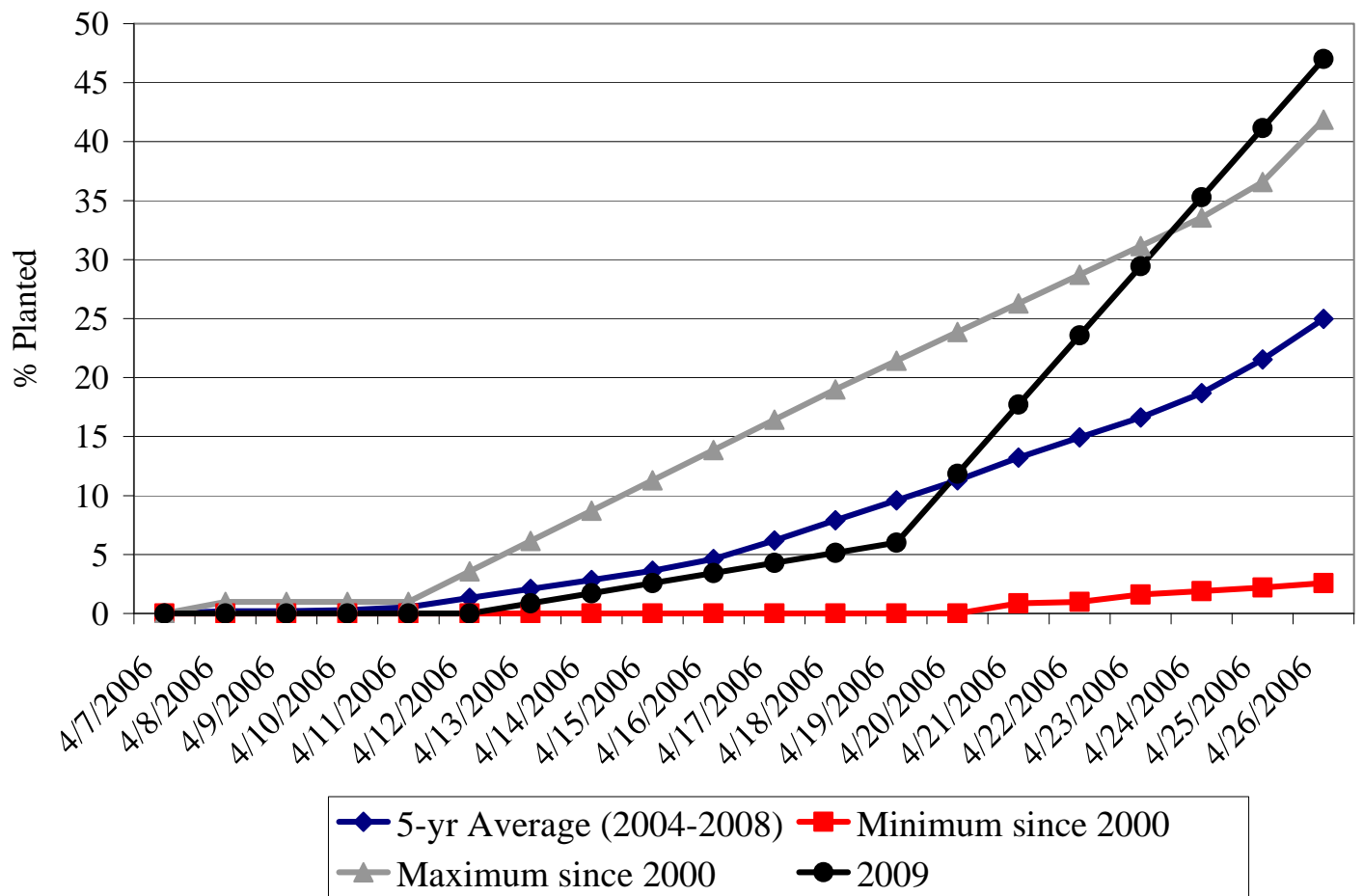
Shane Ellis

Springtime in Iowa

USDA's Crop Progress report on April 27 showed a significant jump in Iowa crop plantings in comparison to the previous week and year. As Figure 1 shows, on April 19th, Iowa producers had planted roughly 6 percent of their corn, slightly below the 5-year average pace. Given a solid 5 days suitable for fieldwork over the week, Iowa corn plantings jumped to 47 percent, the highest percentage recorded at this time of year since before 1981. This pace is about 6 days quicker than the 5-year average and about 1 day ahead of the pace for 2004 and 2006, the highest years since 2000. Last year at this time, Iowa was at 3 percent. Fertilizer applications were at 88 percent, 8 percent ahead of the 5-year average and 23 percent ahead of last year. Oat plantings are at 93 percent, 18 percent ahead of the 5-year average and 67 percent ahead of last year. Soybean planting is underway as well, with 2 percent planted as of April 26.

For the nation, corn planting is 6 percent below the 5-year average pace, but 13 percent ahead of last year. Iowa, Minnesota, and Nebraska all enjoyed good planting conditions in mid-to-late April and are ahead of schedule. But Illinois and Indiana are well behind average pace and, in fact, are behind last year's sluggish start to the planting season. Since the Crop Progress report came out on April 27, a few storm systems have worked through the Midwest, delaying fieldwork. So Iowa's planting pace will fall back toward the average, while Illinois and Indiana will still be looking to catch up. The rains and the associated planting delays have provided some support to crop prices this week.

Figure 1. Iowa Corn Planting Progress



Biofuel Issues

Several biofuel issues have surfaced in the news recently. On April 23rd, California’s Air Resources Board adopted a regulation to implement the state’s low carbon fuel standard. The regulation establishes greenhouse gas (GHG) performance levels California fuel suppliers must meet, starting in 2011. The goal is reduce transportation fuel GHG emissions by 10 percent by 2020. In looking at the GHG emissions of fuels, the Air Resources Board used a “lifecycle” analysis, which examines the production, shipment, and utilization of the fuel. The lifecycle analysis also considered GHG emission changes due to indirect effects from the production, shipment, and utilization of the fuel. The board identified indirect land use change as a significant point in GHG emissions; no other indirect effects were included. In their analysis, the board identified 11 different pathways for corn-based ethanol to enter the California market. These pathways are differentiated by the location of the ethanol plant (Midwest vs. California), production process (dry vs. wet mill), co-product treatment (wet vs. dry distillers grains), and power source (coal, natural gas, and biomass). Their analysis showed the direct GHG emission profiles for all 11 pathways was sizably below their baseline target (the baseline is reformulated gasoline with 10% ethanol), but the inclusion of the indirect land use change increased the emission profiles to around baseline levels. Given the GHG targets in the regulation, 7 of the 11 pathways would meet the target in 2011. By 2020, only 3 of the pathways, all based on the ethanol production being in California, would meet the target.

The debate over the regulations has been under way for some time. The Air Resources Board received over 200 comments during its 45 day comment period for the regulation. Critics of the regulation have concentrated their arguments on the uncertainty in estimating indirect land use change and the lack of inclusion of any other indirect factors. Several critics have pointed to a recently published paper by Adam Liska and Richard Perrin from University of Nebraska that includes an examination the indirect GHG emissions for gasoline that are related to the military protection of global oil supplies. The board chairman has noted that the indirect effects of all transportation fuels will need to be studied further.

On the heels of the California decision, the Environmental Protection Agency (EPA) is expected to issue its proposed rules for the federal Renewable Fuels Standard. The proposed rules have been drafted and were under review with the Office of Management and Budget since February 6th. With the completion of the review, EPA will likely publish the proposed rules and open up a comment period on them in the near future. The federal Renewable Fuels Standard targets 36 billion gallons of renewable fuels by 2022, with specific requirements on the GHG emissions for the fuels. As with the California regulation, the issue of indirect impacts will receive close scrutiny.

The EPA is also taking comments on a waiver application to allow ethanol blending up to 15 percent in volume. In March, over 50 ethanol producers submitted paperwork to EPA to allow E-15 blends. As EPA analyzes this waiver request, it will receive public comments until May 21, 2009 on the request. EPA must rule on the request by Dec. 1, 2009. Expect several important biofuel policy decisions will be handed down this year.

Export Numbers and Prices

While export numbers have been down for corn this marketing year, recent sales have been relatively strong. Throughout early 2009, corn export sales pace was significantly behind the average pace. But as of April 23rd, cumulative corn export sales were at 86.5% of the USDA forecast, higher than the 5-year average. Soybean exports also continue to outpace the 5-year average, as over 96% of the USDA forecast has been met. Drought impacts in South America, combined with Chinese demand, have boosted U.S. export prospects.

With the latest World Agricultural Supply and Demand Estimates report, USDA raised its projections for 2008/09 crop prices to \$4.20/bushel for corn and \$9.65/bushel for soybeans. Forward sales by producers during last spring and summer continue to support the prices received by farmers. Based on futures prices at the close of April, the market will roughly be in line with these estimates (\$4.13 for corn and \$9.79 for soybeans). For 2009, the futures markets are currently projecting a \$4.00/bushel price for corn and roughly a \$9.00/bushel price for soybeans. Weather conditions and planting progress will be the key features to watch over the next few weeks. But as the market action over the last couple of weeks has shown, other factors, such as biofuel policies and the H1N1 flu outbreak, will contribute to continued volatility in the crop markets.

Chad Hart

Iowa's Job Loss Experiences During U.S. Recessions

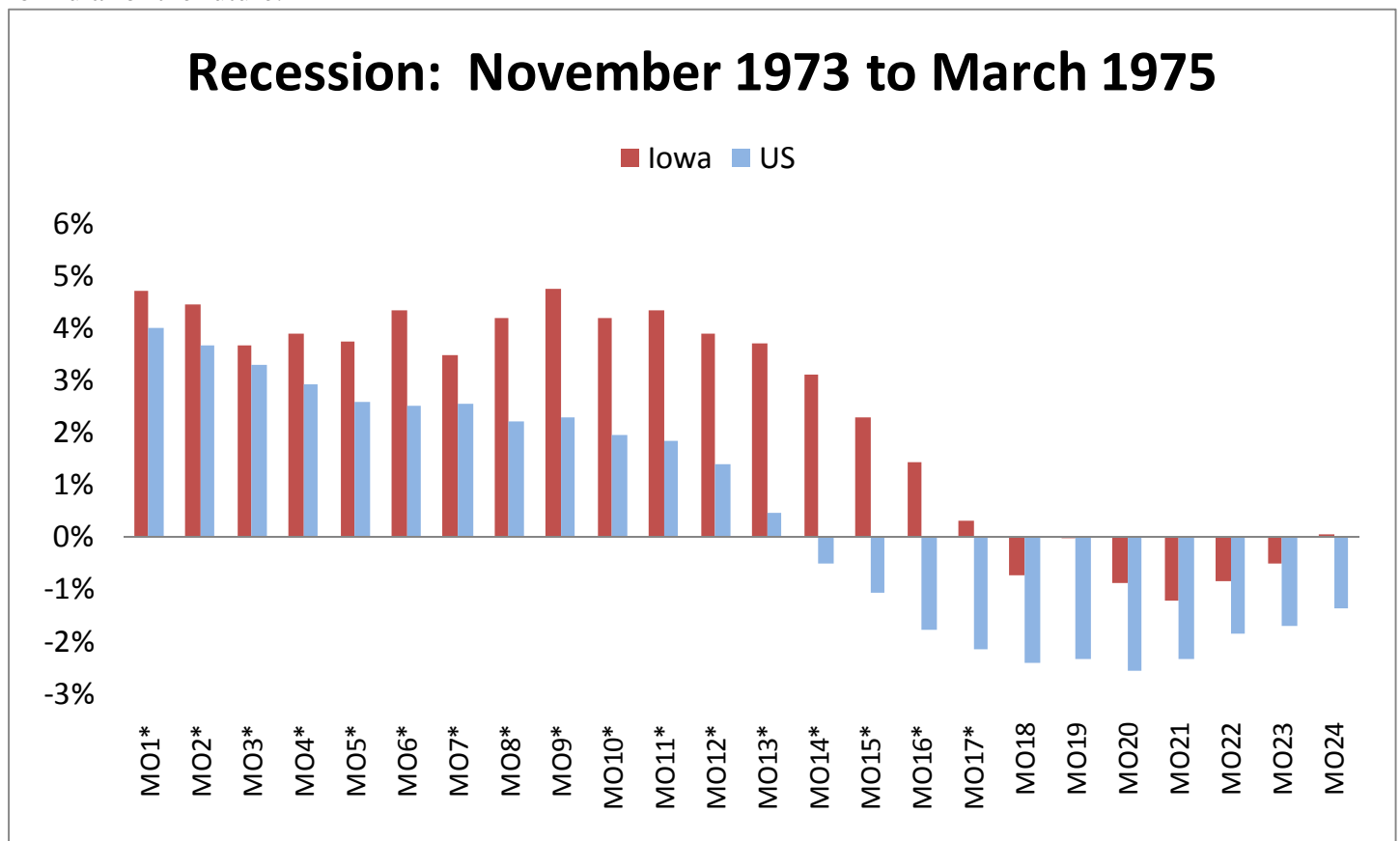
Some Iowans cling to the belief that Iowa is essentially "recession-proof" because its strong agricultural and food production sectors tend to weather national economic downturns better than many other economic sectors. Others believe that some quality inherent in the state's economy causes it to "lag" the United States going into recessions and recover more slowly than the rest of the nation. At least in terms of employment change, neither is entirely true.

Iowa has escaped employment losses during only one of the past six U.S. recessions. Whatever protections afforded by the agriculture and food processing sectors, they are less and less able to shield the state from national and global economic forces. These sectors represent a declining share of the state's total GDP, falling from about 18 percent in the early 1970s to about 9 percent in recent years. The remainder of the state's economy, including its manufacturing sector, is highly vulnerable to declining national and global demand. Patterns of employment change during previous U.S. recessions suggest that there is no consistent formula to determine how Iowa will fare during the current recession. The following figures illustrate employment changes in Iowa and the U.S. during the last six recessionary periods. The values show the year-over-year percentage changes in employment for the first 24 months following the official start of recession in the United States. Starting and ending dates of U.S. recessions are officially declared by the National Bureau of Economic Research. In five of the last six recessions, U.S. employment losses typically began somewhere between the 5th and 7th month following the official start of the recession. The timing of Iowa's job losses have varied from one recession to the next.

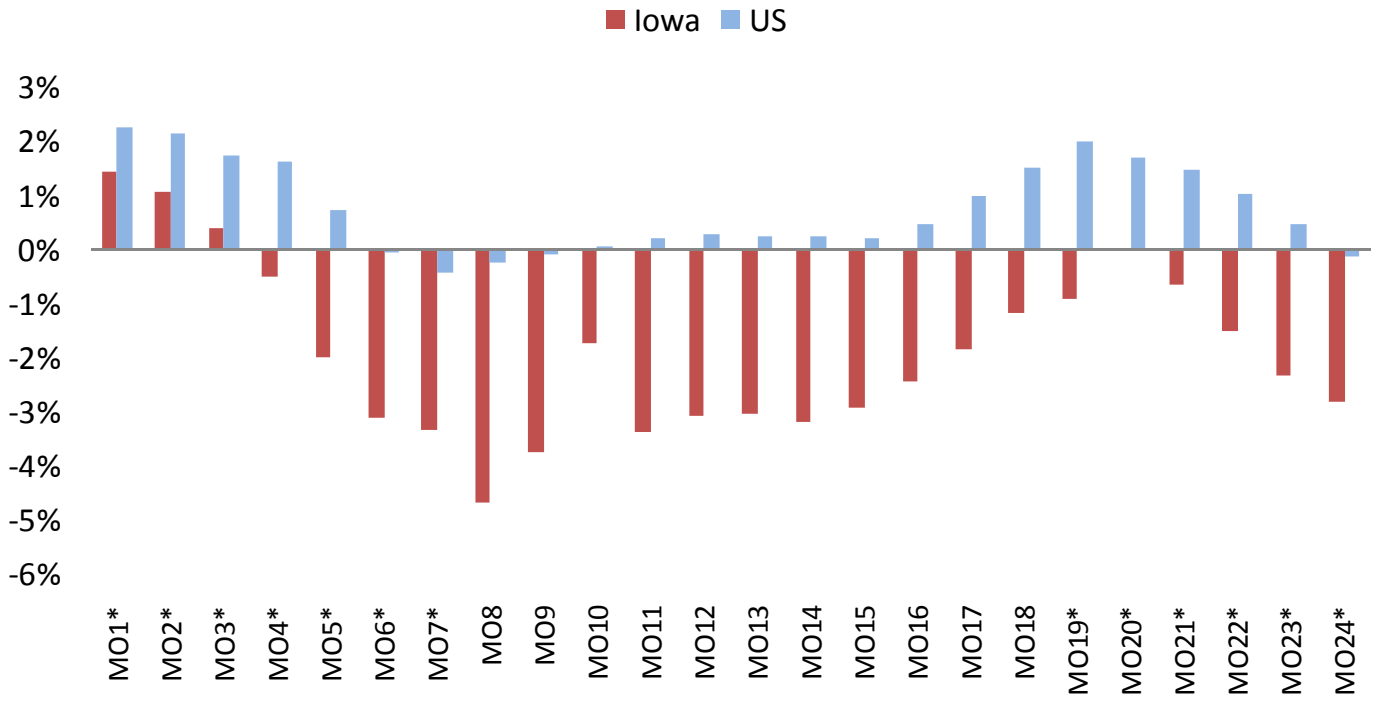
The recession of November 1973 to March of 1975 was unusual in that U.S. employment did not dip into negative growth territory until the 14th month. Iowa lagged the nation with its first year-over-year employment decline occurring in the 18th month, which was actually one month after the official end of the recession. Iowa fared much worse than the U.S. in job losses during both recessions of the 1980s. The first recession was relatively short in duration, lasting from January to July of 1980. U.S. employment declines in that recession were shallow and brief. In contrast, Iowa fell into a pattern of monthly employment declines beginning in April of 1980 and continuing for the next 15 months. The first month in which Iowa's employment did not decline on a year-over-year basis was in August of 1981, when the nation was already officially in another recession. Iowa's rate of job loss was much steeper than the national rate during the July 1981 to November 1982 recession, and the state also lagged the nation in job recovery.

Iowa escaped the recession of July 1990 to March 1991 without experiencing net job losses at the statewide level. However, Iowa preceded the nation in job losses again during the recession of March to November of 2001. The state continued to post job losses on a year-over-year basis for 22 months following the official "end" of that recession, but actually posted its first monthly gains two months earlier than the rest of the U.S.

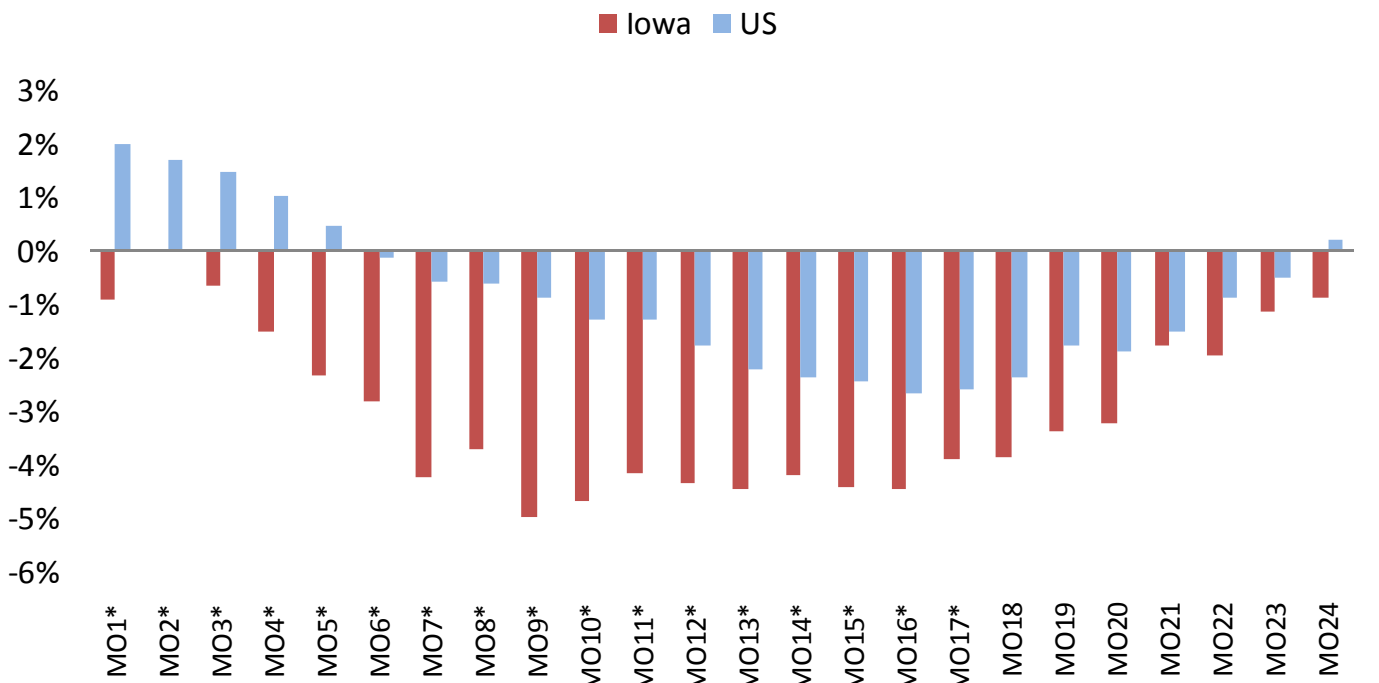
The nation is now 16 months into the recession that officially began in December 2007. In this current recession, Iowa's job losses began later than the nation's on a year-over-year basis. Thus far, they have not approached the U.S. average in magnitude, nor have they reached the severity of Iowa's losses during the 1980s. Only time will tell how the state will fare during coming months, as past trends provide no guaranteed formula for the future.



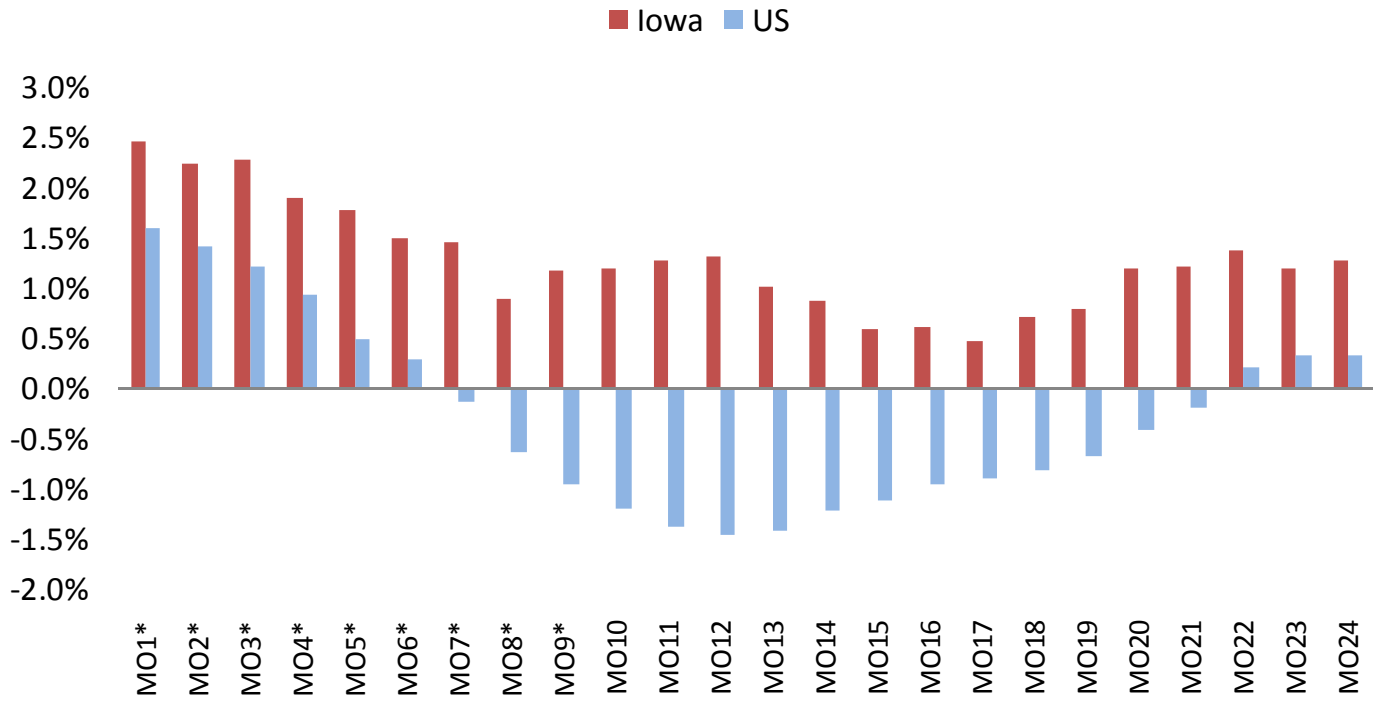
Recession: January 1980 to July 1980



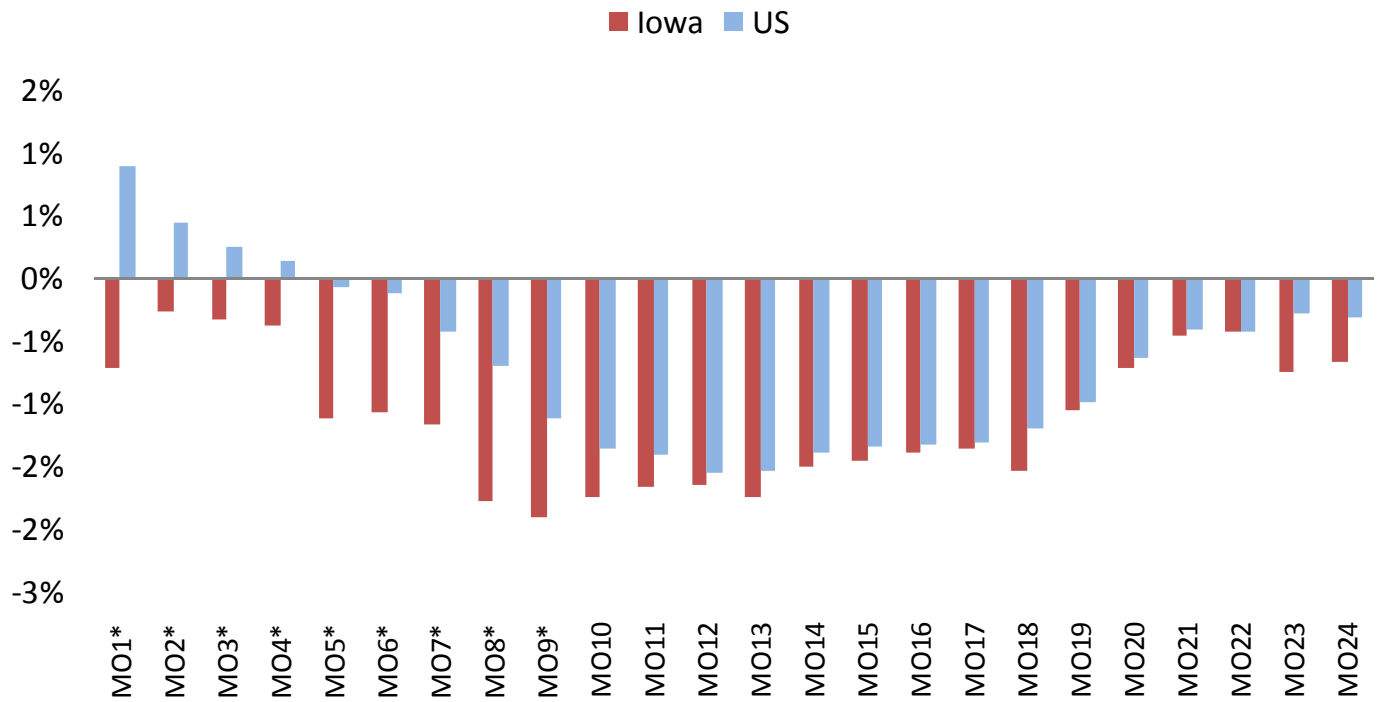
Recession: July 1981 to November 1982



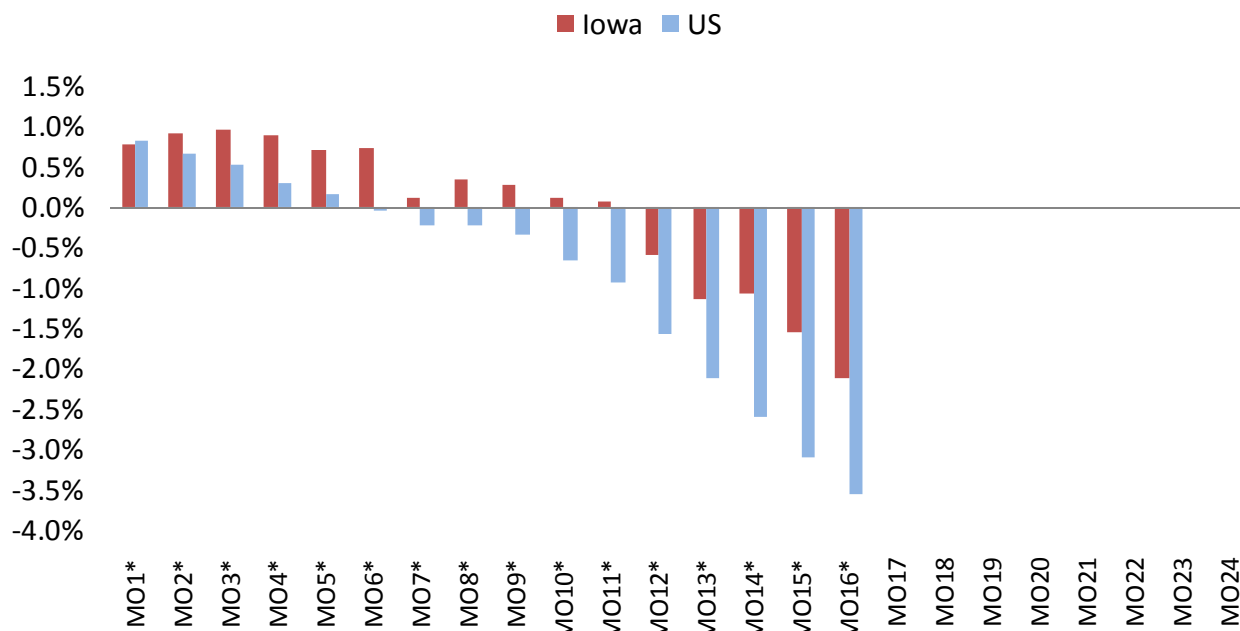
Recession: July 1990 to March 1991



Recession: March 2001 to November 2001



Recession: December 2007 to 20??



Liesl Eathington

March Milk Production Down 0.2%

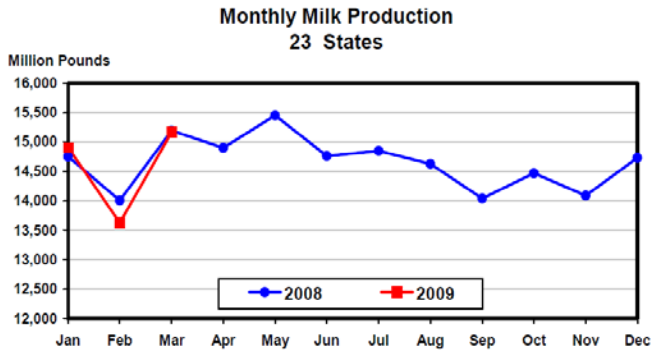
March 2009 23 major dairy states milk production dropped 0.2%. Production per cow was down 6 pounds from one year ago. Milk cow numbers were 15,000 more than March 08 and 4000 less than Feb 09. Feb 09 milk production was revised down by 23 million pounds, a 0.2% point decrease. Milk production in the US during the first quarter of 2009 totaled 47.3 billion pounds, down 0.6% from first quarter 2008. Average milk cow numbers were 11,000 higher for the quarter compared to one year ago.

First quarter NE milk production totaled 284 million pounds up 19 million pounds. Cow numbers rose 3000 to 60,000 dairy cows. Iowa March 09 milk production was off by 0.5% compared to one year ago. Cow numbers were down by 1000 compared to one year ago and milk production per cow was the same as one year ago. Feb 09 Iowa cheese production was 7.5% higher than one year ago and 7.3% less than Jan 09.

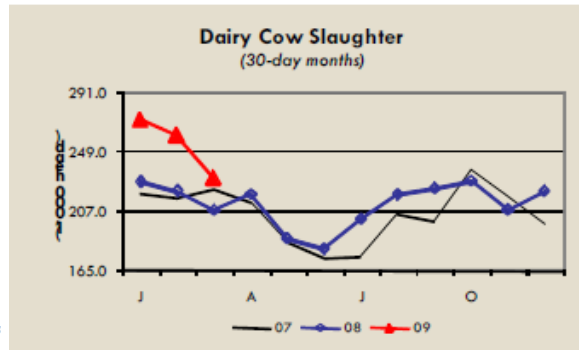
Milk Production: Selected Dairy States, March 2009

State	thousands	thousands	% change	pounds	pounds	% change	million pounds	million pounds	% change
	2008 cow numbers	2009 cow numbers		2008 milk per cow	2009 milk per cow		2008 total milk production	2009 total milk production	
Iowa	216	215	-0.46%	1730	1730	0.00%	374	372	-0.53%
MN	463	468	1.08%	1630	1645	0.92%	755	770	1.99%
WI	1251	1256	0.40%	1660	1685	1.51%	2077	2116	1.88%
IL	102	102	0.00%	1640	1675	2.13%	167	171	2.40%
CA	1842	1822	-1.09%	1975	1920	-2.78%	3638	3498	-3.85%
CO	126	128	1.59%	1945	1980	1.80%	245	253	3.27%
KS	115	122	6.09%	1790	1820	1.68%	206	222	7.77%
ID	540	549	1.67%	1885	1810	-3.98%	1018	994	-2.36%
NM	340	333	-2.06%	1990	2110	6.03%	677	703	3.84%
PA	549	550	0.18%	1680	1670	-0.60%	922	919	-0.33%
NY	626	623	-0.48%	1590	1540	-3.14%	995	959	-3.62%
TX	408	430	5.39%	1800	1850	2.78%	734	796	8.45%
23-State	8467	8482	0.18%	1660	1685	1.51%	15191	15164	-0.18%
US 1st quartr	9286	9297	0.12%	0	0	#DIV/0!	47610	47304	-0.64%

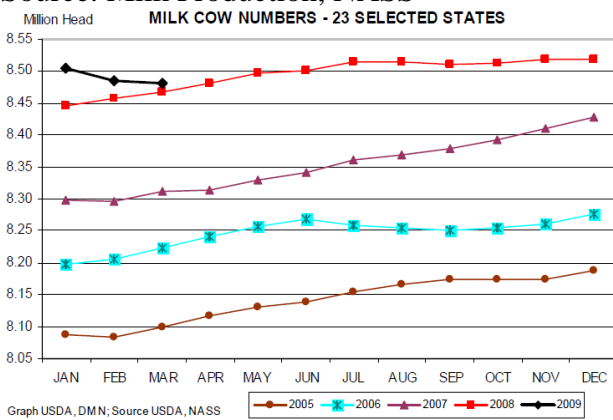
The April 2009 Livestock Slaughter reported 238,200 dairy cows were slaughtered in March. That number was down 11.7% from Feb 09. USDA estimated that “23,000 more dairy cows were culled in March 2009 vs. March 2008; however, since January, the cull rate as a percentage of the total herd has dropped from 10.5% to 8.9%” observed a recent Valley Futures newsletter. The current reduced culling may be due to farmers waiting for their herd to go in the 7th round of CWT herd reductions.



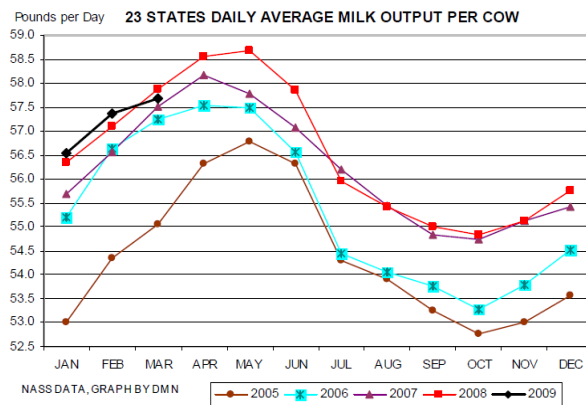
Source: Milk Production, NASS



Source: Daily Dairy Report



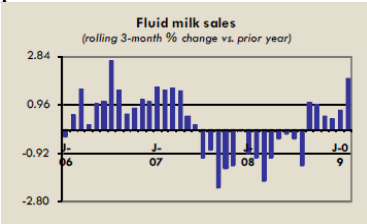
Source: Dairy Market News



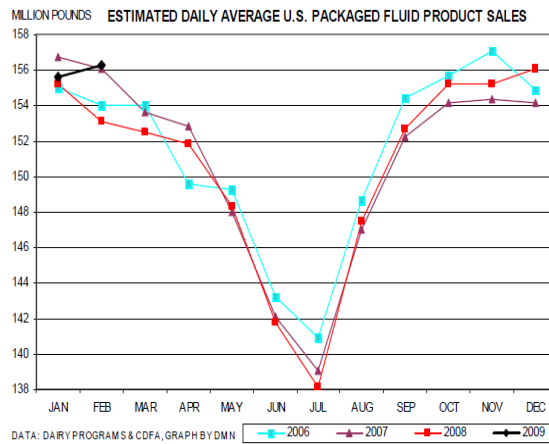
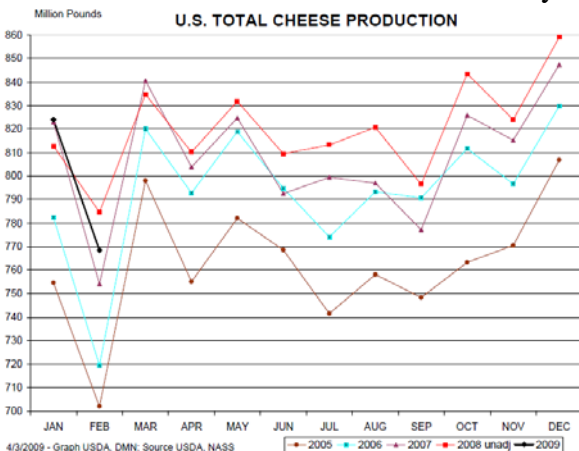
Source: Dairy Market News

Demand or Disappearance

For February total cheese output was 769 million pounds, down 2.1% from one year ago and 6.7% less than Jan 09. Butter production was 145 million pounds, 1% less than one year ago and 16.7% less than Jan 09. Fluid milk sales are improving. The CPI fell slightly for March 09 to the same as Oct 08. The dairy and related products decline was 2.4%. This followed declines during the previous three months.



Source: Daily Dairy Report and Dairy Market News



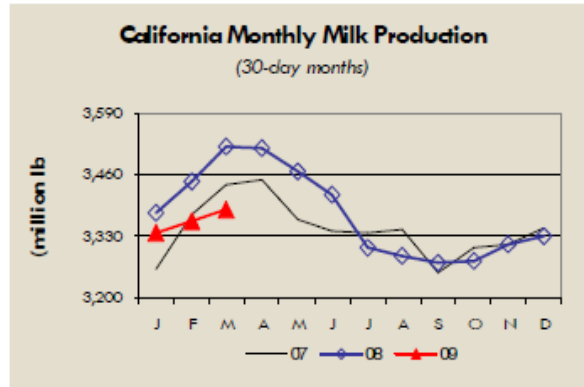
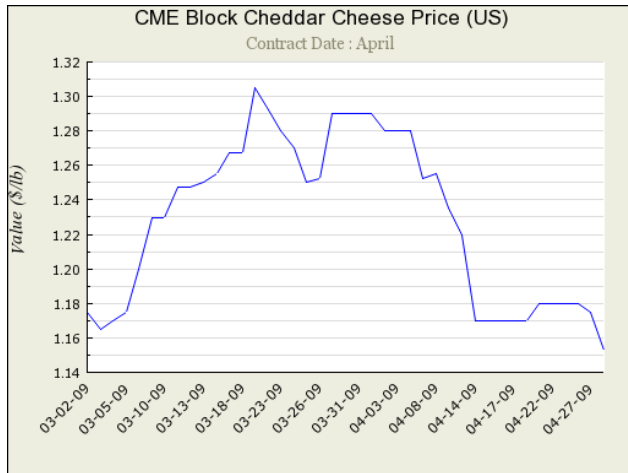
4/3/2009 - Graph USDA, DMN; Source USDA, NASS

DATA: DAIRY PROGRAMS & CDFA, GRAPH BY DMN

The Consumer Confidence Index for April increased to a five month high of 39.2, after the largest month over month rise since 2005. Another report indicated that 20 city home sale prices had the slowest rate of decline in February since 2007.

Analysis

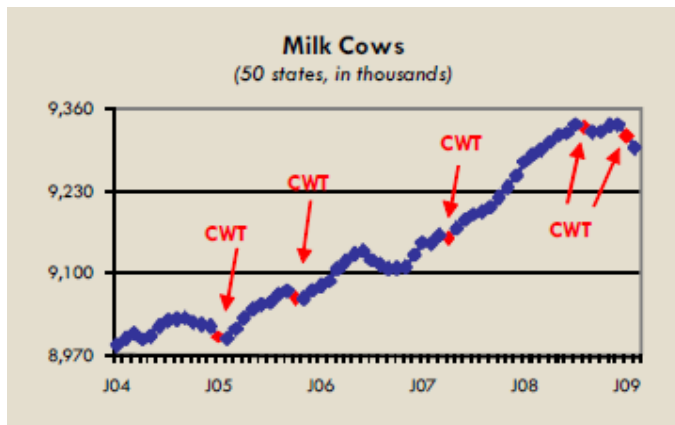
April 28 CME traded barrel cheese prices were 1 cent below support price. Block prices fell 2.25 cents on the same day.



Source: UWEX: Understanding Dairy Markets web site Source: Daily Dairy Report

The weakest milk production has been in the west so far. California and Idaho has seen much weaker total milk production. Both AZ and ID have higher milk cow numbers but the lower milk per cow led to lower total milk produced. CA had lower cow numbers and milk per cow. Feed cost and low milk prices continue to lead to poor dairy farm financial conditions. Those herds who buy feed are at the most risk of financial stress.

A seventh round of herd retirements was announced by Cooperatives Working Together (CWT). However the chart below shows that effect of these retirements has been short-lived. It will be difficult to separate the effects of the current financial stress in the dairy industry and the CWT dairy herd removal.



Source: Daily Dairy Report

Looking at current milk prices still offers little relief to stressed dairy operations. And the recent decline in CME cheese prices tends to lend concern for a longer period of weak milk prices than I had anticipated earlier this year. Pessimistic projections of milk prices put Class III milk prices at \$11 through summer with 4th quarter Class III milk prices from \$12-14.

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