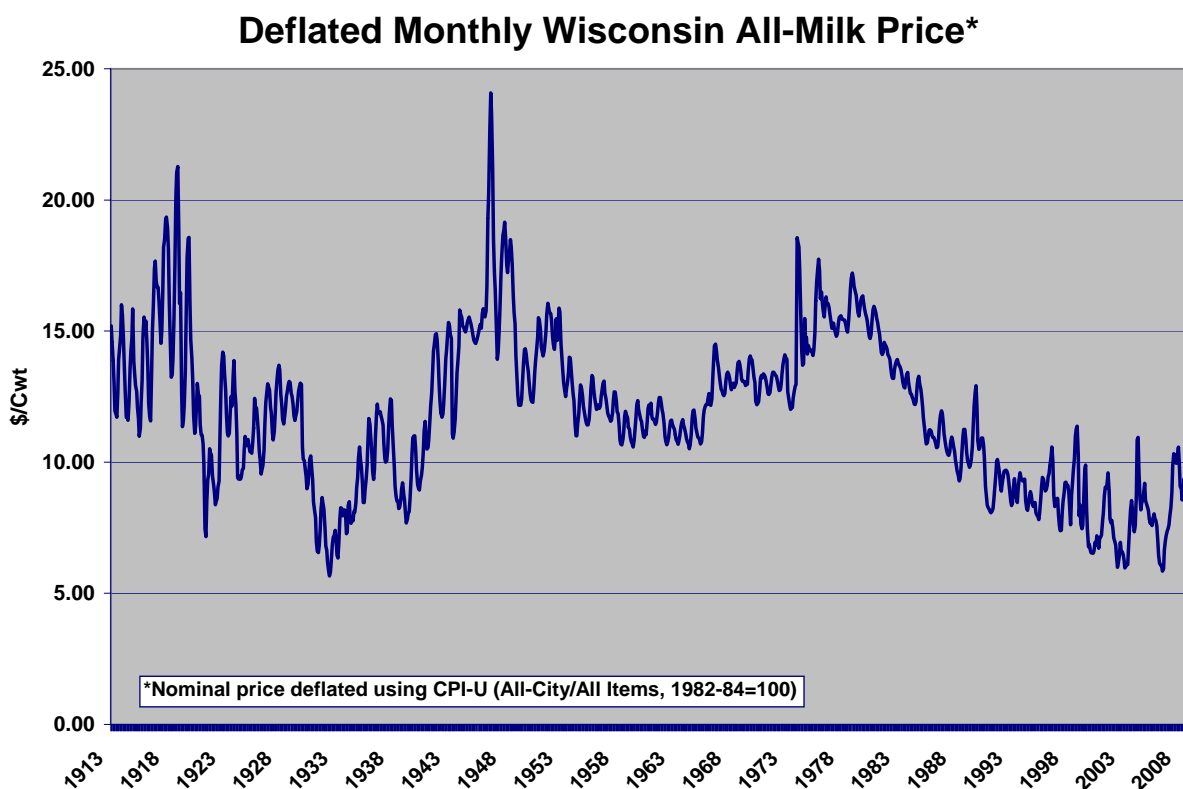


## Current Dairy Situation FAQs<sup>1</sup>

### *How bad is the current price-cost squeeze facing dairy farmers?*

The first 6 months of 2009 were perhaps the worst that U.S. dairy farmers have experienced for at least several generations. On the price side of the profitability ledger, the Wisconsin All-Milk price averaged just over \$12/hundredweight. In nominal prices, this is the lowest first-half average since 2003. Real Wisconsin All-Milk prices (deflated using the CPI-U all city, all item average) for January through June were, in each month, the lowest recorded since the CPI was first published in 1913 (see graph below).



On the cost side of the ledger, prices for purchased feeds have been close to record high. In 2003, the last time nominal milk prices were below current levels, Wisconsin corn prices averaged about \$2.35/bushel during the first six months of year. So far in 2009, Wisconsin cash corn prices have been between \$3 and \$4. During the first half of 2003, soybean meal prices were around \$185/ton. Prices in 2009 (Decatur) have ranged from \$275 to \$450.

The upshot of abysmal milk prices and high feed costs is major cash flow deficits and related financial stress. USDA/Economic Research Service (ERS) cost of production estimates for the

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first six months of 2009 indicate the severity of the problem.<sup>2</sup> For Wisconsin, ERS estimates that January-June returns over cash costs of production averaged negative \$2.81 per hundredweight. Using rough Wisconsin current averages for milk per cow (20,000 pounds annually) and herd size (95 cows), this represents a cash flow deficit of \$47 per cow per month and a monthly loss of about \$4,500 per herd.<sup>3</sup> Despite slightly lower milk prices, return over cash costs for the first six months of 2003 (bad year) averaged \$0.68/hundredweight, \$3.49 higher than 2009 (much worse year). And for the first 6 months of 2008 (great year), returns over cash costs averaged \$3.86/hundredweight.

Wisconsin dairy farms are showing large, painful losses, but the situation even worse in some Western states, where more of the feed supply is purchased rather than home-grown. According to ERS, California dairies have not been able to cover even feed costs in 2009. For the first 6 months, returns over feed costs averaged negative \$2.07/hundredweight. And returns over all cash costs averaged negative \$6.52/hundredweight. Not only does California show higher feed costs than Wisconsin, but also a much lower milk price.

### *How did we get into this mess?*

The succinct explanation is: Loss of export markets. Until 2004, U.S. dairy exports were small, usually representing less than 5 percent of total U.S. milk production. Exports in 2004 jumped to 7.5 percent of production (measured by total milk solids), and increased steadily to nearly 11 percent in 2008. U.S. milk production increased at a slightly lower rate, tightening domestic markets and creating the milk price run-up in 2007 and 2008.

The global economic crisis that began in the fall of 2008 shrunk demand for dairy products world-wide and also dried up credit to finance imports. World prices for dairy products crashed—butter, nonfat dry milk, and cheese prices dropped by at least half between late summer and the end of 2008. Even at these bargain basement prices, buyers were hard to find and U.S. exports (with the exception of whey) fell off sharply.

In the meantime, the U.S. milk production engine was geared up to send 11 percent of its milk supply overseas. Some products previously destined for export (cheese and butter) began to back up on domestic markets and milk previously used to produce milk powders for export was increasingly diverted to other dairy products, especially cheese.

The U.S. Dairy Export Council (USDEC) estimates that 2009 U.S. dairy exports through April were 8 percent of milk solids production. If this percentage holds for the rest of the year, the supply of milk that needs to clear domestic markets because of lost exports will be 5.7 billion pounds larger than 2008. Stated differently, some combination of supply decreases and demand increases totaling 5.7 billion pounds will be necessary to balance supply and demand.

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<sup>2</sup> ERS cost of production estimates are derived synthetically and do not represent actual experience.

<sup>3</sup> Wisconsin milk per cow was 19,546 pounds in 2008 and milk per cow in 2009 is running about 2 percent over last year. Wisconsin cow numbers for July were 1,257,000 and the number of dairy farms licensed to sell milk on July 1, 2009, was 13,110. Note that these losses may be conservative. Losses exceeding \$100 per cow per month have been noted in the popular press.

### *How do we get out of this mess?*

The three principal avenues to higher milk prices are market forces, government market intervention, and private market intervention.

Market forces are in play affecting both supply and demand. Supply reductions are in the form of financially-induced dairy farm exits and less dramatic forms of supply reduction like altering rations to cut feed costs and milk yield per cow. There is anecdotal evidence that dairy farm foreclosures are on the rise, but foreclosures do not usually eliminate cows from the national herd—most move to other herds. Wisconsin licensed dairy cow herds fell by 338 between January 1 and July 1, 2009. This compares to an average January to July loss of 292 herds over the previous five years—very little difference. In the bad year of 2003, the January-July loss was 416 herds.

U.S. milk production per cow in June was up 0.6 percent over 2008 compared to trend increases of about 2 percent. California, Arizona and Idaho recorded less milk per cow than June 2008, indicating significant changes in feeding. Wisconsin milk per cow was up 2.4 percent, perhaps surprising since purchased feed is reported to be down. High quality first- and second-crop forage harvests may explain this anomaly.

Lower prices for milk and dairy products should boost consumption. Overall, dairy product prices are lower. In June, the CPI for dairy products (Bureau of Labor Statistics) was down 7.1 percent from last year. Unfortunately, sorting out how much domestic consumption has changed in response to generally lower prices is difficult because reported commercial disappearance includes exports. However, fluid milk (negligible exports) sales January through May increased 0.8 percent over last year compared to a 0.7 percent decrease recorded for the same period in 2008. Fluid milk consumers are positively responding to fluid milk prices that are down more than 15 percent from last year. Butter prices are also lower, but then so is commercial use, which was augmented significantly by exports in 2008. The CPI for cheese in June was down 6 percent from 2008 and commercial use of American cheese for the first 5 months of 2009 was up 4.6 percent. Commercial disappearance of other cheese (mainly Mozzarella and other Italian varieties) was up only 0.7 percent, probably reflecting the impact of less away-from-home consumption of pizza.

So far, the only government intervention in dairy markets has been through the existing MILC program, which has yielded payments on eligible producer milk marketings as high as \$2 per hundredweight, and a three-month (August-October) augmentation of Commodity Credit Corporation (CCC) purchase prices for cheddar cheese and nonfat dry milk. The higher purchase prices had an immediate effect on Chicago Mercantile Exchange (CME) cheddar cheese prices, lifting them to within 3-4 cents per pound of the new government levels. The CME cheese prices serve as a base for pricing most of the cheese sold in the United States, so the effect is widespread. Since it costs an estimated 5 cents per pound more to sell cheese to the CCC than to commercial buyers, the elevated CCC prices may not induce significant government cheese purchases. Some additional nonfat dry milk may be purchased on top of already large CCC sales, but added government costs are expected to be small.

Inserting the temporarily-elevated purchase prices for cheese and nonfat dry milk (along with current market prices for butter and whey) into federal order formulas yields a Class III price of \$11.71/hundredweight and a Class IV price of \$10.95. July 2009 prices were \$9.97 for Class III and \$10.15 for Class IV.

Numerous other forms of government market intervention have been proposed, many involving mandatory supply management through market access payments or two-tiered pricing. Most of these controversial plans would require Congressional approval, which is not likely to be granted, at least in time to contribute materially to price and profit recovery.

Finally, private market intervention has been in the form of the Cooperatives Working Together (CWT) program operated by the National Milk Producers' Federation. CWT's herd retirement bid solicitation round earlier this year reduced the U.S. dairy herd (cows and heifers) by more than 100,000 cows (about 1.1 percent). A second round was initiated immediately following the completion of the first round that will remove 87,000 dairy animals from 294 herds. Successful CWT bidders must slaughter enrolled cows and heifers.

### ***Why is recovery taking so long?***

As noted earlier, the loss of export sales compared to 2008 amounts to 5.7 billion pounds of milk. Through June of this year, U.S. milk production was down by only 195 million pounds. The slow supply response has been attributed by some to MILC and CWT. The argument is that MILC payments have kept some dairy farmers in business. This is possible but seems unlikely since, even though large by historical standards, MILC payments have not been large enough to offset cash flow deficits. Some believe CWT has delayed exit by encouraging some dairy farmers to wait to be paid to exit. While this argument is plausible, waiting for a highly uncertain outcome would be costly given the magnitude of losses and problematic for heavily-leveraged operations.

More likely, the slow adjustment in milk supply is related to farmers' ability to absorb losses, either through cash reserves or borrowing capacity. Two good years suggest cash reserves were substantial going into 2009. And those farmers who used profits from 2007 and 2008 to replace obsolete and depreciated assets have additional collateral to support operating loans. Dairy farm foreclosures are probably increasing, but foreclosures redistribute rather than eliminate cows. Moreover, large losses associated with calling deep underwater loans may be making lenders hesitant to exercise that option in some cases.

Demand for dairy products is increasing, but the income effect of the ongoing recession has dampened consumers' response to generally lower prices. And while prices for dairy products are lower overall, there are notable exceptions. The Bureau of Labor Statistics reported national average June retail prices for natural cheddar cheese 18 cents per pound *higher* than June 2008. The CME block cheddar cheese price during June 2009 averaged 90 cents per pound *lower* than June 2008. Retail cheese prices that more reasonably reflected wholesale prices would move a lot more cheese and accelerate milk price recovery.

### ***When will recovery occur?***

Many crystal balls have proven dysfunctional in addressing this question. Early this year, many analysts expected Class III prices \$14-15 per hundredweight by August, basing their forecast on a fairly rapid supply adjustment, stronger world markets, and a more robust domestic demand response to low prices. As late as March, the August 2009 Class III futures price was trading above \$15. Analysts (including this one) and traders were wrong.

Recovery has been painfully slow in coming, but there are more encouraging signs. July saw the first down-tick in monthly milk production compared to 2008. Milk cow numbers have been falling every month since December 2008, and the decrease will likely accelerate as the year progresses with second-round CWT herd terminations and more involuntary exits. Demand growth is sluggish but positive. Markets are beginning to tighten.

The temporary increases in support prices for cheese and nonfat dry milk will help elevate milk prices in the short run. Legislation passed by the U.S. Senate this month paves the way for an augmentation and possible extension of the increases when they expire at the end of October. Other legislative and administrative proposals are being considered that would lend support to milk prices or expand credit to dairy farmers to help them ride out this storm.

There is light at the end of the tunnel. The length of the tunnel remains somewhat in doubt.