
Dairy Policy Brief #1: Price Volatility in Dairy Markets

What is the history behind milk price movements?

Month to month changes in milk prices have increased dramatically in recent years. Concern over volatility includes not only the month to month price changes, but also the wider gaps between price peaks and troughs. In the 1970s, the largest monthly increase in all milk prices was \$0.68/cwt in September, 1973. The largest decline was \$-0.58/cwt in May, 1974. The Nixon price freeze of that decade, a short-term governmental policy to combat inflation, influenced these results. Over the decade, the highest monthly milk price was \$12.90/cwt while the low was \$5.37/cwt, a difference of \$7.53. In the 1980s, the largest monthly increase in milk prices of \$0.80/cwt occurred in September, October and November, 1989 while the largest monthly decline of \$-0.50/cwt occurred in March, 1989. The high monthly milk price during the 1980s was \$16.00/cwt while the low was \$11.30/cwt, a difference of \$4.70.

Monthly price changes became much larger in the 1990s. The largest monthly increase of \$1.30/cwt occurred in September, 1998 while the largest monthly decline of \$-2.60/cwt occurred in April, 1999. The highest monthly all milk price of the 1990s was \$18.10/cwt while the lowest was \$11.30/cwt, a difference of \$6.80. Relatively sharp movements in milk prices continued in the decade of the 2000s, with the largest monthly increase in the all milk price of \$2.60/cwt occurring in April 2004 and the largest monthly decline of \$-2.20/cwt occurring in January, 2009. The highest monthly price in the decade of the 2000s of \$21.90/cwt occurred in November, 2007 and the lowest monthly price of \$11.00/cwt occurred in May-June, 2003, a difference of \$10.90.

What are the key factors contributing to milk price volatility?

- ***Domestic dairy policy.*** During the 1970s and 1980s the price support program had a large mitigating effect on milk price volatility. High support levels resulted in market prices for milk being close to support prices for most of the period. In addition, the government accumulated dairy products that could be released into the market to dampen prices when they rose far enough above the support level. As the level of dairy price supports was systematically cut in the late 1980s and early 1990s, government inventories of dairy products were reduced and eventually eliminated. Lower support prices along with the absence of buffer stocks contributed to much of the increased volatility experienced in the late 1990s. Another policy-related factor likely underlying increasing milk price volatility is the lag in transmitting dairy product price changes to farm-level milk price changes because of the federal milk market order system minimum pricing provisions.
- ***U.S. participation as a commercial exporter of dairy products.*** The ability for the U.S. to commercially export bulk dairy products in 2007 and 2008 played a crucial role in raising milk prices during this time. The loss of commercial exports in late 2008 and 2009 played an equally important role in lowering milk prices. The addition of new markets is thought to reduce risk and should therefore help decrease volatility. However, that does not happen when the ability to access these new markets is not consistent.
- ***Increased concentration in milk production.*** As dairy herds have grown in size and more capital is invested in specialized dairy facilities, the ability to reduce milk production during times of low prices declines. The need to service debt means that idling these facilities is not usually an option; they usually remain in operation until their owner exits the business. Even then, the facilities often change owners and stay in milk production since few alternatives exist. The resulting effect of relatively more milk production than is justified by low milk prices acts to prolong and intensify periods of low prices, a factor in increased volatility.