

NCCC-134

APPLIED COMMODITY PRICE ANALYSIS, FORECASTING AND MARKET RISK MANAGEMENT

Observations on Cash Settlement

by

Paul E. Peterson

Suggested citation format:

Peterson, P. E. 1995. "Observations on Cash Settlement." Proceedings of the NCR-134 Conference on Applied Commodity Price Analysis, Forecasting, and Market Risk Management. Chicago, IL.
[<http://www.farmdoc.uiuc.edu/nccc134>].

OBSERVATIONS ON CASH SETTLEMENT*

PAUL E. PETERSON**

Cash settlement is frequently -- and often incorrectly -- promoted as a cure for any problem that occurs with a physical delivery contract. In practice, cash settlement is a complicated process, and developing a workable cash settlement contract is a difficult task.

The purpose of either physical delivery or cash settlement is to force the convergence of cash and futures prices, and thereby ensure a reliable basis for hedgers. Physical delivery forces convergence by threat: delivering shorts, who may not have the commodity, are allowed to deliver it to receiving longs, who may not want it. Cash settlement forces convergence by decree: on expiration day, futures prices are set equal to some cash settlement index.

Before there can be a viable cash settled contract, there must be a viable cash settlement index. At a bare minimum it must fully and accurately reflect the cash market price, reflect that price in a timely manner, and be trusted by all market participants.

This last point is vitally important: if people don't trust the index, they won't use the contract. One way to increase user confidence in the index is to use some price series published by USDA or some other independent third party. However, this solution assumes a suitable price series already exists, which is seldom the case.

What happens if the cash settlement index doesn't fully and accurately reflect the cash market price and/or reflect that price in a timely manner? The result is a basis distortion, which creates serious problems for hedgers. With cash settlement there is no delivery process to drive cash and futures prices together, so it is absolutely essential for the cash settlement index to be well-behaved. A physical delivery problem is typically a one-time, random, isolated event which is fairly easy to correct. A cash settlement problem is typically more systemic in nature and therefore much more serious and difficult to solve.

Many cash settlement recommendations have been prompted by delivery problems caused by thinness in the underlying cash market. But if there isn't enough deliverable supply to allow the physical delivery process to work smoothly, why should one expect there to be a

* Excerpts from a luncheon presentation on April 25, 1995.

** The author is Senior Director of the Commodity Research Department, Chicago Mercantile Exchange, Chicago IL 60606.

sufficient volume of cash market transactions to create an acceptable cash settlement index? Under these conditions, a cash settlement index would have all the same problems found in the underlying cash market, and probably a few new ones, too.

In summary, the world has had literally centuries of experience with physical delivery, but barely a decade of experience with cash settlement. The profession is still near the bottom of the cash settlement learning curve, and today it lacks even a simple "theory of cash settlement" to guide research in this area. With so much basic work to be done, the research community should resist the temptation to blindly promote cash settlement, and instead focus its efforts on building the foundations necessary to conduct sound cash settlement research.