Legal and Regulatory Issues in Information Markets

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Overview

- Why are these markets regulated the way they are (or likely to be)?
- Some of the types of markets (products) which are regulated as derivatives
- Brief history of derivative regulation
- Particular regulatory issues
  - Economics-market failure issues
  - Politics-rent seeking issues
Where do they fit?

- One could argue that information, prediction markets, are derivatives.
- Derivatives are a form of contracting which allow individuals and firms to alter their exposure to price risk or some other risk such as that based on an index or prediction without intending on transferring ownership of a good or asset.
Sources of regulation

- High degree of leverage
  - Significant losses to firms in 90s, Enron, etc.
- Prices from these markets used in benchmarking other transactions...“public good”
- Typical securities related issues, fraud, etc.
**Example: futures contracts**

- Futures contract--an agreement to trade an asset in the future, where the price is determined at the time the contract is negotiated
  - Typically margined
  - Trades can be easily offset (unlike "forwards")
  - Clearinghouse guarantees trading
- Swaps...a linked series of futures
A Heating Degree Day (HDD) measures the coldness of the daily temperature compared to a standard of 65 ° degrees Fahrenheit.

Daily HDD = Max (0, 65 ° Fahrenheit - daily average temperature)

Predicting the weather, monthly HDD value=?
Example: Options

One party to the contract has the right (but not the obligation) to enter into a transaction at a price fixed in advance (the *strike* price)

Could be a *call* option, the right to buy, or a *put* option, the right to sell

There can be options on the same things as futures, and even options on futures
Speculating on the S&P 500

- Outright purchase S&P 500 stocks
- Purchase shares in Vanguard S&P 500 SPD “spiders,” exchange traded fund, similar to closed end mutual funds
  - Marginable like stocks
- S&P 500 futures, place margin (~5%)
- S&P 500 options, purchase call,
  - 5% out-of-the-money, 3m, cost about 8%
Organized exchange-trading of futures contracts evolved the mid-1800s in Chicago.

1921 Futures Trading Act
1936 Commodity Exchange Act (CEA)
1974 Commodity Futures Trading (CFTC)
Major revisions to the CEA occurred 1992 and 2000
Regulatory oscillation, turf battles
Regulation and crisis

- Derivative regulation as Congressional CYA, ratchet effect
- 1920 grain crisis ➔ Futures Trading Act
- 1930’s depression ➔ Commodity Exchange Act
- 1970’s Russian wheat ➔ C.F.T.C
- 1990’s, FBI sting, derivatives crisis ➔ tiered regulatory scheme
- Late 90’s flip-flop, now Enron ➔ ???
Some types of regulation other than proscription

- Risk disclosure, warning labels
- Suitability requirements (not in CFTC rules)
- Trade practice regulation
- Anti-manipulation efforts
- Contract approval (potential proscription)
  - Exchange trading requirement
  - Economic purpose of instrument
Risk disclosure

- Inform traders of risks of the product
- Benefits: are not clear...does it really happen
- Costs: economics of information
  - mandated disclosure may restrain competition
- Required risk disclosure requirements could be the result of rent seeking by some brokers, keeping out low cost brokers
Trade practice regulation

- Benefit...economies of scale for policing
- Costs...optimal fraud levels, conditional on cost (U.S. govt. costs)
- Exchange revenue maximization may not lead to optimal fraud rate
- May conflict directly with exchange trading requirement...forcing trading onto the exchange, then regulating it to unprofitable extremes
Manipulation regulation

- Benefits...efficient prices (information, prediction)
- Definition: intent to profit from creating artificial prices
- Relies on asymmetric (mis)information
  - Manipulator must act secretly
- Costs...regulatory burden, reporting requirements
Manipulation regulation

- Regulation at exchange level, or government level
- Consider exchange’s incentives
  - Is optimal manipulation in exchanges view the same as social optimum
- Dependent on prices as public goods
- Dependent on nature of the information/prediction market
Exchange as public utility

Prices (information, prediction) generated by exchange

Free rider problem...why trade on the exchange if the information is freely available

Some derivative markets are not markets which discover information or prediction

Example—FX futures
Contract approval

- Benefit—difficult to identify
- Currently requires economic purpose test—contract must be useful for hedging or price discovery
- Not to guarantee success
  - Why would the exchange seek to trade a contract which will not be successful
  - Success depends on volume