

Imperfect Competition and Dairy Markets

**Farm Foundation Workshop on
The *Economics of Structural Change and Competition in
the Food System***

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**Daniel A. Sumner, Director University of California
Agricultural Issues Center and Frank H. Buck, Jr. Professor
of Agricultural and Resource Economics, UC Davis**

Outline and Preview

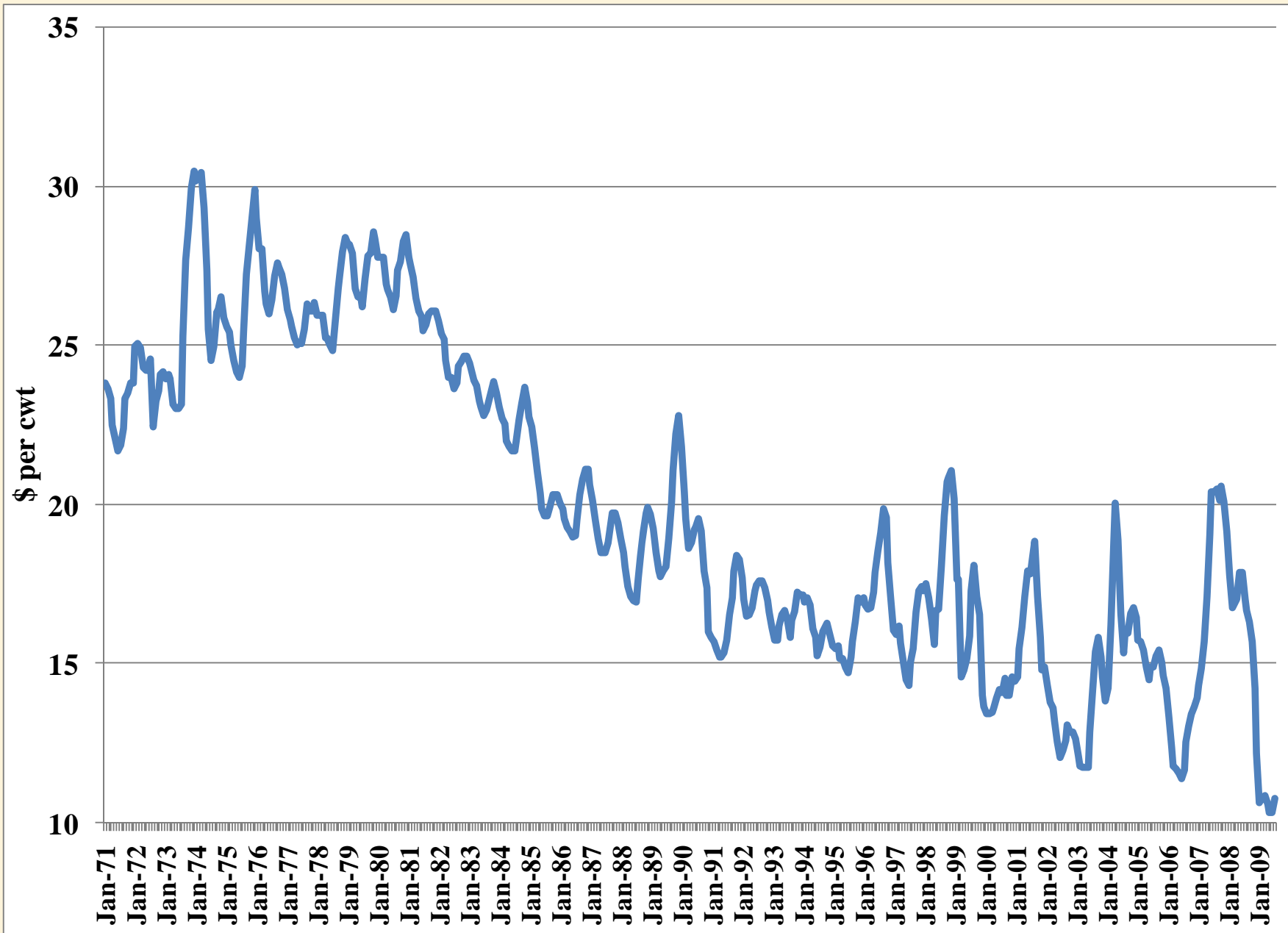
Dairy markets have features that make measurement and implications of market power inordinately complex (and interesting)

- **More than for many other agricultural markets direct government programs and regulations are central to raw milk and milk product prices**
- **Geographic delineations of dairy markets are not straightforward and differ by product—from raw milk and beverage products to dry milk powder**
- **Cooperatives are central to raw milk marketing and processing of several products, and the nature of coops has changed over time**
 - **Many complex relationships characterize links between proprietary buyers and coops.**

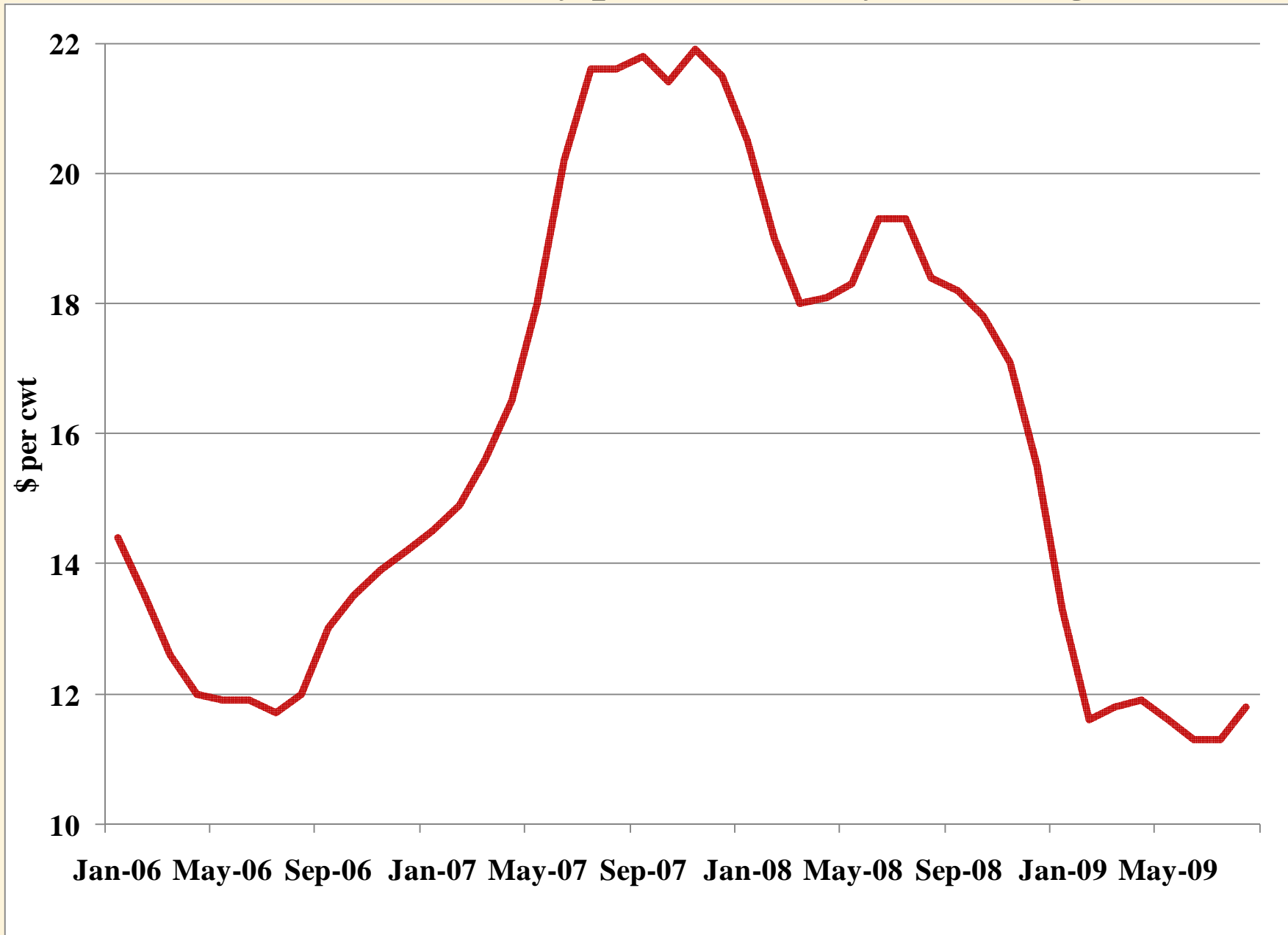
Some of the current **special policy interest in measurement and implications of imperfectly competitive behavior in dairy markets probably derives from the recent time path of milk prices.**

Let us review facts about the price path to put this in context.

US All milk: monthly real prices, Jan 1971 - Aug 2009



All milk: nominal monthly price, January 2006-August 2009



Low prices often stimulate calls for some form of supply restraint

- **In agriculture, this classic response, has often been organized and managed through government “supply management” programs.**
- **One dairy industry response has been to use cooperative collective action to play this role supply management role.**
- **Coops Working Together (CWT): industry funded whole-herd cow slaughter program and export subsidy.**
 - **Periodic cow removal that gets funds from coops and pays farms to exit the industry and send cows for slaughter**
 - **Removed 100K cows in spring of 2009 and another 90K cows this fall. Of course, some cows would have exited anyway and some remained in production waiting for the subsidy**
 - **Problems: Milk supply reduction (and export subsidy) has only small contributions to higher short run market prices and non-contributors also benefit**

A more traditional supply management or government run cartel approach

- **Marketing quotas to manage supply, keep out new farms and limit allowed sales when prices decline**
 - **Suggested quota would not be tradable so no (EU or Canadian style) capital value built into the quota**
 - **No transfer of quota exacerbates the problem that benefits go to the old and inefficient and the industry becomes less dynamic**
 - **This program has limited appeal**

Milk marketing orders allow the use of power in the political market to raise farm revenues

- **By price discrimination the MMOs raise milk revenue even when raw milk production is not subject to collective supply control**
- **Evidence from Ahn and Sumner (AJAE, 2009) suggests that producers have used the MMO system to raise revenue, but resulting prices are much less than full monopoly power, which would yield Class 1 differential far higher than current legislation and regulation.**
- **The relative welfare weights of producers is higher than buyers and consumers, but in the range of only a few % higher overall.**

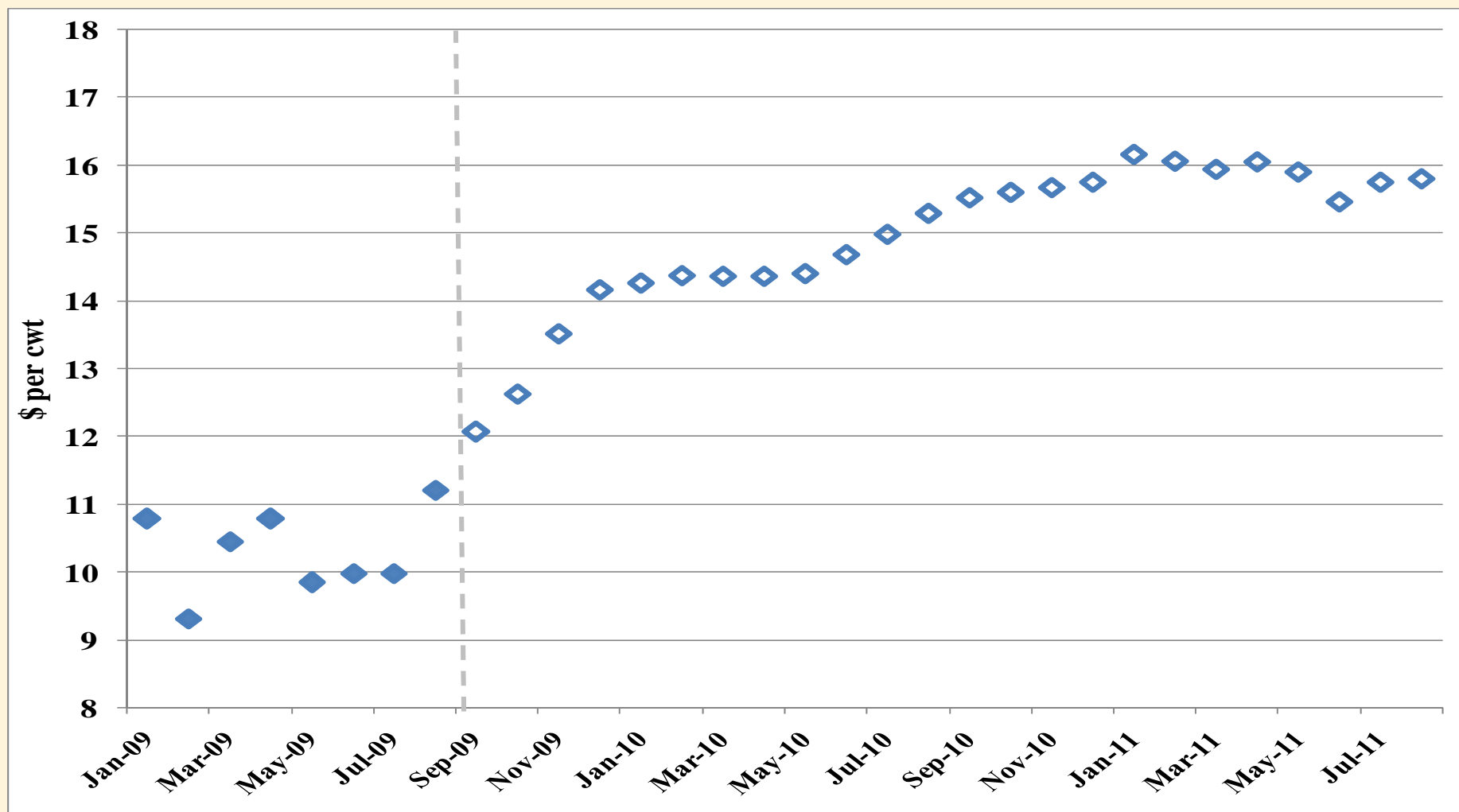
Another often discussed policy remedy: Use legal remedies to sanction potentially non-competitive behavior that may lower farm prices

- **If traditional government programs and cooperative cartel activity does not solve low price problems look to buyer market power as a source of the problem**
- **This idea does not seem to fit the observed price path that has stimulated concerns, buyers had the same market power last year too when prices were high! And prices have risen substantially this fall.**
- **(Of course buyer market power can suppress prices even when they are higher than usual.)**

But has the short-term pressure passed?

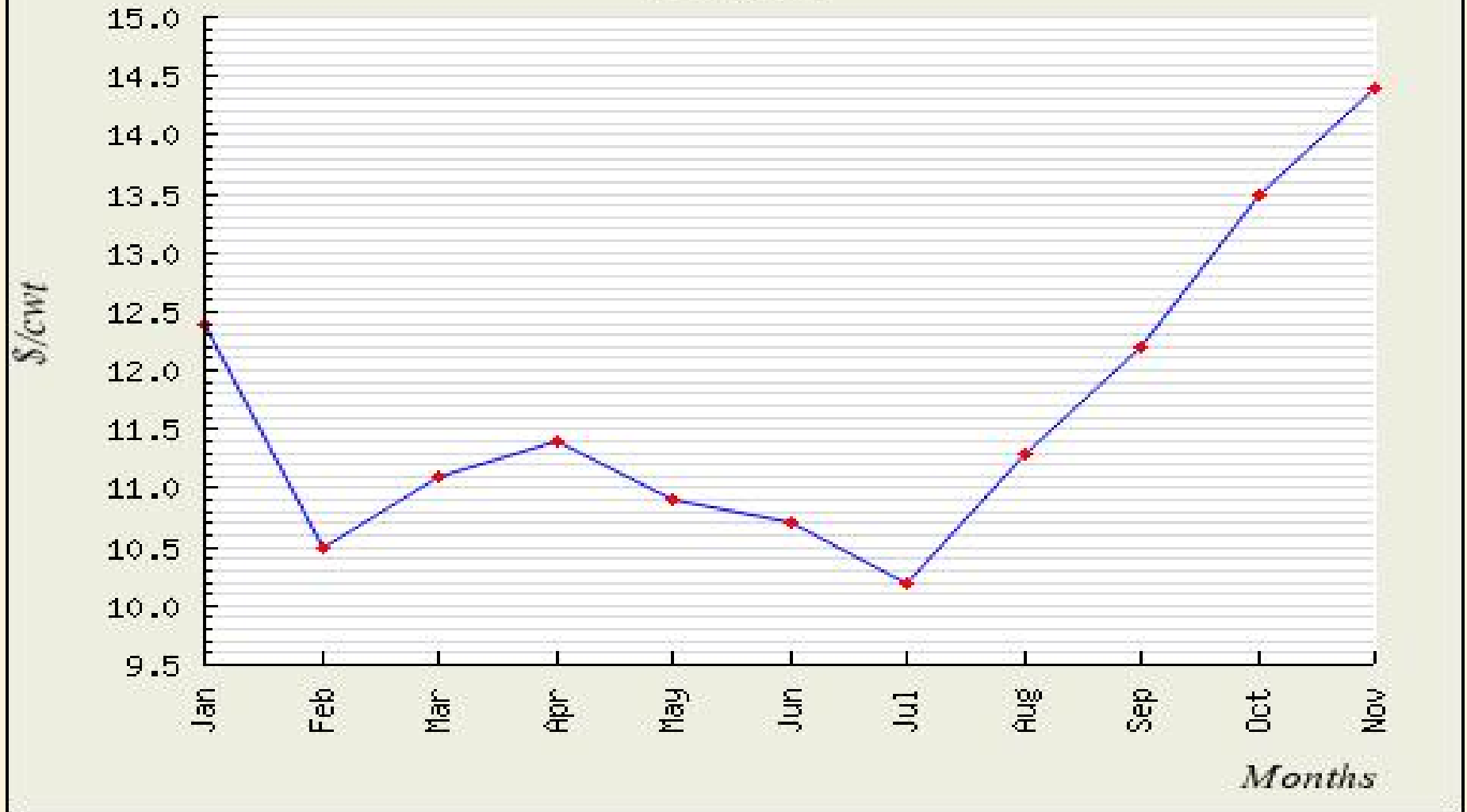
Actual class III milk prices and futures prices

The latest short run crisis on the way to resolving itself. Seems likely that milk prices will rise high enough that profits will return. At least until next time!



Mfg Milk Price (2009)

Area : US



From Brian Gould's website at Wisconsin.

Measuring market power is more than usually complex

- **The MMO system stimulates price differences across the country and transports costs would cause differences anyway.**
- **Raw milk and beverage milk have high transport costs per unit of value and limited shelf life, so markets tend to be more local and regional.**
- **That means local and regional market power evidence can be important. The definition of the market for price analysis depends on the specific product, time horizon and empirical question.**
- **Prevalence of over order premiums (especially for beverage uses) suggests coop market power, unless some service, quality or other efficiency rationale is powerful enough.**
 - **The Capper-Volstead “undue price enhancement” is vague enough to limit legal action**
- **Establishing buyer market power also offers challenges**

Research agenda questions

- **The effects of MMO rules on exercise of market power**
 - Does MMO variation and OOP variation help provide evidence to measure oligopsony behavior?
- **Is coop consolidation a response to consolidation and buyer market power?**
 - Do coop-buyer relationships provide substantial efficiencies?
 - Do these relationships allow offsetting bargaining power or information collection and do they facilitate competition among coops for offering better prices and services to producers ?