



# Dairy Outlook

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## Market Psychology

The market is facing an overall bearish environment. Retail sales for the holiday shopping period are well below a year ago, consumer and business credit is drying up, housing values continue to fall, and the federal deficit is forecasted to exceed all prior expectations. It's clear that something worse than a normal recession has crept into the U.S. economy and is now spreading beyond our borders. For the dairy markets, the overall bearish market is taking its toll. Cash market prices for cheese, butter and nonfat dry milk are now all down to support levels. According to Allan Levitt of the CME Group, three loads of butter were sold to the government at \$1.05 per pound under the price support program on January 7, 2009. This was the first time butter was sold to the government since Spring 2003. And, as of December 31, 2008, about 114.6 million pounds of nonfat dry milk were sold to the Government.

Crude oil prices, which peaked at 152 per barrel, are now down to below \$48 per barrel (Figure 1). High energy costs dramatically increased the cost of spring plantings. Thus dairy producers that just harvested their fall crop of corn silage, hay, and other concentrates have a relatively high cost of production. That high cost feed must now be passed through the dairy cow. Offsetting this, lower fuel costs have the advantage of increasing consumer's disposable incomes. That would normally result in increased spending on fast food and thus dairy products. But an environment of economic uncertainty is keeping consumers home. The other major macro factor affecting the dairy industry is the value of the dollar. As the dollar weakened from 2006 through mid-2008, U.S. exports were more attractive (Figure 2). However, the dollar has recently strengthened and that directly reduces U.S. dairy exports. Product that isn't exported is backed up in the U.S. market.

The cash market is certainly exhibiting very weak conditions. For example, on January 8, 2009 the CME price for block and barrel cheese was each \$1.04 per pound. The CCC purchase prices for block and barrel cheese are \$1.1314 and \$1.1014 per pound, respectively. The CME Grade AA butter price for the same day was \$1.11 per pound, which compares to a CCC purchase price of \$1.05 per pound. Finally, the Western mostly price of nonfat dry milk from the week ending January 2, 2009 was \$0.8150-\$0.83 per pound. That compares to a CCC purchase price of \$0.80 per pound for nonfat dry milk. There is no longer a debate as to whether butter or nonfat dry milk will enter the CCC or the Dairy Price Support Program (now called the *Dairy Product Price Support Program*). The real question now is whether cheese will enter the program. Given current market prices, it certainly is a possibility.

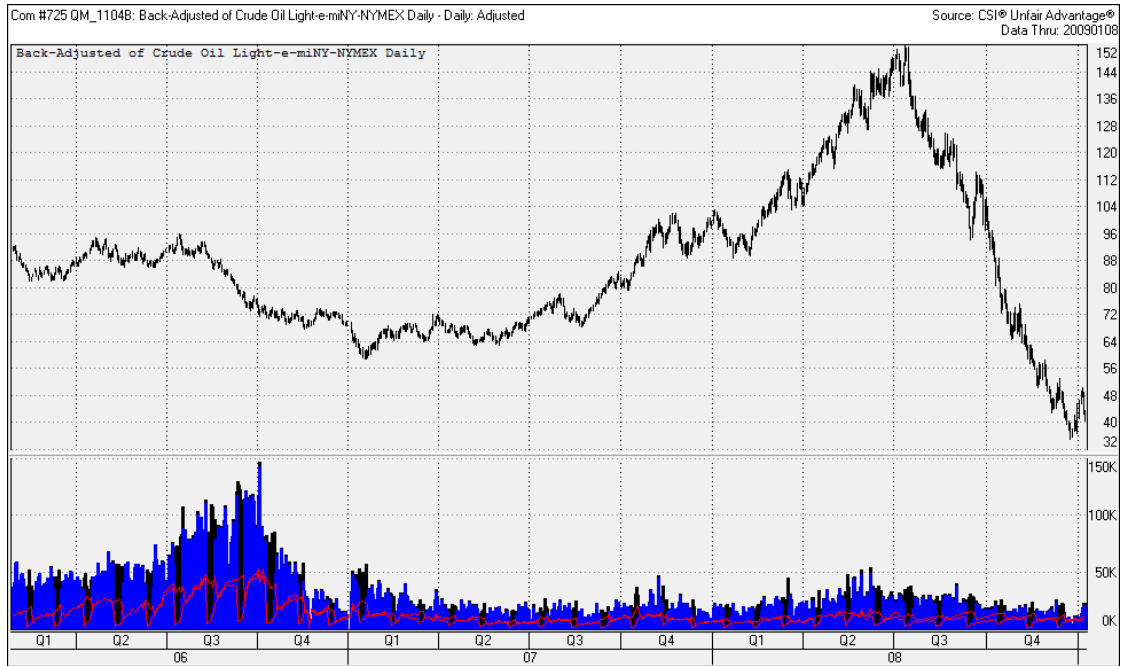


Figure 1. Back Adjusted Crude Oil, Light Sweet (CSI)

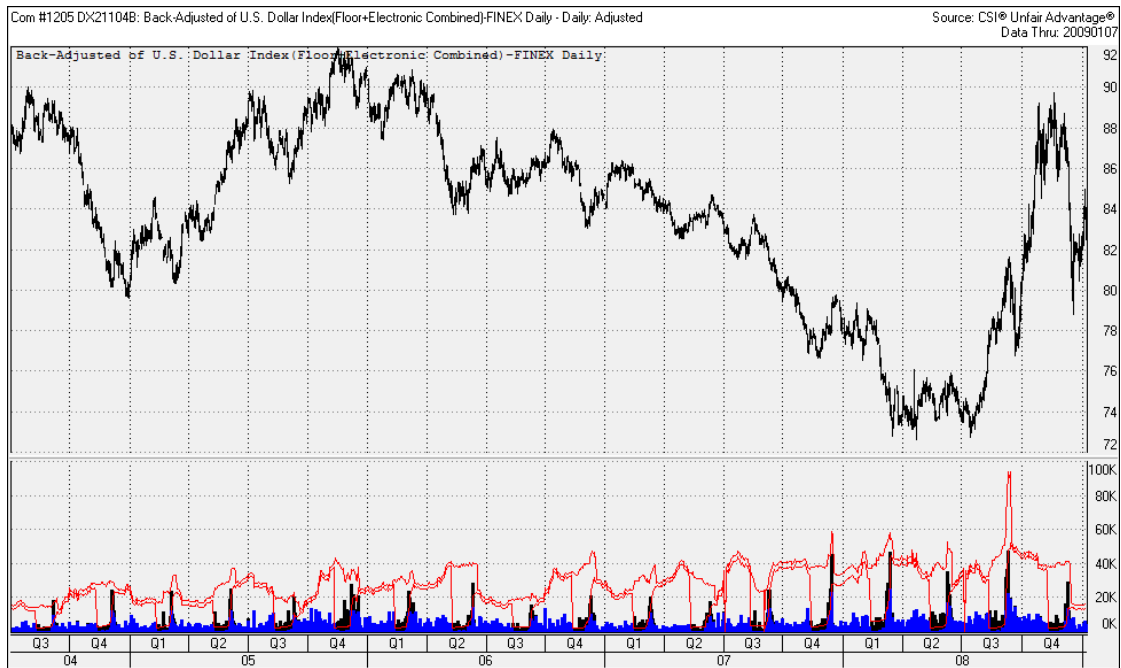
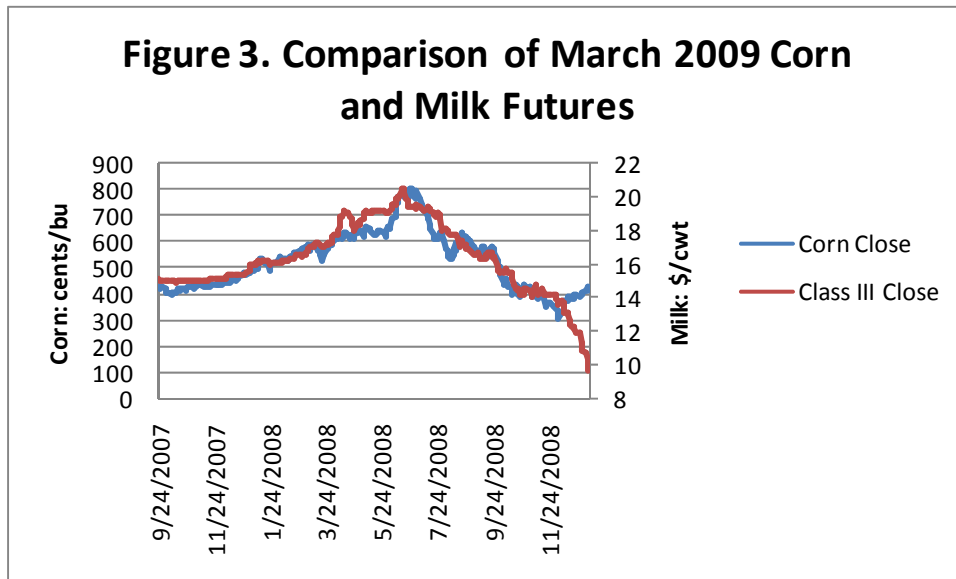


Figure 2. Back Adjusted U.S. Dollar Exchange Rate Index (CSI)

### Milk and Corn

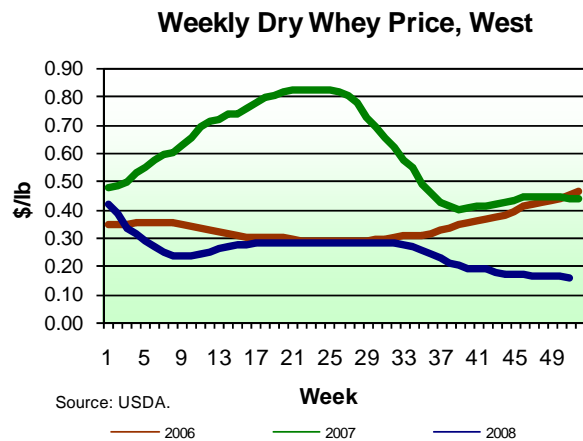
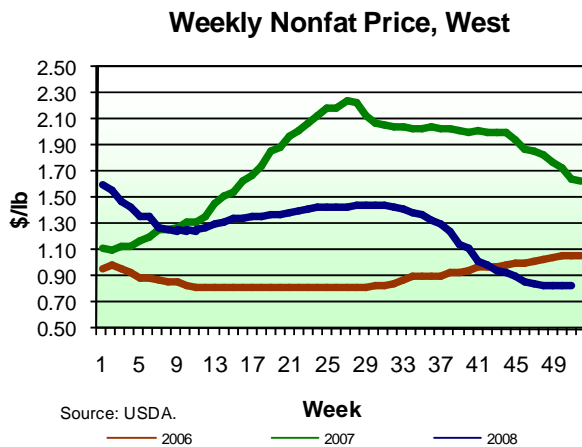
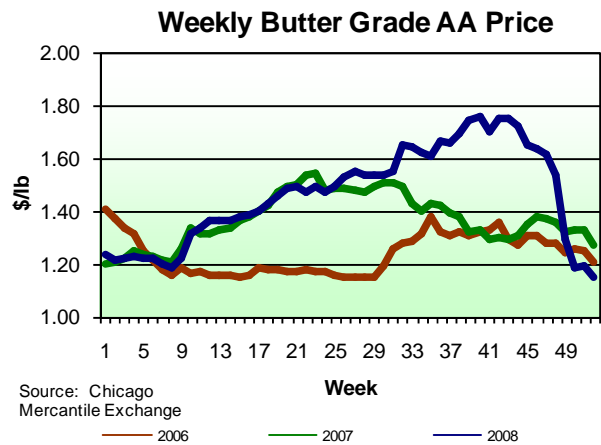
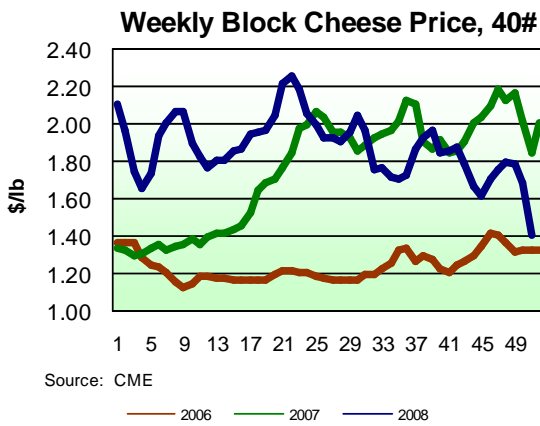
Over the summer corn prices rose to astronomical levels. In fact, corn prices rose in concert with crude oil and exchange rates. Milk prices were happy to rise along with corn prices as seen in the chart below. However, this relationship took a sudden turn at the end of the year when milk prices and corn prices suddenly diverged. With milk prices falling and corn prices rising, the gross margin on milk suddenly took a big hit. The fact is, corn prices drive all feed prices, including alternative feeds and hay prices. All have risen in the last year.

The clear implication of this divergence is that dairy farmer margins for the first quarter of 2009 will be among the worst in decades. It is very likely that this will force a liquidation of cow numbers. In prior years dairy farmers were surprisingly resilient to falling farm profits. They were able to hold on by refinancing the dairy farm. However, with cash in short supply and bankers becoming more conservative, it's not clear that they will be able to weather the storm. So, look for a very noticeable reduction in cow numbers during the first half of the year.



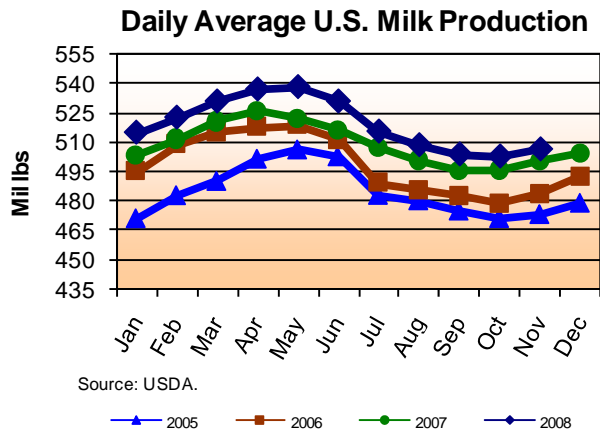
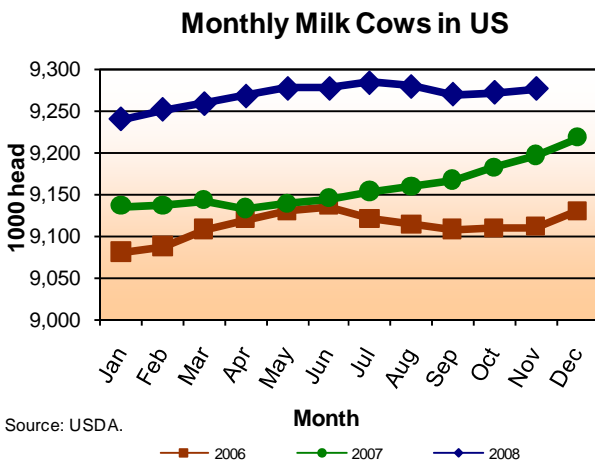
## Commodity Prices

The depth of the commodity price declines can be seen in the charts below. First it was nonfat dry milk and dry whey prices which bowed to international pressures. Both prices peaked in 2007 and then had a gradual fall in 2008. For cheese, prices were volatile but trading in a range of \$1.80-\$2.20 over the period mid-2007 to fall 2008. Prices began to tumble below \$1.80 per pound in late fall when it became clear we were not going to export our way out of a surplus problem. Butter prices, on the other hand, rose steadily throughout most of 2008 and peaked at well over \$1.70 per pound in late fall. But prices suddenly fell to below \$1.20 per pound before year end. For butter there was the feeling that we were going to switch from a net importer to a net exporter. In fact, for most of 2008 that was true. But our ability to export was dependent on exchange rates and the CWT program (Cooperatives Working Together). As soon as it became clear we could not export all the surplus product given the massive change in exchange rates, prices suddenly plummeted.



## Milk Production

Milk production in November 2008 rose an estimated 1.1 percent to 15,182 million pounds. Cow numbers rose from the month before to 9,276 thousand head. Milk productivity per cow was 1,637 pounds, about even with a year ago. The rate of growth in the U.S. milk supply is clearly slowing from the higher rates earlier in the year.



## Dairy Product Production

USDA's latest Dairy Products report sends a very bearish signal to the market place. Despite a slowing rate of growth in the milk supply, production of cheese, butter and nonfat dry milk were very strong in November 2008. Clearly there is a lag and the current market will no doubt show lower production levels in the months ahead. Still, this is very bearish news to the market. For November 2008 American cheese production grew 4.9 percent, butter grew 2.2 percent, nonfat dry milk grew 34.8 percent, skim milk powders fell 16.3 percent, and whole milk powder grew 62.8 percent. Clearly the market was switching from exporting powder to sending it to the CCC.

## Market Outlook

Two things are evident from the current market. First, there is going to be significant reductions in cow numbers as early as the first quarter due to the massive reduction in gross earnings for dairy producers. This will force a swift realignment of supply and demand. Second, once this adjustment occurs, the market by the third and fourth quarters will find itself short of milk. Add a little summer heat and look for the markets to react the other way and for market prices to suddenly boom. So, for dairy commodity buyers, lock in as much product as you can. For dairy producers, be very cautious to lock in milk prices, particularly for the second half of the year. Remember, we are at the bottom of a bad market. Focus more on feed prices.

Table 1. Implied Cheese Prices and Futures Prices for 2009

		NASS Prices/Futures Prices					
		Cheese	Butter	Nonfat	Dry Whey	Class III	Class IV
		\$/lb	\$/lb	\$/lb	\$/lb	\$/cwt	\$/cwt
2008							
Jan		1.9998	1.2301	1.5090	0.3992	19.32	16.29
Feb		1.8403	1.2044	1.3331	0.2736	17.03	14.67
Mar		1.9575	1.2539	1.2512	0.2435	18.00	14.17
Apr		1.8164	1.3492	1.2506	0.2560	16.76	14.56
May		1.9525	1.4170	1.2985	0.2700	18.18	15.26
Jun		2.1609	1.4669	1.3508	0.2758	20.24	15.92
Jul		1.9585	1.5180	1.4053	0.2642	18.25	16.60
Aug		1.8699	1.5713	1.3840	0.2470	17.32	16.64
Sep		1.7773	1.6365	1.2131	0.2183	16.28	15.45
Oct		1.9065	1.6997	0.9987	0.1945	17.06	13.62
Nov		1.7508	1.6356	0.8701	0.1895	15.51	12.24
Dec		1.7542	1.2448	0.8425	0.1730	15.28	10.35
Annual		<b>1.8954</b>	<b>1.4356</b>	<b>1.2256</b>	<b>0.2504</b>	<b>17.44</b>	<b>14.65</b>
2009							
Jan		1.3186	1.1145	0.8590	0.1600	10.95	9.94
Feb		1.2033	1.1163	0.8675	0.1550	9.81	10.02
Mar		1.2266	1.1175	0.8750	0.1575	10.05	10.09
Apr		1.2809	1.1825	0.8750	0.1403	10.50	10.37
May		1.3029	1.2100	0.9175	0.1550	10.81	10.85
Jun		1.3808	1.2325	0.9100	0.1600	11.60	10.88
Jul		1.4166	1.2400	0.9175	0.1775	12.05	10.97
Aug		1.5000	1.2725	0.9200	0.1880	12.93	11.13
Sep		1.5397	1.3125	0.9500	0.1950	13.37	11.56
Oct		1.5370	1.3300	0.9950	0.2203	13.50	12.02
Nov		1.5443	1.3300	0.9950	0.2203	13.57	12.02
Dec		1.5329	1.3425	0.9975	0.2175	13.45	12.10
Annual		<b>1.3986</b>	<b>1.2334</b>	<b>0.9233</b>	<b>0.1789</b>	<b>11.88</b>	<b>11.00</b>
Annual change		-0.50	-0.20	-0.30	-0.07	-5.55	-3.65
% change		-26.2	-14.1	-24.7	-28.6	-31.9	-24.9

Forecast January - December 2009.

Uses futures prices as of January 8, 2009.