

The Development of Dairy Futures
Contracts:
Experiences and Implications for New
Contract Development

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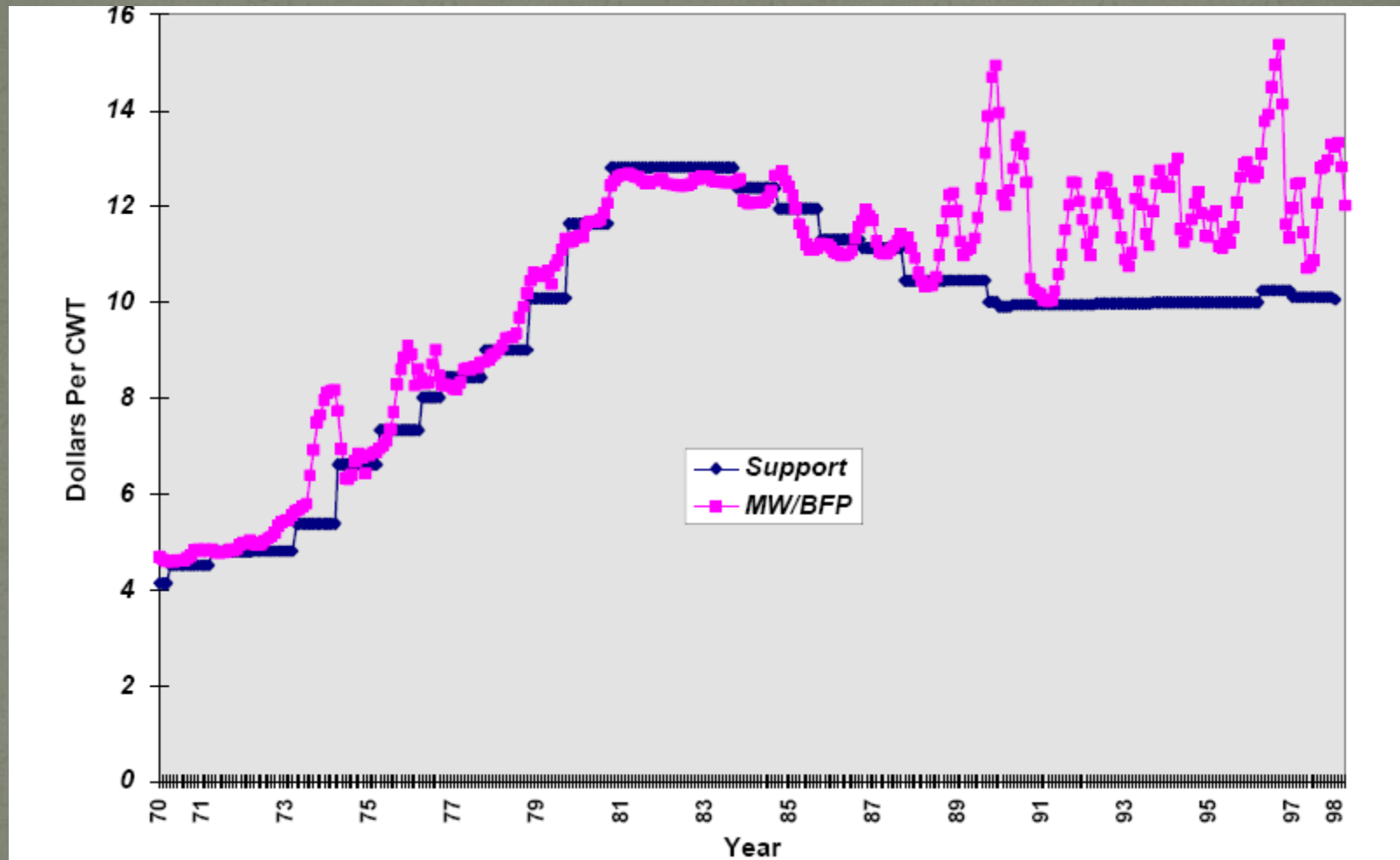
Dairy Futures History

- 1993 – Cheddar Cheese and Non-Fat Dry Milk Contracts – CSCE
- 1995 – Grade A Raw Milk– CSCE
- 1996 – Grade A Raw Milk– CME
- 1996 – Butter Contract – CSCE, CME
- 1997 – BFP Futures Contract for Milk – CSCE, CME
- 1997 – Cheddar Cheese Contract – CME
- 1998 – Dry Milk and Dry Whey Futures Contracts – CME
- 2000 – BFP Futures Contracts converted to Class III
- 2000 – Class IV Milk Futures Contract – CME
- 2000 – CSCE (NYBOT) terminates dairy futures trading

Purpose

- Developed in response to commercial interests related to hedging milk prices.
- Assumption was that a Cheddar Cheese contract would be the most appropriate because it would entice large commercials (Kraft), and still provide forward contract opportunities to dairy producers because of the high correlation between cheese and milk prices.

Milk Prices vs. Government Price Support

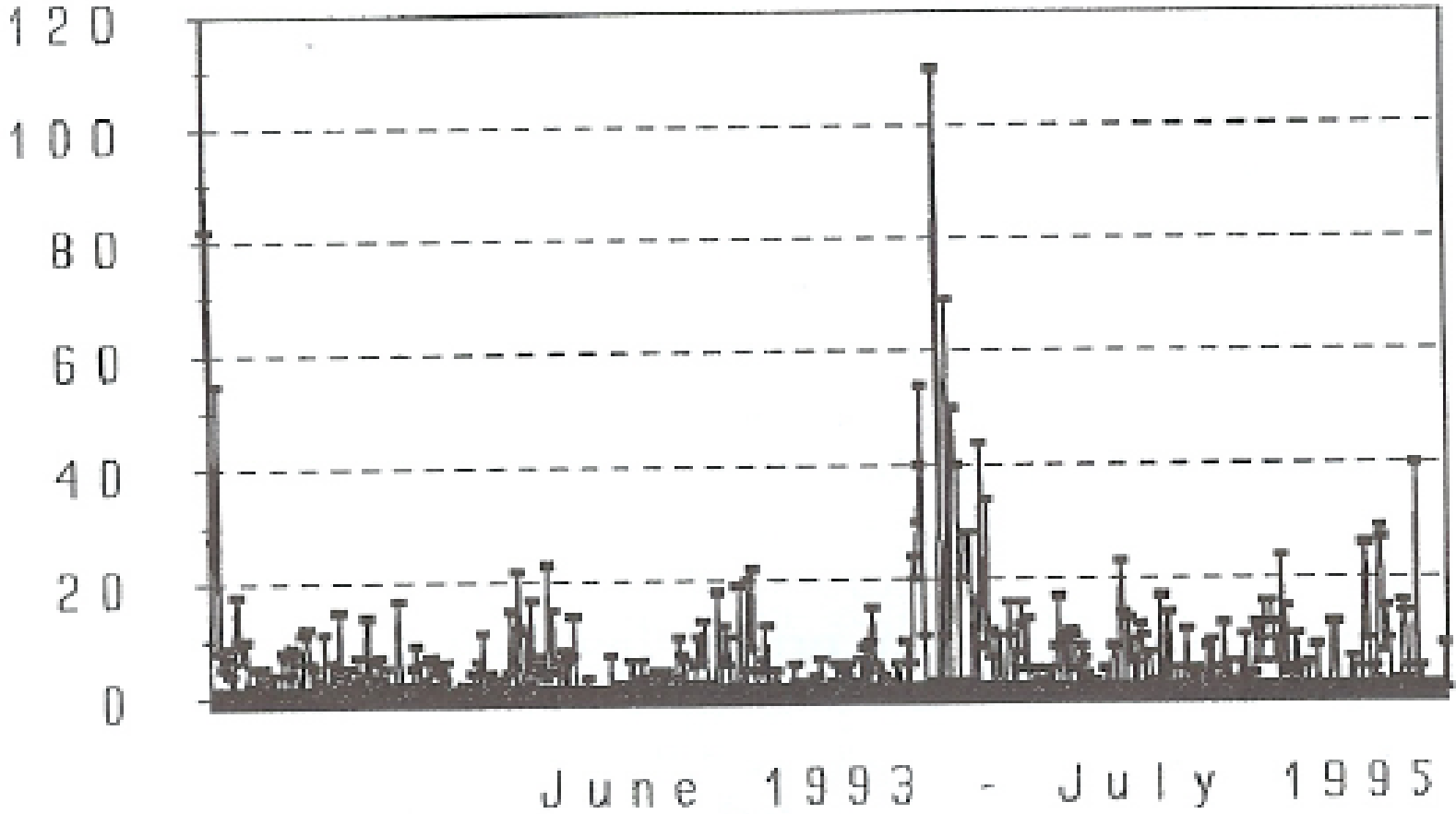


Source: Bob Cropp – Futures and Other Instruments to Manage Price Risk

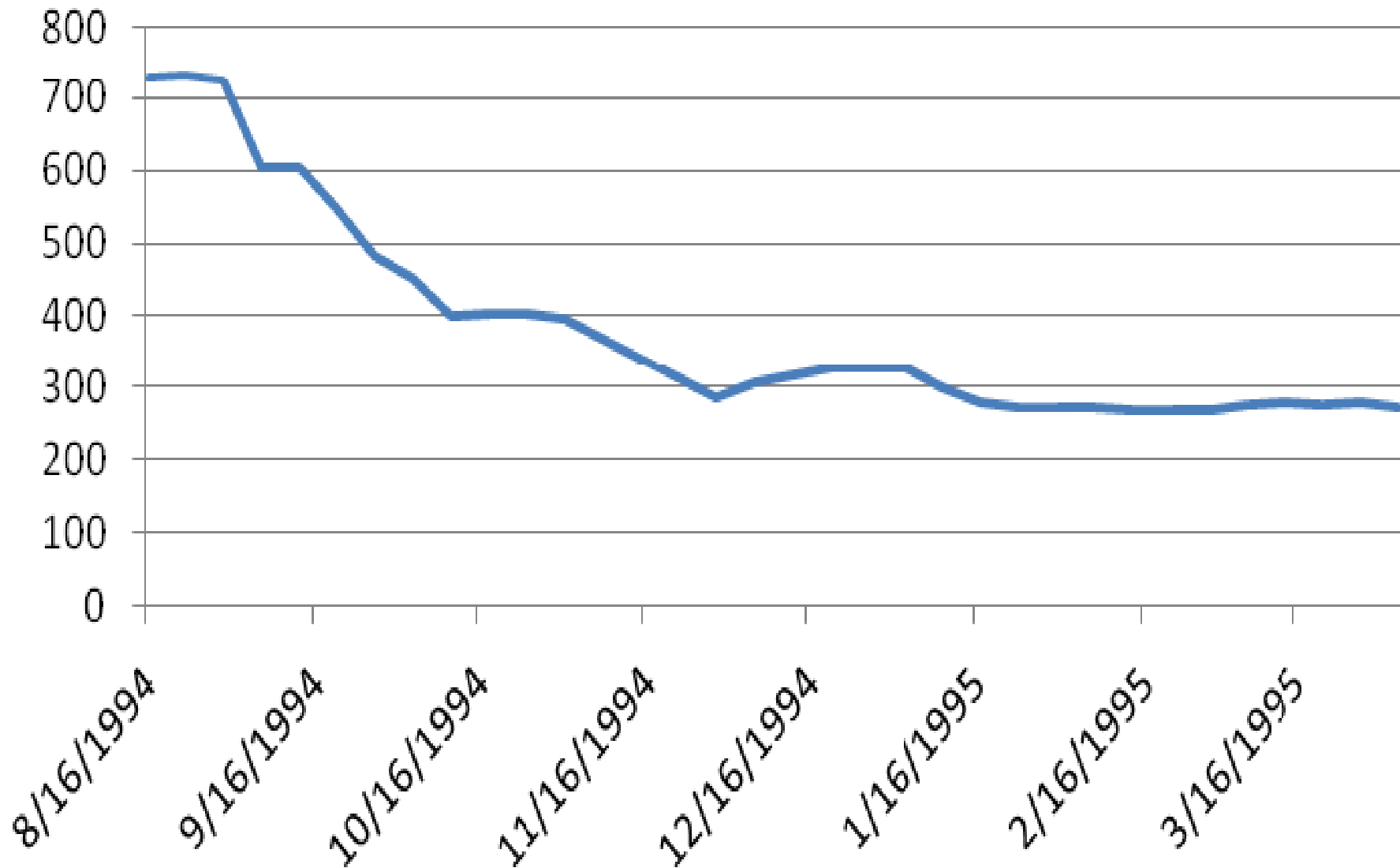
Unique Challenges

- Cash market with no price volatility experience.
- Dynamic public policy environment.
- Price manipulation accusations concerning large commercial's behavior in the cash market.
- Head to head competition by two different futures exchanges.

Daily Trading Volume – Cheddar Cheese Futures Contracts
CSCE



Cheddar Cheese Open Interest



Cash Market Challenges

Mueller et al. Cheese Pricing: A Study of the National Cheese Exchange - 1996

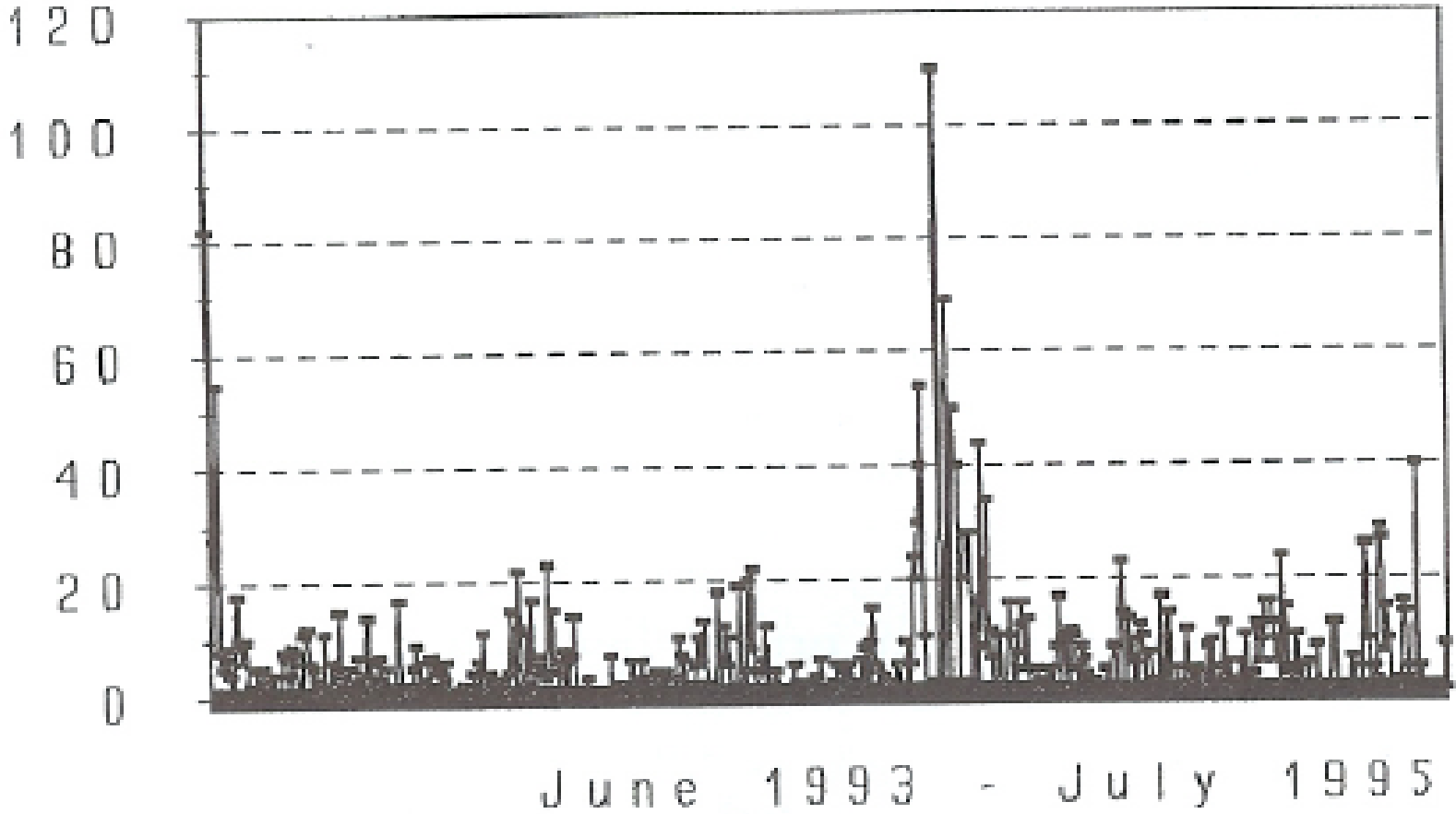
- Examined trading from 1980 – 1993
- Less than $\frac{1}{2}$ of 1 percent of all cheese produced was traded on the exchange, but 90 to 95 percent of all bulk cheese sold under long term contracts was directly priced of the Exchange price.
- Between 1988 and 1993, the market position of firms on the Exchange did not match their commercial interests.
- One company (Kraft) accounted for 74 percent of all sales on the Exchange.
- Concluded Kraft used the Exchange to lower cheese prices prior to buying on the larger cash market.

Fortenbery and Zapata

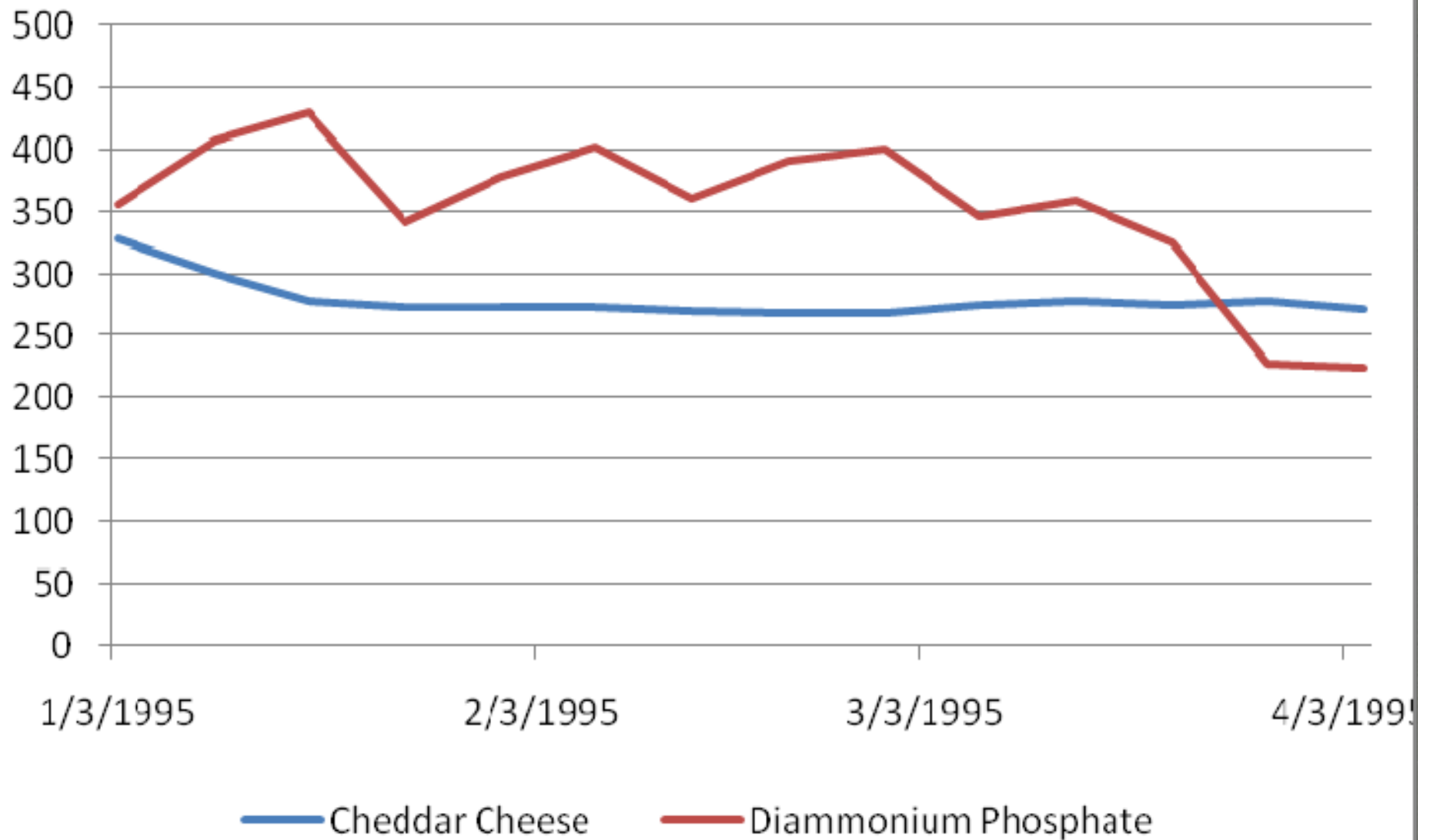
Journal of Futures Markets 1997

- There was no evidence of a stable relationship between cash and futures prices for cheddar cheese in the firsts two years of trading.
- This resulted in limited hedging opportunities, and explains the lack of commercial participation in the market.
- A serious issue related to the way cash prices were determined.
- Other “new” markets with similar volume were able to establish a predictable basis relationship.

Daily Trading Volume – Cheddar Cheese Futures Contracts
CSCE



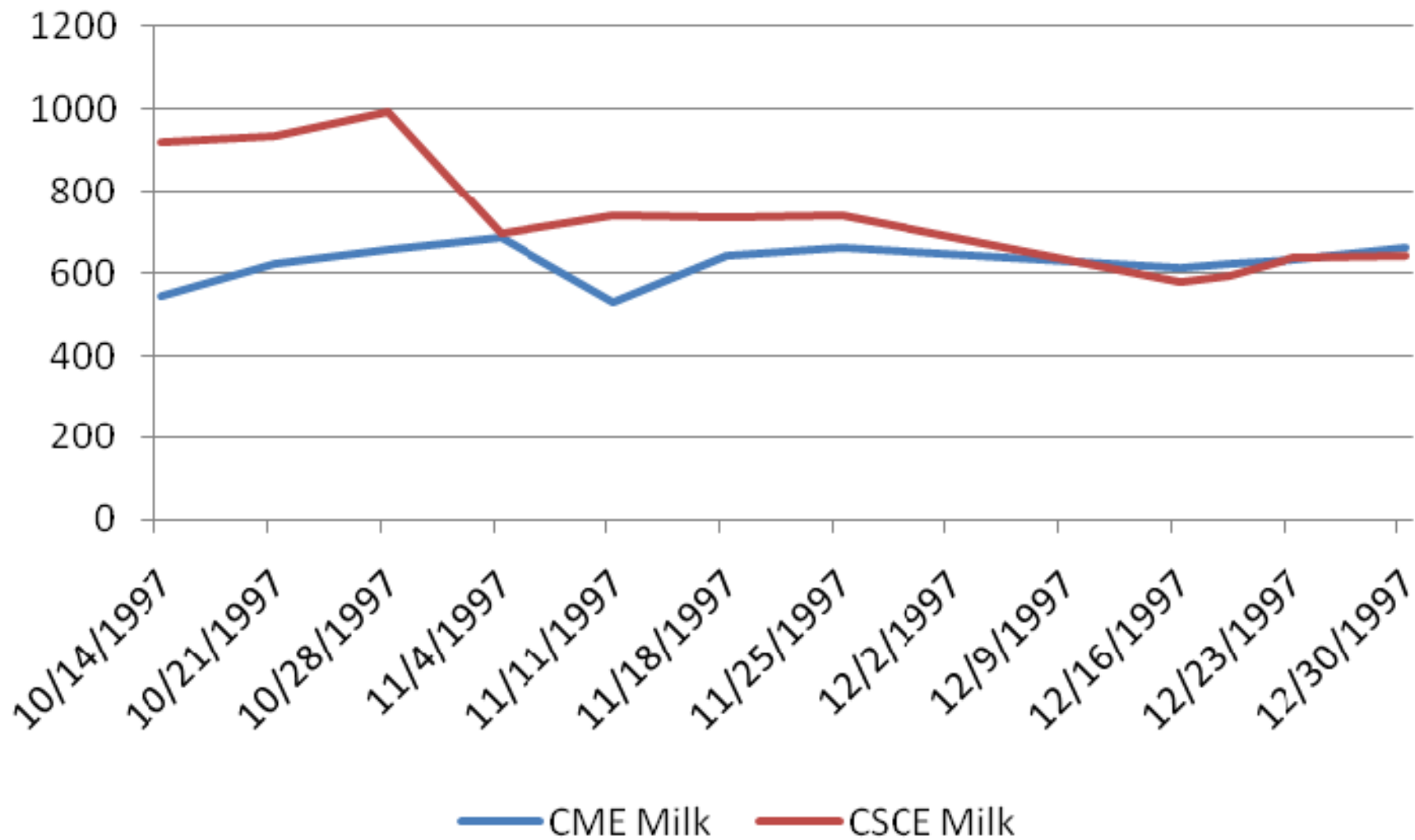
Open Interest



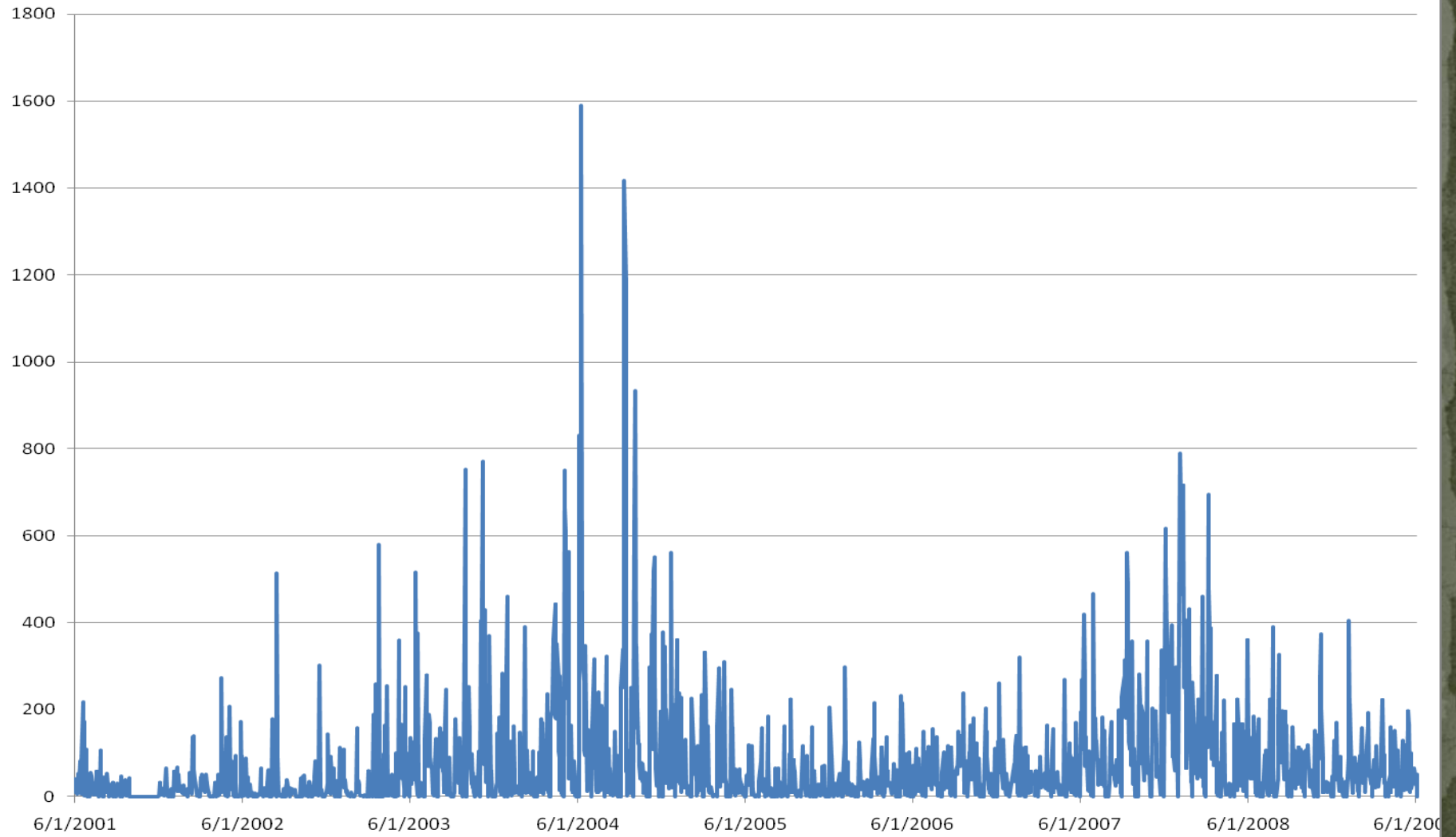
Addressing Liquidity Issues

- Market Maker Program
- Smaller Contract Size
- Commercial “sales”
- New Contract Design - Milk

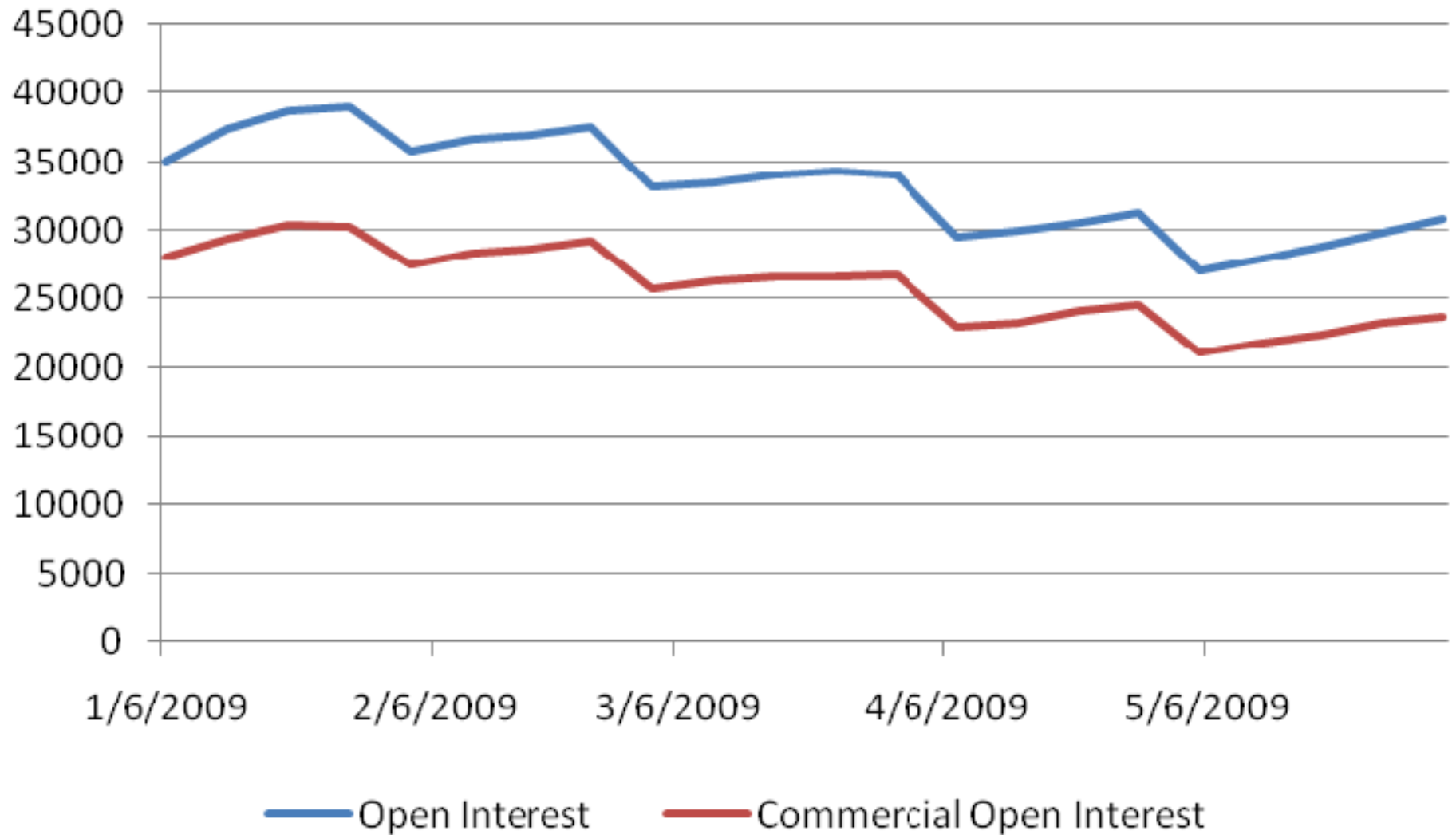
Open Interest



Volume in the Nearby Class III Milk Contract



Class III Milk - CME



Fortenbery, Cropp, and Zapata

Journal of Agribusiness - 1997

- Milk futures did develop a stable basis relationship early in their life.
- Simulated futures showed the milk contract would have been preferable to cheddar cheese in the earlier periods.
- Hedging performance was better in the Upper Midwest than California.

Conclusions

- Picking the “right” commodity to trade is critical.
- For new markets, education and analysis are critical to acceptance.
- Futures cannot solve cash market problems.
- Perceptions of cash price discovery are critical to acceptance of a futures market.