

Paper Electrons

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The Provocation to Me

- **Do we really need all of these financial trades and traders in the electricity market?**
- **What good do they really do?**

An Age Old Puzzler

- 1864 ban on futures trading in gold implemented by US Treasury Secretary Salmon Chase.
- 1879 California Constitution prohibited futures.
- 1893 votes in Congress to ban sales of grain and cotton where the seller did not own the goods – the so-called “wind wheat”.
- Options were banned throughout the nineteenth and most of the twentieth century under state anti-gambling laws.
- Futures, too, were often banned under state anti-gambling laws; but the courts often bowed to their being essential to commerce in grains and other agricultural commodities.
- A recommended read:
 - Populists, Plungers and Progressives: a Social History of Stock and Commodity Speculation, 1890-1936, by Cedric Cowing.

Still Current: Are “Prediction Markets” Gambling?

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Will anyone leave the Euro before the end of 2013?

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Democratic Party candidate to win the 2016 US Presidential Election

Event: Winner of the 2016 US Presidential Election (Party)

Lowest Ask

\$5.65

1 share

Buy shares

Highest Bid

\$5.50

73 shares

Sell shares



Republican Party candidate to win the 2016 US Presidential Election

Event: Winner of the 2016 US Presidential Election (Party)

Lowest Ask

\$4.59

2 shares

Buy shares

Highest Bid

\$4.24

1 share

Sell shares



USA and/or Israel to execute an overt Air Strike against Iran before midnight ET 31 Dec 2013

Event: US/Israeli Overt Air Strike against Iran

Lowest Ask

\$3.00

30 shares

Buy shares

Highest Bid

\$1.81

5 shares

Sell shares

Exchange news

- New Market: Winner of the Eastleigh by-election (28 Feb 2013)
- New Markets: The next Pope of the Catholic Church
- New Market: Who will be the next President of Iran?
- \$4.99 p.m. for Effective "Free" Active Trading

See more Intrade News

Forum posts

- Movie critical ratings
- Senate Election primaries in Massachusetts
- Winner of next presidential election in Venezuela
- Civil unrest in Venezuela (possible coup d'etat)



Still Current: Futures on Movie Revenues?

- In 2010 the Commodities Futures Trading Commission voted 3-2 to allow them...
- But then Congress passed legislation which banned them.
- In a statement following the vote, Bob Pisano, interim head of the Motion Pictures Association of America (MPAA), which has been vehemently opposed to the markets all along, said, “Speaking on behalf of a coalition that includes the Directors Guild of America (DGA), the Independent Film and Television Alliance (IFTA), the International Alliance of Theatrical Stage Employees (IATSE), the Motion Picture Association of America (MPAA) and its member companies, and the National Association of Theater Owners (NATO), I want to thank Congress for approving this measure.”

Shall we demand evidence?

- **No “suppose” or “what if” stories. That’s not evidence.**
- **No gnudeflection before the god of perfect, self-regulating financial markets. That’s not evidence.**
- **On the other hand, expecting evidence is not the same as requiring a CPSC for every single financial product.**
 - For example, we can affirmatively demonstrate how futures prices guide natural gas and oil storage decisions.

My Provocation to You

- **What could you possibly have been thinking?**
- **No other commodity derivatives markets are organized this way!**
- **Yes, electricity is special. But, are we drawing the right conclusions from that fact?**

3 organizing questions

- **1. What are the central economic functions of futures markets in electricity?**
- **2. How might financial trading pervert or undermine electricity markets?**
- **3. What sort of financial markets do we want in our electricity market design?**

1. What are the central economic functions of futures markets?

- **It's about rigidities in the production system, and the role of storage as a remedy.**
 - Transportation, too.
 - Another recommendation for a good read: *The Economic Function of Futures Markets*, by Jeffrey Williams.
- **Solving the riddle of high turnover: trade in futures permits the low cost lending and borrowing of stored goods across many different processors without the cost of actually handling the goods.**
 - Giro banks – warehouses for coin.
 - The DTCC for stocks.
 - Grain banks.
- **Notice I didn't say risk aversion and hedging!**

Storage & electricity

- **Electricity system is more rigid than most other production systems.**
 - Check plus.
- **But electricity cannot be stored.**
 - ...wait, or can it?
 - Check.
- **Do futures markets in electricity facilitate the efficient use of available capacity? Do they enable those parties who value stand-by capacity to get it, unbundled from long-term ownership of the capacity?**
 - What is the meaning of “convenience yield” in electricity?

Futures markets are not essential

- Oil has been a commodity for more than a century, but futures markets only arrived in 1979, much later than for many other commodities.
- And even today, futures markets in crude oil are only relevant for a subset of flows. Same with natural gas.
- Lots of other commodities have no futures markets...
 - Coal
 - Iron ore
 - Steel

What is the essential ingredient for successful futures markets?

- **Competition.**
- **Why is the delivery point for NYMEX//CME's WTI oil contract in Cushing, Oklahoma?**
- **Why is it so difficult to get a natural gas futures contract going for LNG in East Asia?**
- **Do we have the requisite competition for futures markets in electricity?**

2. How might financial trading pervert or undermine electricity markets?

- **Manipulation.**
- **Market power is pervasive in electricity markets.**
- **The administrative character of electricity market designs.**

3. What sort of financial markets do we want in our electricity market design?

- **Stop multiplying the product space. More is not always better.**
- **Financially settled markets are no markets at all. Day ahead markets are not just a financially settled contract ... or SHOULD NOT be.**

Conclusion

- **Of course purely financial trading in electricity futures contracts may contribute to the productivity of the industry.**
- **Not much in the way of substantive evidence has been produced, yet.**
- **Attention has not been focused on the really valuable contributions.**
 - Risk aversion and hedging may not be a red herring, but they have hogged the spotlight.
 - And the real value of hedging has mostly been told as a fairy tale, disconnected from plain business sense.
- **There are substantive problems to making futures markets work successfully in the electricity industry. It's not clear that we have been pushing in the right direction.**