Commodity Exchanges and Antitrust

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Abstract

Historically, commodity exchanges have been viewed as natural monopolies, not subject to competitive forces. But in recent years, both technology and regulatory changes have allowed for competition between rival exchanges in various contracts. With competition comes the regulation of competition. The traditional method of regulating competition is through court adjudication of the Sherman Antitrust Act. But in regulated industries, antitrust authority must be shared in some way with the regulatory authority. Then, it must be implemented by the relevant government entity.

This article will explore the impact of competition on this industry and how the exchanges are dealing with the resulting antitrust issues. Not surprisingly, there have been several allegations of anticompetitive activity in violation of the antitrust laws of the United States. Indeed, at least two lawsuits have been filed, and one complaint has been brought to the Commodity Futures Trading Commission (“CFTC”).

Here we review the economics of commodity exchanges, and the nature of competition between exchanges. We then examine the new forces for competition in exchanges offering commodity contracts. After this introduction to commodity exchanges, we review the basic economic and legal foundations of antitrust law. We then provide an analysis of antitrust mandate of the CFTC and examine the legal doctrine of implied immunity as it applies to the CFTC. Finally, we discuss various types of antitrust cases, and applies these legal and economic theories to recent cases.

I. Introduction

Historically, commodity exchanges have been viewed as natural monopolies, not subject to competitive forces. But in recent years, both technology and regulatory changes have allowed for competition between rival exchanges in various contracts. With competition comes the regulation of competition. The traditional method of regulating competition is through court adjudication of the Sherman Antitrust Act. But in regulated industries, antitrust authority must be shared in some way with the regulatory authority. Then, it must be implemented by the relevant government entity.

This article will explore the impact of competition on this industry and how the exchanges are dealing with the resulting antitrust issues. Not surprisingly, there have been several allegations of anticompetitive activity in violation of the antitrust laws of the United States. Indeed, at least two lawsuits have been filed, and one complaint has been brought to the Commodity Futures Trading Commission (“CFTC”). We will discuss these three cases below.

In Section II of this paper we review the economics of commodity exchanges, and the nature of competition between exchanges. Section III examines the new forces for competition in exchanges offering commodity contracts. In Section IV, we review the basic economic and legal foundations of antitrust law. Section V provides an analysis of antitrust mandate of the CFTC and examines the legal doctrine of implied immunity as it applies to the CFTC. Section
VI discusses various types of antitrust cases, and applies these legal and economic theories to the recent cases of *United States Futures Exchange, L.L.C. v. Board of Trade of the City of Chicago* and *the Chicago Mercantile Exchange*, No. 1:04cv6756 (N.D. Illinois), *New York Mercantile Exchange v. IntercontinentalExchange, Inc.*, No. 02-Civ-9277 (S.D.N.Y.) and *Chicago Mercantile Exchange Rule 432.D Interpretation*, Submission No. 04-61a – challenge by the London International Financial Futures Exchange before the CFTC.\(^1\) Section VII contains our conclusions.

II. An Introduction to the Economics of Commodity Exchanges

Any discussion of antitrust issues between commodity exchanges requires a discussion of what role commodity exchanges play in the economy, how such exchanges operate, and the implications those factors have on competition between exchanges. In this section we will review these topics.

A. What do Commodity Exchanges Do?

Commodity exchanges trade contracts, generally known as “derivatives.” Derivatives are generally divided into two categories, “futures” and “options.” Futures contracts are promises to deliver economic goods (generally agricultural products or financial claims) at a fixed price, place and point in the future. Options represent the opportunity to buy or sell products at a fixed price at a fixed time and place in the future.\(^2\)

Derivative contracts exist to reduce risk to economic participants. In a classic context, imagine a farmer who is planting wheat in the spring for harvest in the fall. This farmer does not know what the price of wheat will be in the fall, and therefore, absent a futures contract, is engaged in a highly risky endeavor. If, however, that farmer can sell (“go short”) a futures contract on her crop for a fixed price for, say, a fall delivery, then that farmer can alleviate the

\(^1\) The following abbreviations will be used for the exchanges: United States Futures Exchange, L.L.C (“Eurex US”), Board of Trade of the City of Chicago (“CBOT”), Chicago Mercantile Exchange (“CME”), IntercontinentalExchange, Inc. (“ICE”), New York Mercantile Exchange (“NYMEX”) and the London International Financial Futures Exchange (“LIFFE”). As additional exchanges are mentioned in this article, the respective abbreviations will be noted in the text.

\(^2\) *Merrill Lynch, Pierce, Fenner & Smith, Inc. v. Curran*, 456 U.S. 353 (1982) (“In the 19th century the practice of trading in futures contracts led to the development of recognized exchanges or boards of trade. At such exchanges standardized agreements covering specific quantities of graded agricultural commodities to be delivered during specified months in the future were bought and sold pursuant to rules developed by the traders themselves. Necessarily the commodities subject to such contracts were fungible. For an active market in the contracts to develop, it also was essential that the contracts themselves be fungible. The exchanges therefore developed standard terms describing the quantity and quality of the commodity, the time and place of delivery, and the method of payment; the only variable was price. The purchase or sale of a futures contract on an exchange is therefore motivated by a single factor -- the opportunity to make a profit (or to minimize the risk of loss) from a change in the market price.”); *see also What is a Futures Exchange?* http://www.cme.com/edu/course/intro/whlfutrx9699.html (A futures exchange, legally known in the U.S. as a “designated contract market,” is, at its core, an auction market – highly regulated, technical and complex – but an auction market nonetheless. A futures exchange is the only place where futures and options on futures (which offer the right, but not the obligation, to buy or sell an underlying futures contract at a particular price) can be traded. Trading may take place either on the exchange’s trading floor or via an electronic trading platform); Todd Lofton *Getting Started in Futures* 13-22 (1997); Jim Rogers *Hot Commodities* 61-94 (2004).
price risk to farming. Similarly, one can imagine how a baker who uses wheat would face a similar problem in planning its fall operations. This baker would alleviate his price risk on wheat by buying (“going long”). In trading terminology, such a contract, between two economic parties, is called a “forward.”

For our hypothetical farmer and baker, however, creating this forward contract may not be easy. The seller of the contract (the farmer) and the buyer (the baker) must be able to find out the existence of each other. But, perhaps, even worse, they must be assured that the other will not renege on their agreements. For example, assume that our farmer and baker agree to a fall contract that would have the baker buy the wheat from the farmer at $3.00 a bushel. If, in the fall, the price of wheat is $8.00 a bushel, the farmer has strong incentives to renege on the deal and sell her wheat elsewhere. The baker may have little recourse against the farmer’s action.

Herein lies the role of the commodity exchange. A commodity exchange creates a standardized contract, a “future” (or “option”) for a particular derivative. Such a contract describes the product involved, the time of delivery or expiration, and has attached to it variety of financial conditions designed to deter contract default. Contracts of market participants are with the exchange, rather than with each other. Thus, on an exchange, when a farmer sells a future to a baker, each party has a contract, not with each other, but with the exchange. The exchange then guarantees payment on each contract to the contract holders. Thus, instead of the farmer having an obligation to the baker, as in the forward contract, through a futures contract, the exchange has an obligation to the baker.

The fact that the exchange holds one side of each contract obligation has an important feature. It serves to make contracts fungible. Assume, for example, that our farmer wishes to eliminate her short position in wheat. Without a commodity exchange, she would have to go back to the baker and renegotiate. In our exchange world, however, there is no such requirement. Instead, the farmer can eliminate her short position on the exchange by simply buying (again, “going long”) a contract equal in size to her short position. This eliminates her obligation with the exchange.

Thus, exchanges, by creating futures contracts, enable derivatives to be traded at low cost. They create standard contract conditions, which reduces contracting costs. Exchanges act as contract guarantors, which enables parties to make trades with assurance that the promised payoffs will actually occur. By having contracts of participants be with the exchange, exchanges make such contracts fungible, and therefore “liquid.” In addition, exchanges act as central locations for trading of particular contracts. Thus, if our farmer wants to go long or short in a wheat contract, she knows where to look for a party to take the other side of the contract.

Because the exchange holds the contract with both parties, the exchange must take great efforts to insure that neither party reneges with it. This process is known as “clearing,” through institutions known as “clearinghouses.”

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4 The discussion in this section is taken from Chance, An Introduction to Derivatives and Risk Management, 270-278 (2004).
Clearinghouses essentially perform the financial processing that constitutes the mechanics of exchange transactions. They confirm that each trade is acknowledged, settle the amounts owed, and ensure the financial integrity of the futures and options contracts traded on the exchanges by taking over the counterparty risk and guaranteeing that all contracts will clear on the date of performance. These services reduce the credit risk exposure of buyers and sellers and allow the exchanges to operate more efficiently. Commodity exchanges are required under the Commodity Exchange Act to have a clearinghouse in place prior to approval as a Designated Contract Market.\textsuperscript{5}

The implicit assumption in our discussion so far has been that many or most derivative contracts would be held until their expiration. This is, in fact, generally not the case. In fact, the vast majority of contracts are closed out before they reach expiration.\textsuperscript{6} The reason for this is that firms’ risk exposure changes constantly, implying that their desired position in various derivative contracts will also change constantly.

Commodities bought and sold on exchanges are not (generally) delivered. Rather, longs and shorts cash out their positions prior to the delivery (settlement) date. This increases the importance of clearinghouse operations to exchanges.

For example, assume on September 1 Party 1 buys 1000 units of natural gas, deliverable on October 1, at a price of $4 per unit. By September 20, October 1 natural gas has fallen to $3.25 per unit. Party 1 decides to cash out of its position, losing 1000*$0.75, or $750.

In the commodities world, however, Party 1 does not pay $4 per unit up front, and take a loss of $0.75 on September 20. Rather, each party’s position is “marked to market” each day. For example, assume on September 3 the price of natural gas fell $0.10 per unit. The clearinghouse would then take 1000*$0.10, or $100 from Party 1’s account at the exchange.

Marking to market is done to avoid credit problems at an exchange. Rather than parties who have losses paying them all upon settlement, parties pay losses as they occur, thus reducing the daily financial exposure. (Parties who cannot meet their daily obligations have their positions closed.) This process reduces the financial exposes of the exchange on a daily basis, and therefore reduces the threat of insolvency through customer default to the exchange.

Historically, in the U.S., there have been three important commodity exchanges. All of the “big three” initially started in agricultural products and eventually migrated to more complex financial instruments. For example, the first exchange, the Chicago Board of Trade (“CBOT”) historically specialized in grains (corn, soybeans, wheat, oats, etc.).\textsuperscript{7} However, over the past twenty years, the CBOT has diversified its product set moving into, among other things, Treasury futures (it’s biggest money maker), as well as metals and stock indices (Dow Jones

\textsuperscript{5} 7 U.S.C. § 7(d)(11)(Financial Integrity of Contracts traded on a futures exchange).
\textsuperscript{6} See, for example, Hull, Options, Futures, and Other Derivatives (2003, 5th ed.) at 20.
The Chicago Mercantile Exchange (“CME”) initially started as the Butter and Egg Board, but evolved with a specialty in “meats” (pork bellies, live cattle, lean hogs, etc.). Similar to CBOT, the CME has also moved into a diverse group of products including stock indices (S&P and NASDAQ indices), interest rate products (Eurodollars), as well as foreign currency. Finally, the New York Mercantile Exchange (“NYMEX”) traded a variety of products through its 132 year history, including potatoes, but it is now focused on energy and metals products, such as crude oil, natural gas and gold.

B. In Exchanges, Liquidity is King

The need to change positions, and the resulting desire to cash out position, constantly generates a tremendous desire by contract participants for “liquidity.” As Harris puts it, “liquidity is the ability to trade large size quickly, at low cost, when you want to trade. It is the most important characteristic of well-functioning markets.”

Harris (at 398) breaks down liquidity into three components:

1) Immediacy – how quickly you can make trades of a given size at a given cost;
2) Width – the cost of making a trade of a given size;
3) Depth – the size of the trade that can be arranged at a given cost.

At this point, a reference to “order books” may be appropriate. Order books are the standing “limit orders” (outstanding offers) to buy or sell a given contract at a given time. Let us assume that the order book to buy wheat futures looks as outlined in Table 1, below.

<table>
<thead>
<tr>
<th>Price (per bushel)</th>
<th>Order Size (in contracts)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$3.00</td>
<td>100</td>
</tr>
<tr>
<td>$2.96</td>
<td>200</td>
</tr>
<tr>
<td>$2.94</td>
<td>150</td>
</tr>
<tr>
<td>$2.93</td>
<td>50</td>
</tr>
<tr>
<td>$2.91</td>
<td>100</td>
</tr>
</tbody>
</table>

Assume that our hypothetical baker would like to reduce his “long” position in wheat by selling 400 contracts. At this moment in time, the baker could sell 400 contracts – but at what may be a substantial price slippage. Selling 400 contracts would require selling 100 at a price of $3.00, 200 at a price of $2.96, and 100 at a price of $2.94. This represents a price slippage of six cents from the “top” of the order book. The amount of the slippage is governed by the

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8 www.cbot.com
9 See www.cme.com; see generally The Merc
10 www.cme.com
11 See www.nymex.com
13 Today, the order books for most well-traded stocks are easily available from Yahoo.com, among other sources.
“width” or the order book – how much is offered at a particular price, and the “depth” – what prices are available.

Alternatively, our baker could wait for better prices. He could place a “limit order” to sell his 400 contracts at a price of, say $3.05. How long the baker could expect to wait to have his order filled (if it is filled at all) is what Harris refers to as “immediacy.” Immediacy is important, because as risk changes, firms do not wish to caught holding their (previously optimal) portfolios.

All these factors – immediacy, depth, and width – are a function of the number of traders involved in a particular market. The more traders, the more limit orders on the order book, the wider and deeper the market, the less the price slippage. If the trader decides to wait for a better price, the more traders, the faster that trader is likely to get his requested price.

This adds up to the following: the more trades, the greater the volume, the “thicker” the order book, the more immediate the transactions, the more liquid the market. Thus, as a market gets larger, its value to traders improves. This has important consequences for the nature of competition between exchanges.

C. Competition For the Market

Thus, in commodity markets, bigger really is better. Thus, if one exchange wants to offer, for example, a new wheat contract to compete with the existing wheat contract, it has a serious problem getting established.

Contracts have a variety of product attributes – such as (i) what commodity is being traded; (ii) what size of the commodity constitutes a contract; (iii) what type of price movement is allowed for the contract, which corresponds to the economic value of the contract (i.e., how much value is associated with a “tick”); (iv) where is the contract cleared; (v) what is the margin required to trade the product; (vi) what are the price limits for the contracts (daily highs & lows); (vii) what reporting levels are in place for the contract (known as “Large Trader Reporting” that requires traders who hold certain large positions to report such positions to the CFTC); and (viii) how is the product traded – open outcry, i.e., “in the pits,” or electronically through either dedicated networks and/or the Internet.\footnote{The transition from open outcry to electronic trading is not always an easy process. Electronic trading is considered more transparent, efficient and cheap as compared to open outcry. However, despite the obvious business reasons for such a transition to electronic trading, there are imbedded interests in open outcry that stall electronic progress. The lack of transparency and efficiency is to the benefit of the traders who stand “in the pits.” That is, they are able to respond to market forces “in person” before anyone that trades outside of the exchange, e.g., a trader who has to “call in” orders to a broker (who then, in turn, trades on behalf of the client). See generally http://www.fimandate.com/news/fullstory.php/aid/851/The_man_versus_machine_debate.html. In an interview with one of the authors regarding the transition to electronic trading in the Brent Crude Oil contract at the International Petroleum Exchange (“IPE”), a trader working for a large oil company stated that he/she did not want to see the IPE “go electronic” because the company...} But the crucial aspects of any contract are liquidity and...
the benefits that come from liquidity. For this attribute, it is near impossible for a new contract to have the product quality of the existing contract in the same product. Further, it is very difficult for two competing contracts to survive in the long run.

Thus, what competition between contracts offered by different exchanges really amounts to is competition for the market.\textsuperscript{15} If exchange can compete effectively for markets, in the long run, the contract with the best product attributes will survive. Competitively, the operators of that contract will be constrained, not by existing rivals, but by “potential” competitors – firms that could enter the market if the incumbent attempts to exercise market power. It is this type of competition, competition for the market, that antitrust in commodity exchanges is largely concerned with. This, in turn, implies that the creation of barriers to entry for new competitors will be at the center of antitrust claims in this area.

### III. New Forces for Competition Between Exchanges

With the advent of new technology, globalization, as well as the passage of a flexible regulatory scheme in 2000, the Commodity Futures Modernization Act (“CFMA”), significant competition at the exchange level has, for the first time in the history of the derivatives industry in the United States, been introduced. These three forces reduced – but certainly did not diminish – barriers to entry in becoming an exchange.

#### A. “Let’s be Gentlemen” – The Rules of Exchange Competition Prior to the Commodity Futures Modernization Act of 2000

Competition at futures exchange in the United States has been described by market observers as “historically mild.”\textsuperscript{16} As has been traditionally the case:

…[t]he Chicago exchanges have competed in the past over new products, with one market eventually emerging as the dominant market, and the other market relinquishing that listing as a result. CBOT trades the mini-Eurodollar, which competes with the CME. But the competition between the two exchanges has generally been healthy and good-natured.\textsuperscript{17}


\textsuperscript{17} Id. at 8
Put more bluntly by other commentators, the exchanges entered into an implicit “gentlemen’s agreement,” whereby they agreed to not compete in each other’s dominate markets. As one commentator has put it:

The Chicago Merc and CBOT are thriving, in part, by following a sort of gentlemen’s agreement to respect each other’s traditional business turf. The CBOT specializes in futures contracts tied to such storable commodities as corn and soybeans, as well as long-term interest rates. The Chicago Merc specializes in perishable commodities such as live cattle and hogs, as well as in short-term interest rates.18

This “respect for competition” has led to the development of exchange franchises in successful contracts. That is, once a product gains traction and all-important liquidity, other exchanges in the United States have not pursued the contract. While one could assume that a “gentlemen’s agreement” to leave each other’s turf alone is at work and responsible for the lack of competition in these successful contracts, it is equally possible that once a contract is successful, “stealing” such contract from the incumbent exchange is viewed as a difficult, and perhaps nearly impossible, task. Thus, competing exchanges decide that they would rather invest their resources elsewhere.19 As stated by John Damgard, Chairman of the Futures Industry Association, a long-time derivatives trade group:

Traditionally, once a market achieved liquidity and dominance in a particular product, no challenger emerged. Traditionally, trading and clearing were inextricably linked, one function supported the other and shut out potential competitors that might want to offer similar services. In fact, traditionally, few markets even attempted to challenge dominant markets by offering a new contract design, method of trading or clearing efficiency.20

Nonetheless, exchanges in the United States readily compete on new products. That said, new products rarely succeed and the product development process at most exchanges can best be described as a “crapshoot.”21 While the exchanges typically have large research and product

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19 Not surprisingly, at least one high ranking official from a U.S. exchange, the CBOT, believes that U.S. exchanges face significant competition: “I am known for being blunt. So let me put this bluntly. Those who would tell you that U.S. futures exchanges are monopolies and face no competition are out of touch with reality. There is more competition today than ever before,” Testimony of Charles P. Carey, Chairman of the Chicago Board of Trade Before the Subcommittee on General Farm Commodities and Risk Management of the House Agriculture Committee, June 19, 2003.

20 Testimony of John M. Damgard, President, Futures Industry Association Before the House Subcommittee on General Farm Commodities and Risk Management, Committee on Agriculture, March 9, 2005.

21 An example of the successful nature of product development is the development of energy futures by the New York Mercantile Exchange (“NYMEX”) in 1978. “Exchanges: Growth and Change the Ongoing Story; Commodity Exchanges; 20 Years of Futures,” Futures at 52 (March 1992). At the time of the development of energy futures, it
development departments, creating new, successful contracts is very challenging. Many new ideas are thrown at the dartboard, and most fail.

An example of this dartboard development technique of new product competition occurred in early 2000, when both the CME and the CBOT decided to launch “agency-note” futures that were linked to debt issued by Fannie Mae and Freddie Mac. The exchanges launched these competing products at the same time – during the second week of February in 2000. CME won the initial liquidity battle over CBOT, thanks in part to an aggressive incentive program. The combined Note products traded almost 12,000 contracts on the Merc during their debut. However, volume quickly fell thereafter and the CBOT seemed to take control of the fledgling contracts when it posted open interest of 12,800 contracts and volume of 13,300 two weeks after the launch of the agency note product. Thereafter, trader and institutional interest in these contracts on both exchanges faded and the contracts ended up in the massive graveyard of tried, but unsuccessful, futures products.

B. Enter Competition – The Commodity Futures Modernization Act Becomes Law

Congress passed, and President Clinton signed into law, the Commodity Futures Modernization Act (“CFMA”) in late 2000. Indeed, the bill became law literally in the “eleventh hour,” passing right before the 106th Congress adjourned for the session. In the preamble of the bill, Congress made it explicit that “enhanc[ing] competition” in the markets for futures and over-the-counter derivatives was a goal of the legislation. One of the ways the CFMA set out to achieve competition in the marketplace was to promulgate “core principles” as a way to regulate exchanges and clearinghouses, rather than using traditional, overly proscriptive rules. In other words, the new law created a flexible regulatory scheme for market participants. As such, Congress hoped that U.S. exchanges could compete more effectively internationally, as was unclear if the NYMEX would survive as it was “reeling” from potato futures default and manipulation problems in the late 1970s. See also Paul Meier, “Derivatives – History and Outlook,” February 13, 2003.

24 Id.
25 There are many reasons why a new futures contract will not succeed. One of the most reasonable explanations is that there is not an end customer need for the product. In other words, while the “locals” trading in the pits (as speculators) at the exchanges in the United States can support a new contract by trading with each other for a period of time, eventually, in order to succeed, the contract must appeal to some end-user base that needs to use the contract for hedging purposes. The entry of end-users into the marketplace is sometimes referred to as getting “customer paper” into the trading mix (or, more bluntly, finding “food” for the market). Without the customer paper, the product cannot survive. Stated slightly different, without hedgers, the speculators can only last so long and the contract will die.
28 CFMA (preamble).
29 Id. at § 2.
well as that new entrants would be encouraged to compete in the marketplace given the “lighter” regulatory regime.

Furthermore, the CFMA provided for one specific core principle that addressed antitrust issues as they relate to exchanges:

ANTITRUST CONSIDERATIONS. – Unless necessary or appropriate to achieve the purposes of this Act, [a] board of trade shall endeavor to avoid –

(A) adopting any rules or taking any actions that result in any unreasonable restraints of trade; or

(B) imposing any material anticompetitive burden in trading on the contract market.30

Despite a limited legislative history, in subsequent Congressional testimony, many legislators, regulators and industry participants have hailed the CFMA as pro-competition legislation. For example, Acting Chair of the Commodity Futures Trading Commission, Sharon Brown-Hruska, stated:

Prior to the CFMA, the market was regulated with a one-size-fits-all model. It did not matter whether a customer was commercially sophisticated; whether the underlying commodity was susceptible to manipulation; whether a customer needed the flexibility of an over-the-counter contract or the liquidity of an exchange-traded one; or whether there was more than one way to deliver customer protections in the marketplace. This recognition by Congress of these differences represented a significant step forward in its design of the regulatory oversight structure. When Congress adopted the CFMA, it put in place a practical, principles-based model and gave the CFTC the tools to regulate markets that were challenged by competition brought about by technology and an increasingly global marketplace.

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…the innovation, competition, and customer choice envisioned by Congress in passing the CFMA is bearing fruit.31

As Acting Chair Brown-Hruska noted in her testimony, the CFMA has indeed borne fruit. From 2000 through 2004, the volume of futures and options contracts traded on U.S.

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30 Commodity Exchange Act, Section 5(d)(18), 7 U.S.C.§ 7(d)(18). This core principle was based on pre-existing antitrust language contained in the Commodity Exchange Act.
exchanges increased from 600 million contracts a year to over 1.6 billion contracts per year.\textsuperscript{32} The product range also increased dramatically going from 266 to 556 regulated contracts. Furthermore, and perhaps most significant from a competitive vantage, the CFTC approved eight new Designated Contract Markets (futures and options exchanges).\textsuperscript{33} Finally, eleven Exempt Commercial Markets\textsuperscript{34} and three Exempt Boards of Trade filed notifications with the Commission indicating that they were open for business.\textsuperscript{35}

The initial wave of competition after the passage of the CFMA swept the derivatives industry. There was unprecedented competition at all levels of the industry – among the regulated exchanges, in the over-the-counter versus the regulated exchanges, and even between clearing houses. Some of the competition included:

-- Exchange Place Futures Exchange, LLC, also known as “Brokertec Futures Exchange,” a joint venture of several of the largest investment banks, was formed in 2001. It listed futures and options on futures electronically in the Treasury (fixed income) complex of contracts competing directly against the Chicago Board of Trade;

-- Several online energy exchanges emerged to compete with the incumbent regulated futures exchange, the New York Mercantile Exchange (“NYMEX”), as well as with over-the-counter “voice brokers.” These new, Internet-based exchanges included: Intercontinental Exchange (“ICE”) (notice given to CFTC in 2001), Houston Street (notice given to CFTC in 2002), TradeSpark (notice given to CFTC in 2002), Natural Gas Exchange (notice given to CFTC in 2002), Optionable (notice given to CFTC in 2001), Spectron Live.com Limited (notice given to CFTC in 2003), as well as Altrade and Red Meteor;\textsuperscript{36}

-- A new clearinghouse, EnergyClear, a joint venture of the Bank of New York, as well as energy voice brokers Prebon Yamane and Amerex, was created in 2000 (and approved by the CFTC as a Derivatives Clearing Organization in 2001) to offer netting and settlement of wholesale energy contracts for the over-the-counter marketplace in competition with the NYMEX clearinghouse, as well as the London Clearinghouse.\textsuperscript{37}

\textsuperscript{32}Id.
\textsuperscript{33}Id.
\textsuperscript{34}An “Exempt Commercial Market” is a marketplace that is exempt from most, but not all, provisions of the Commodity Exchange Act and CFTC regulations. In order to qualify as an Exempt Commercial Market, such market must not allow “retail” customers to trade on it. That is, the market is only usable by large, typically institutional, users. See generally Section 2(h) of the Commodity Exchange Act, 7 U.S.C. § 2(h) and 17 CFR § 36.3 (Exempt commercial markets).
\textsuperscript{35}Brown-Hruska Testimony.
\textsuperscript{37}“Bank of New York Joins with Two Over-The-Counter Energy Brokers,” Foster Natural Gas Report at 21 (December 7, 2000); see also http://www.cftc.gov/dea/dearegistered_dco.htm.
A regulated futures exchange, the St. Louis Merchants Exchange was formed (again) in 2000 to offer the same energy contracts as NYMEX.38

U.S. Futures Exchange, LLC, also known as “Eurex US,” was approved by the CFTC as a Designated Contract Market (“DCM”) in 2004. Eurex US listed futures and options on futures in the Treasury complex of contracts competing directly against the Chicago Board of Trade.39

Eurex US also listed foreign exchange (“FX”) products in competition with the CME, as well as the New York Board of Trade on September 23, 2005.40

CBOE Futures Exchange, LLC (“CFE”) was approved by the CFTC in 2003 as a DCM. CFE’s primary product is volatility indexes, which compete largely against the CME.41

Eurex US and CFE separately listed the Russell 1000 and Russell 2000 Index products in 2005 in direct competition with the CME and the New York Board of Trade.

The entry of these new competitors led to competition among the long-time, established exchanges. The legacy exchanges “took their gloves off” and began competing against each other in “franchise” products for the first time in history, with one notable exception.42 For example:

The CBOT listed precious metal products (gold and silver) in direct competition with NYMEX’s metal exchange subsidiary, the Comex, beginning on October 6, 2004.43

Euronext-Liffe, a non-CFTC registered exchange, but a foreign futures exchange authorized to do business in the United States under CFTC regulations, offered Eurodollar contracts – the flagship product of the CME – in 2004 through its electronic trading system.44

38 Ann E. Berg, “Does the Futures Industry Need Revamping?,” Futures at 62-66 (May 2003);
39 See http://www.cftc.gov/dea/deadcms_table.htm (hereinafter “CFTC Designation Table”)
41 CFTC Designation Table; see also http://www.cboe.com/publish/CFEinfo/circ/CFEIC04-011.pdf#search='cme%20cboe%20lawsuit%20s%26p' (describing litigation between CME and CBOE regarding licenses to S&P products).
42 This exception involves the competition over the Bund contract between DTB/Eurex and Liffe in 1997. This competition is discussed below.
43 http://www.cbot.com/cbot/pub/cont_detail/0,3206,1027+23668,00.html
-- CBOT listed German interest rate products in direct competition with Eurex AG, based out of Frankfurt, Germany, in 2004.45

-- NYMEX listed the Brent Crude Oil contract in direct competition with the International Petroleum Exchange (“IPE”) in 2001 (immediately before September 11, 2001) and then again in 2004.46

-- The IPE indicated that it would list the West Texas Intermediate (“WTI”, the most important type of oil produced in the United States) oil contract in direct competition with NYMEX on February 2, 2006.47 Similar to Euronext-Liffe, the IPE is a foreign futures exchange that operates in the United States pursuant to a no-action letter issued by the CFTC.48

Accordingly, to the extent Congress sought to increase competitive activity by passing the CFMA, the Act was a huge success. However, has any of the competitive activity actual resulted in success by the competing exchange? Moreover, have consumers of the exchange products realized any long-term benefits as a result of the increased competitive activity? In other words, did the CFMA lead to “real” competition?

C. The Results of Competition Five Years After Passage of the CFMA – With Few Exceptions, the Incumbents Are Winning in a Landslide

An exchange with a captive clearinghouse is “one of the largest de facto monopolies on earth. We do not have a competitive environment right now. Instead, we have exchanges that are each monopolies in their own products. And customers don’t thrive under monopolies.”49

While the competition statistics from the CFMA appear, on their face, to paint a positive story, the actual competitive results of competition between exchanges have been much less impressive. With a couple of limited exceptions, none of these new exchanges have been able to break into the liquidity held by the legacy exchanges. Indeed, while the CFTC has touted the statistics concerning new exchanges seeking designation with the CFTC post-CFMA, the statistics relating to exchanges either closing shop or ceasing trading are equally revealing. According to CFTC materials, nine exchanges shut their proverbial doors since passage of the CFMA (as compared to eight that were approved post-CFMA).50

Moreover, challenges to the “core” products of the existing exchanges have not succeeded. For example, after failing to attain any meaningful market share in the treasury

45 http://www.cbot.com/cbot/pub/cont_detail/0,3206,1123+18742,00.html (“On April 23, 2004, the CBOT will launch Bund, Bobl, and Schatz futures on the e-cbot platform, with seven firms serving as market makers within the German debt complex.”).
47 https://www.theice.com/showpr.jhtml?id=1240
48 http://www.cftc.gov/tm/letters/03letters/tm03-17.htm
49 “Clearing Firms and Exchanges at Odds at CFTC Clearing Roundtable,” Securities Week at 1 (August 5, 2002).
50 CFTC Designation Table.
market against CBOT, Broker Tec Futures was purchased by Eurex US.51 While Eurex US had more success than Broker Tec, it was unable to break CBOT’s monopoly on the treasury products. Indeed, in June 2005, Eurex US announced that it had effectively given up the fight against CBOT.52 Eurex US claimed that a significant reason for its inability to gain traction in the product was CBOT’s alleged anticompetitive activity, which is the subject of a pending antitrust lawsuit (and discussed below).53

Other results of the post-CFMA competition are:

-- EnergyClear ceased operations on July 9, 2004.54

-- Merchants Exchange ceased operations on September 30, 2004.55

-- CFE has failed to gain any meaningful market share on any of its products, typically trading less than 5,000 contracts a day.56

-- In early 2005 Eurex US took between four to eight percent of the market share in the Russell contract, but it has had to waive fees and pay “market makers” to do so.57

-- CBOT’s foray into precious metals in competition with NYMEX/COMEX has shown the most promise of all the efforts to take on an established product. While CBOT’s market share was is in the 1-2 percent range for quite some time, it seemed to hit a “tipping point” in late 2005 where its market share jump to a steady 10 percent.58 More recently, CBOT’s market share in gold has risen to 44 percent.59

51 http://www.pricegroup.com/newsletter/062405.htm
53 Id.
54 http://www.cftc.gov/dea/dearegistered_dco.htm?from=home&page=epclearingcontent
55 CFTC Designation Table.
57 http://www.eurexus.com/about/company_info/press_releases/eurex_us_news_pressreleases_394.html (“Eurex US is waiving all trading fees for all market participants for the first three months of trading in the Russell products. Twenty-two firms are acting as market makers for the new products and are providing additional liquidity and increasing order book depth by continuously quoting prices and offering competitive spreads. Market makers will be active during the core U.S. trading hours (8:30 am to 3:00pm CST)). “Market makers” are speculators who continuously offer to both buy and sell the relevant contract. See Harris, supra, 195.
58 http://www.cboe.com/cbot/pub/cont_detail/0,3206,1027,35861,00.html?link=rss (“After celebrating the one-year anniversary of launching its Precious Metals complex electronically, the CBOT marked another major milestone, with its Gold contracts (100 oz. and mini-sized futures) capturing a 15 percent market share of gold futures traded in North America based on volume for the month of December. Daily volume for the overall complex reached a record in December, surpassing 20,000 contracts in a single session.”)
59 David Roeder CBOT pan for profits, Chicago Sun-Times, July 21, 2006 at 47.
-- Euronext.Liffe failed to attract any significant liquidity to its Eurodollar contract and, as such, on, Euronext-Liffe acknowledged that it was going to give up the battle of the Eurodollar.60

-- CBOT has failed in its efforts to trade the core European fixed income products from Eurex. Indeed, the contracts failed after having no trading activity.61

-- Finally, despite incentive programs that pay traders up to $200,000 a month, NYMEX has not attracted any significant volume in its efforts to take the Brent crude oil contract from IPE. With limited exceptions, its volume is in the 3-5 percent range of total Brent contracts.62

The results of post-CFMA competition, or lack thereof, have not escaped industry observers. As noted in 2005 by Jeremy Grant, a long-time futures industry reporter for the Financial Times:

[T]o put it mildly, none of these initiatives has lived up to expectations. Eurex US’s share of the Treasury futures market is still under 5 per cent, with Euronext-Liffe scraping by on a Eurodollar share of roughly 2 per cent. The CBOT has barely made a dent on NYMEX. And the CBOT’s Bund, Bobl and Schatz initiative has sunk without trace.

* * *

The CBOT’s initiative stands out because it is an example of an electronically traded offering competing against an existing “open outcry” traded product. That reinforces the view that it is where liquidity resides that counts, not the way products are traded… The real barrier to stealing liquidity and thus successfully competing is the difficulty of shifting open interest from one clearing house to another.63

Indeed, the challenge of moving (or, as incumbents often describe it, “stealing”) open interest to the challengers’ products was a central issue in the CME/LIFFE matter, discussed below.

Furthermore, while many industry observers have noted the positive effects of competition on the marketplace even though such competition has “not been successful in doing more than chipping away at the entrenched markets’ dominance,”64 recent moves by the legacy exchanges suggest that such positive effects may be short-lived. For example, after sensing that the competitive threat from Eurex US was receding (and, that a hefty Eurex US incentive

60 John J. Lothian Profits soar for Euronext, Newsletter (August 31, 2005)(“Euronext.liffe let is be known during their press conference …that they will be scaling back their investment in Eurodollars. They will be winding down the contracts.”)
61 The CBOT delisted these products on August 17, 2005. See http://www.cftc.gov/submissions/subdems0805.htm
62 http://www.nymexeurope.co.uk/notice_to_member.aspx?id=ntm02&archive=2005
63 Jeremy Grant, “An Era of Derivatives Competition that Never Was,” Financial Times, March 14, 2005 at ___.
64 Testimony of John M. Damgard, President Futures Industry Association before the Subcommittee on General Farm Commodities and Risk Management, Committee on Agriculture, House of Representatives, March 9, 2005.
program expired), the CBOT raised fees on its treasury products. Additionally, the CME announced that it would raise fees for its members effective August 1, 2005. Notably, CME’s stock price rose 6 percent on the announcement perhaps because it was able to demonstrate its pricing power in the market.

D. Defeating the Incumbents Requires a “Perfect Storm”

As discussed above, in commodity markets, “liquidity is king.” The result has been that commodity markets are often insulated from competition. As put by one observer:

Stock exchanges are often revered as bastions of free markets, but the reality is that virtually all of them have been adept at squashing competition from anyone who would challenge their privileged position. Ever since the first stock exchange was founded in Amsterdam in 1611, these bodies have been owned by brokers who control the trading on the floor and make sure their interests are taken care of first.

Liquidity has also been called a “black hole,” sucking up everything in its path:

[T]he liquidity generated by the [new trading] system will start drawing in more and more buyers and sellers, not unlike a black hole.

So, the question raised is whether a market, once it obtains a critical mass of liquidity in a product (and thus becomes a monopoly in such product), can ever lose such liquidity. The most prominent, and perhaps only example of such an event was the so-called “Battle of the Bund.” In the 1990s, Liffe had established the Bund contract as a crucial cornerstone in its portfolio of products. Indeed, it was (and is) one of the most heavily traded derivatives contracts in the world. Deutsche Terminboerse (“DTB”), the predecessor to Eurex, set its sights on the Bund contract. Given that Liffe was trading the contract via open outcry and DTB was a fully electronic exchange, DTB thought that it had an opportunity to capture the contract due to the structural differences in the trading environment. Moreover, given the fact that the Bund was (and is) a German product, DTB believed that it could appeal to German banks on a nationalist

65 http://216.109.125.130/search/cache?p=cbot+fee+raise+treasury&fr=FP-tab-web-t402&toggle=1&ei=UTF-8&u=tradetalk.cbot.com/cbot/pub/cont_detail/0%2C3206%2C1236+32360%2C00.html&w=cbot+fee+raise+treasury&d=NtiDnTmtM_J-icp=1&.intl=us (“The exchange fee rate increase implemented October 1, 2005 is currently expected to raise the overall rate per contract in the fourth quarter of 2005 about seven to ten percent from the rate during the third quarter of 2005”)
67 Gregory Dalton, “The Killer B-to-Bs,” The Industry Standard, February 28, 2000. See also “Six Southeast Wholesalers Join New Intercontinental Energy Exchange,” Platts Southeast Power Report, August 4, 2000 at 4 (““Liquidity is King” in determining whether … online exchanges will be successful…”); Hoi Leung, “Futures Exchange Takes a Hard Line on Various Issues,” Hong Kong Standard, December 28, 1998 (“In all of these markets, liquidity is king… Once the liquidity is there, it will be a long term threat to [the dominant marketplace]”).
level to assist in their effort. Ultimately, while the battle lasted seven years,\textsuperscript{70} DTB succeeded in taking the Bund contract from Liffe. As described by industry commentator, Patrick Young, the tipping point occurred in 1997:

For years, Liffe had dominated the [Bund] market. By March 1997, the DTB had managed to capture only a very paltry share of 35 percent of Bund futures trading. In April, this creaked up to 37.5 percent but after six years of head-to-head contest, progress was hardly significant. Then as 1997 progressed, volume began to drift upwards on the DTB. It wasn’t a passive situation, the Frankfurt management had made a no-holds-barred attempt to coax the business away from the London market. Turnover reached 43 percent in July 1997 when trading hours were extended by 90 minutes… The major catalyst, however was the Maastricht Agreement which guaranteed free trade throughout the European Union. Amongst the treaty’s many provisions, one permitted any European marketplace’s terminals to be sited anywhere within the other European nations.

\* \* \*

By September 1997, the gloves were off and the knuckle dusters on in the fight for market share in the Bund… Exchange or clearing fees were waived at both the DTB and Liffe.

\* \* \*

By October, Liffe’s share of the Bund business was down to 52 percent. However, the DTB’s policy of disseminating their screens far and wide \[
\] was beginning to pay off in terms of volume growth – and more significantly market share.

\* \* \*

The full frontal assault on Liffe’s Bund business went ballistic on January 1\textsuperscript{st}, 1998. The DTB dropped up-front admission and annual membership fees for full members and market makers, and slashed those for clearing members. Telecommunication line fees were also dropped, replaced by a minimum transaction fee of DEM 4,500 per month.

On Wednesday October 22\textsuperscript{nd} 1997, the turning point had been reached. The DTB surpassed Liffe’s Bund market share with 52 percent of that day’s volume. From then on, the Germans never looked back.\textsuperscript{71}

In analyzing the battle for the Bund, it is reasonable to conclude that DTB was able to take advantage of the dislocation created in the market by the differences in trading systems, i.e., Liffe was open-outcry and DTB was electronic. Additionally, a change in European regulation

\textsuperscript{70} Id.
(the Maastricht Agreement), contributed to this dislocation and created an opportunity for DTB to distribute its trading system far and wide. Moreover, DTB put significant resources behind this effort. Thus, the “last leg of the stool” in taking the Bund was money – DTB bought the liquidity by not charging traders fees for trading its Bund contract. The battle for the Bund therefore resulted in a “perfect storm,” allowing for the transfer of liquidity.

In more recent times – post-CFMA – there have been (and are) dislocations that could result in additional liquidity transfers. For example, when Eurex entered the US market and competed with CBOT in the market for Treasury derivatives, there were various factors that led one to believe that Eurex had an opportunity to create another “perfect storm,” including:

--- CBOT was in the process of changing its trading system from the Deutsche-Boerse created “ACE system” (ACE meaning “Alliance between Chicago Board of Trade and Eurex) to the Liffe Connect product, thus requiring its traders to go through a complicated change in technology;

--- CBOT was also in the process of changing its clearing house from The Board of Trade Clearing Corp (“BOTCC”) to the CME clearing house. Again, this changeover required the cooperation and execution on the part of a number of parties, including the CFTC to “bless” the transfer of the open interest in treasury from BOTCC to CME. It was Eurex’s desire that it the open interest would remain at BOTCC. Had the CFTC supported that view, the battle of the treasuries would, quite likely, have turned out differently.

--- Given that one of Eurex’s parent organizations, Deutsche Boerse, was the owner of the ACE system, Eurex US was able to easily utilize this technology once CBOT changed systems. Thus, Eurex US had a built in trading system with distribution to key traders.

--- Eurex invested significant funds into the treasury product – including $18 million in 2004 in market making and other trading incentives – to attempt to attract liquidity to its platform.72

As noted above, however, Eurex did not prevail in this battle and recently announced a retreat. Eurex asserts that one of the crucial reasons for its inability to win this market was due to illegal anticompetitive activity on the part of CME and CBOT. It has filed an antitrust lawsuit alleging such claims. This lawsuit is discussed infra in Section ___.

The other crucial market dislocations that could lead to liquidity transfers post-CFMA relate to NYMEX because it is one of the few remaining bastions of open-outcry in the world. More specifically, the Intercontinental Exchange (“ICE”), an all-electronic OTC energy trading platform, has made inroads with the NYMEX natural gas contract, as well as NYMEX’s West Texas Intermediate oil contract. As of October 2005, ICE has approximately 35 percent of the

cleared market for Henry Hub natural gas. With respect to the WTI oil contract (ICE is using its UK-based futures subsidiary to list WTI), ICE has captured approximately 15-20 percent of the market within the first few weeks of listing the contract.

Additionally, as noted above, CBOT has listed precious metals contracts (gold and silver) on its electronic trading system in competition with the COMEX division of NYMEX. Thus, similar to the DTB-Liffe battle, an open outcry model is being challenged by an electronic model. CBOT has made significant inroads into the gold product, obtaining 50 percent of the market as of June 2006.

Finally, in an ironic twist of the open outcry-electronic battles, NYMEX is attempting to take liquidity from the IPE in the Brent Oil contract by attacking IPE from an open outcry model. IPE took the Brent Oil contract fully electronic in April 2005. NYMEX saw an opportunity to attempt to tap into the disgruntled open outcry traders who were going to lose their jobs. As such, NYMEX opened an open outcry exchange in Ireland and tried, through extremely generous incentive programs, to attract these traders to the pits in Ireland. Thus far, the Brent battle has not borne fruit for NYMEX.

In summary, while the CFMA, combined with technological advancements, have led to competition in the futures and options marketplace at the exchange level, there have not been any significant success stories. One crucial reason for this failure is that existing liquidity creates a very high barrier to entry. This, in turn, implies that the alleged creation of further barriers to entry will be central to antitrust concerns in this area.

IV. Basic Economic and Antitrust Principles

A. The Economic Goals of Antitrust

Exchanges may now be open to competition. But that competition may take a different form than the competition, say, between local gasoline stations. Exchange competition, as discussed above, appears to be competition “for the market.” Thus, antitrust policy should seek to allow that competition to occur, allowing the most efficient firm to succeed in the market, and for the benefits of that efficiency to be passed on to consumers.

The recognized goals of antitrust vary slightly, but we will start here with the premise that the goal of antitrust is to maximize the net economic wealth for society, by facilitating the provision of goods with higher quality and lower costs. The goal of antitrust, therefore, is explicitly not to protect incumbent firms and their (presumed) supra-competitive prices.

73 In its S-1 Registration Statement filed with the SEC in October 2005, ICE reports that it has average daily volume in its Henry Hub over-the-counter cleared natural gas contract of 29,000 contracts. NYMEX has average daily volume in its Henry Hub over-the-counter cleared natural gas contract of 8,000 contracts and 75,000 average daily volume in its cleared Henry Hub futures contract. Thus, adding NYMEX’s cleared contracts (its OTC and futures contracts) compared to ICE’s OTC contract, implies that ICE’s overall percentage is approximately 35 percent.
74 https://www.theice.com/showpr.jhtml?id=2960
75 http://www.cbot.com/cbot/pub/cont_detail/0,3206,1036+39436,00.html
76 ["...the only goal of antitrust law should be to promote efficiency in the economic sense…” Posner at 2].
B. The Rule of Reason and the Basic Elements on an Antitrust Case

The antitrust cases we will discuss here are “rule of reason” cases. The rule of reason dates back to the Supreme Court decision in *Standard Oil v. United States*. It requires for liability a logically consistent economic theory of anticompetitive harm, with the evidence to support that theory.

Any antitrust case required two elements: 1) a concentrated antitrust market; and 2) barriers to entry into that market.

1. Market Definition

Any monopolization attempt must refer to the actions of a firm that is “dominant” in an “antitrust market.” Measures of “dominance” can vary, but following *U.S. v. Aluminum Co. of America (ALCOA)*, 66 percent market share is generally considered sufficient to show dominance.

Defining an antitrust market, especially in a monopolization case, can be a far more daunting task. In general, there are always substitute for an economic product. For example, one can gain the same financial exposure from a share of stock by being long in a call with an exercise price equal to the stock price, and short in a put with the same exercise price. But that does not mean that a call/put package is in the same antitrust market as the stock. The transactions costs from acquiring the call/put combination can be significantly greater than the transactions costs of simply acquiring the stock. In the case of Eurodollars, a product traded at the CME, one can acquire the same exposure by, for example, by going long or short in a variety of short-term interest rate products.

An antitrust market has two dimensions: product and geographic (though here we will focus on the product market dimension). The United States Department of Justice/Federal Trade Commission 1992 Horizontal Merger Guidelines state for product market definition:

[T]he Agency will delineate the product market to be a product or group of products such that a hypothetical profit-maximizing firm that was the only present and future seller of those products ("monopolist") likely would impose at least a "small but significant and nontransitory" increase in price. That is, assuming that buyers likely would respond to an increase in price for a tentatively identified product group only by shifting to other products, what would happen? If the alternatives were, in the aggregate, sufficiently attractive at their existing terms of sale, an attempt to raise prices would result in a reduction of sales large enough that

77 221 U.S. 1 (1911)
78 Id.
79 148 F.2d 416 (2d Cir. 1945)
80 See, for example, at Hull, supra, at 174-5.
the price increase would not prove profitable, and the tentatively identified product group would prove to be too narrow.81

In simpler terms, a group of firms is considered to be an antitrust market if they can raise their price a small but significant amount (perhaps 5 percent) without losing a significant number of customers. With respect to commodities exchanges and the Eurodollars contract, this analysis comes down to a question of if all exchanges who traded Eurodollars jointly raised their fees 5 percent, would a significant number of customers switch to other instruments.

The difficulty with this approach is that it applies to mergers, not monopolization cases. Using this market definition in a monopolization case risks falling into the famous “Cellophane trap.”82 Assume, for example, that apples and oranges are in separate antitrust markets, and each constitutes the others’ “nearest” competitor. If a firm is able to monopolize the apples market, it will raise the price of apples so that they are now substitutes with oranges. Thus, using the Merger Guidelines approach, a small increase in the price of apples would result in customers switching to oranges. Thus, the Merger Guidelines test would conclude that apples and oranges were in the same antitrust market, and fail to detect the possibility of monopolization.

There is no definitive method of avoiding the Cellophane trap. In commodity exchange cases, however, we would look to see what competitive threats the relevant exchange has faced in the past for its contract. If those threats have consisted solely of other entities threatening to establish contracts in the same product, such a situation would be a sufficient (but not necessary) condition for establishing the product as an antitrust market. If such a condition is not met, defining the relevant antitrust market may become problematic.83

Another approach to this question was presented in FTC v. Staples.84 In this matter, the FTC sued to prevent Staples from buying its rival Office Max. The relevant product market asserted by the FTC was something along the lines of “office superstores.”85 Such a market definition was counter-intuitive, to say the least. Consumers can and do buy office supplies through a number of other distribution channels.

The crucial evidence for the FTC, however, was data that indicated that Staples’ and Office Max’s prices were between 5 and 13 percent higher in markets where one firm did not compete with another. In effect, this evidence subsumed the entire Merger Guidelines test. Since prices were higher where the two firms did not compete, eliminating the competition between the two firms via merger would increase prices to consumers.

81 http://www.ftc.gov/bc/docs/horizmer.htm. The geographic approach is similar.
83 But see Discussion of CME/LIFFE, supra.
85 More precisely, from the court decision, “[t]he Commission defines the relevant product market as "the sale of consumable office supplies through office superstores," with "consumable" meaning products that consumers buy recurrently, i.e., items which "get used up" or discarded. For example, under the Commission's definition, "consumable office supplies" would not include capital goods such as computers, fax machines, and other business machines, or office furniture, but does include such products as paper, pens, file folders, post-it notes, computer disks, and toner cartridges.”
Since exchange antitrust markets, if they can be defined on a product by product basis (which may often be appropriate), are likely to have one incumbent and one entrant, they are therefore likely to be considered concentrated.

2. Barriers to Entry

Simply having a monopoly in an antitrust market is not sufficient to exercise market power. To exercise market power, a firm must be protected by a barrier to entry – something that stops entry from occurring once the monopoly firm charges supra-competitive prices.

A variety of authors over the last 35 years have proposed a number of definitions of barrier to entry. Un fortunately, these definitions have not been entirely consistent. A recent article by McAfee, Mialon and Williams brings these definitions into focus in a tractable fashion that can be used in antitrust analysis. They break barriers to entry into economic and antitrust barriers, where the first is a subset of the second.

McAfee et. al. begin by defining an economic barrier to entry. An economic barrier to entry, “is a cost that must be incurred by a new entrant that incumbents do not or have not had to incur.” For example, the CME has been trading commodities since the late 1800’s. Assume that because of new regulation, any new competitor must gain regulatory approval from the federal government, and the approval process is onerous and uncertain. This would constitute both an economic barrier to entry and an antitrust barrier to entry.

McAfee et. al. then go on to define an antitrust barrier to entry as “a cost that delays entry, and therefore reduces social welfare relative to immediate but costly entry.” The process of operationalizing this definition is a bit involved, but what it comes down to is a combination of sunk costs, economies of scale, and uncertainty.

Sunk costs refer to costs that, once borne by the entrant, cannot be recouped by the entrant should that firm decide to exit the market. For example, if a firm decides to enter the automotive industry, it will have to build a manufacturer plant. If the firm then decides to exit the automobile business, it has on its hands a plant which may not be very valuable in other economic uses. The firm has therefore “sunk” costs into its facility as a condition of entry.

Economies of scale are also important. If a firm can enter a market at a very small scale, its sunk costs are likely to be small, and any resulting potential losses from exiting the market are also likely to be small. Thus, if a firm can compete effectively by selling one percent of the product in a particular market, antitrust barriers are likely to be low. If, on the other hand, to be successful a firm has to compete for the entire market, it raises the possibility of significant entry barriers.

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88 The Merc
89 McAfee, et. al. supra.
The final ingredient is uncertainty. *Ex ante*, it is often not very clear whether or not a potential entrant will be successful. If there is no such uncertainty, there is no risk from sinking costs, and therefore no barrier to entry.

Recent economic literature has cited the barrier to entry properties of network industries.\(^91\) A network industry can be described as having a product that is more valuable the more people use it. The telephone is a classic network product. A telephone owned by one person is useless by itself. Only if another person owns a telephone, and there are lines in between, is the first telephone useful.

Now assume a third person obtains a telephone and gets “linked” to the network. The phones of the first two telephone users now become more valuable, as they can use their telephones to reach the third person. This process continues as more people buy telephones.

The result is that local telephone networks, absent switching (a very modern event) are natural monopolies. As one telephone system gets large, it becomes more valuable and its rivals’ systems become less valuable.\(^92\)

Network economics played a starring role in the recent *Microsoft* case.\(^93\) According to the theory of the case, as Microsoft’s operating Windows system became more and more dominant, more and more software developers created their products to be compatible with Windows. This made it harder and harder for other operating systems to get into the market.

Futures and commodity exchange platforms fit the definition of network industries. The more trades and traders on a particular exchange, the more liquidity on that exchange, the more able the exchange is to serve the needs of its customers. As more traders trade, they are able to execute their trade more quickly, and get better prices for their trades.

This, in turn, has several implications. First, consistent with the discussion in Section II, it implies that competition in any commodity exchange market is competition for the (entire) market.\(^94\) In effect, the firms are competing for the right to be the monopolist, or “winner take all.” Consumers are served by this process by having the most efficient firm winning the competition for the market.

The market for a network good, by definition, is difficult to enter. By definition, upon entry the entrant’s good is inferior to the product of the established firm. Thus, the basic method for the entrant to gain customers is to “buy” or “rent” them – either by directly paying them to


\(^92\) This externality effects serves as the rationale for subsidizing universal service, which attempts to get as many people as possible in society hooked up to the telephone network.


switch products or by offering their product for an extremely low price. As the discussion above in Section II indicates, new entrants in this industry have had very little success overcoming the relevant barriers to entry. In fact, commodity markets are notoriously “tippy,” with competition often being for the market, rather than in the market. This increases the importance of economies of scale, and of any artificial barriers to entry incumbents might create.

C. Antitrust and Economics: Summary

Under a rule of reason, an antitrust plaintiff must have a theory of how consumers have been or are likely to be injured. Any antitrust plaintiff must have a well defined market that is (allegedly) being monopolized. That market must also have a barrier entry – or else even a monopolist could not charge supra-competitive prices. But for a commodity exchange antitrust case to be successful, it needs something else. It needs to find a court willing to listen to it. For such a plaintiff, this may be the most significant obstacle of all. We turn to that difficult question next.

V. Antitrust Jurisdiction and Immunity in Regulated Industries – Can Parties Get to Court?

In all regulated industries, the regulator has responsibility for at least some of the industry’s competitive practices. This sets up a potential conflict between the regulator’s actions and the court-determined antitrust law. Thus, for a plaintiff in a regulated industry to get to court, it must first show that the court has jurisdiction. Unfortunately, there is a good deal of tension in the law on this issue.

The critical issue here relates to the doctrine of Implied Repeal of, or Implied Immunity from, the antitrust laws, as well as the doctrine of Primary Jurisdiction. Simply put, these doctrines determine, in the first instance, whether a plaintiff can go to court with an antitrust claim in the context of a “regulated industry,” whether the plaintiff must pursue the matter before the federal agency overseeing the regulated industry, or whether the issue is immune from the antitrust laws altogether.

In this section we will first review the major jurisdiction on this issue. We will then comment on what we believe the appropriate law should be. As we will describe, this is a line of cases that started well, but is in danger of “falling off the tracks.” We will then review the recent history of CFTC antitrust jurisdiction.

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95 One of several articles discussing “buying customers” in an antitrust context is Kleit and Coate, Are Judges Leading Economic Theory?: Sunk Costs, the Threat of Entry, and the Competitive Process, Southern Economic Journal 60:1 (July 1993) 103-118.


A. A Brief History of the World – of Implied Immunity and Primary Jurisdiction

The seminal case in this area is *Silver v. New York Stock Exchange*.98 While *Silver* involved an antitrust challenge in the context of the securities industry, its ruling has been equally relied upon in the commodities area.99 In *Silver*, the plaintiff, Harold Silver, operated a securities firm, Municipal Securities, Inc. to trade in corporate over-the-counter securities.100 Because communication with the marketplace and, in particular, obtaining market data was (and is) of great importance in trading activities, Silver, who was not a member of the New York Stock Exchange (“NYSE”), arranged to have direct private telephone wire connections with members of the NYSE. While the NYSE originally approved of the connections, it later rescinded its decision and cut-off Silver’s connection to the important securities trading data.101 Silver brought the action alleging, *inter alia*, violations of Sections 1 and 2 of the Sherman Act. The case went to the Supreme Court on the issue of “whether the Securities Exchange Act has created a duty of exchange self-regulation so pervasive as to constitute an implied repealer of our antitrust laws, thereby exempting the Exchange from liability in this and similar cases.”102

The *Silver* Court began its analysis by noting the difficulty in reconciling the pursuit of eliminating antitrust restraints with the important duties of self-regulation imposed on exchanges. Such self-regulation inevitably, at times, conflicts with the objectives of the antitrust laws.103 Nonetheless, the Court held that, despite the NYSE’s “general power to adopt rules governing its members’ relations with nonmembers,” it was not exempted from the antitrust laws.104 The Court made clear that:

> The Securities Exchange Act contains no express exemption from the antitrust laws or, for that matter, from any other statute. This means that any repealer of the antitrust laws must be discerned as a matter of implication, and “it is a cardinal principle of construction that repeals by implication are not favored.” [citations omitted]. Repeal is to be regarded as implied only if necessary to make the Securities Exchange Act work, and even then only to the minimum extent necessary.105

As noted in the academic literature, *Silver* articulated a basic two-part test for implied repeal:

> Immunity made be predicated upon either (1) a finding that the administration of the regulatory statute is incompatible with the maintenance of private antitrust suits (statutory incompatibility); or (2) the defense that the activity’s competitive

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99 *See*, e.g., *Ricci v. Chicago Mercantile Exchange*, 409 U.S. 289, 303 (1973) (*discussing Silver*).
100 *Silver*, 373 U.S. at 343-44.
101 *Id.*
102 *Id.* at 347.
103 *Id.* at 349.
104 *Id.* at 357.
105 *Id.*
impact, in the absence of direct agency oversight, is the minimum necessary to fulfill self-regulatory duties under the regulatory statute (“rule of reason”).\textsuperscript{106}

Although there was a comprehensive regulatory framework in place, there was no direct securities regulation that addressed the telephone issue in \textit{Silver}. Accordingly, the Court found that the defense of Implied Immunity failed.\textsuperscript{107}

The next significant decision in the “get to court” area involved the Chicago Mercantile Exchange (“CME”), \textit{Ricci v. Chicago Mercantile Exchange}.\textsuperscript{108} While the \textit{Silver} Implied Immunity doctrine was reviewed, the decision ultimately turned on the issue of Primary Jurisdiction. That is, the Court examined whether, given apparent tension between the dictates of the Commodity Exchange Act, which is a crucial law that governs the derivatives marketplace and the antitrust laws, the dispute should be sent to the regulator – in this case the predecessor to the Commodity Futures Trading Commission, the Commodity Exchange Administration – to determine whether the antitrust claims should proceed to court or be decided at the agency level.\textsuperscript{109}

In \textit{Ricci}, the plaintiff alleged that the CME transferred the plaintiff’s membership in the exchange to another entity without notice or a hearing. Ricci was excluded from trading on the CME for almost a month, after which he purchased another membership at a much higher price than the cost of his previous membership.\textsuperscript{110}

The \textit{Ricci} Court undertook a thorough analysis of the Commodity Exchange Act and the accompanying regulations promulgated thereunder before summarizing the problem in the case as:

\ldots[A]ris[ing] when the reach of the antitrust laws is also at least arguably protected or prohibited by another regulatory statute enacted by Congress. Often, but not always, the other regime includes an administrative agency with authority to enforce the major provisions of the statute in accordance with that statute’s distinctive standards, which may or may not include concern for competitive considerations.\textsuperscript{111}

At the time of \textit{Ricci}, the CEA did not contain any antitrust provision, i.e., any directive that required the Commodity Exchange Commission to review or consider the impact of the

\begin{flushleft}
\textsuperscript{106} After Gordon at 117.
\textsuperscript{107} 373 U.S. at 357.
\textsuperscript{108} 409 U.S. 289 (1973).
\textsuperscript{109} Id., at 290. \textit{See also United States v. Western Pacific Railroad}, 352 U.S. 59, 64 (“Primary jurisdiction… applies where a claim is originally cognizable in the courts, and comes into play whenever enforcement of the claim requires the resolution of issues which, under a regulatory scheme, have been placed within the special competence of an administrative body; in such case the judicial process is suspended pending referral of such issues to the administrative body for its views”).
\textsuperscript{110} Ricci, 409 U.S. at 290-91.
\textsuperscript{111} Id. at 299-300.
\end{flushleft}
antitrust laws in undertaking its activities. Nonetheless, the Ricci Court distinguished Silver and held that the doctrine of Primary Jurisdiction applied to the matter. As a result, the dispute was stayed and sent to the Commodity Exchange Commission for resolution. The Court’s decision rested on three important premises:

(1) that it will be essential for the antitrust court to determine whether the Commodity Exchange Act or any of its provision are “incompatible with the maintenance of an antitrust action; (2) that some facets of the dispute between Ricci and the Exchange are within the statutory jurisdiction of the Commodity Exchange Commission; and (3) that adjudication of that dispute by the Commission promises to be of material aid in resolving the immunity question.

The next step in the progression of the “get to court” cases was Gordon v. New York Stock Exchange. In Gordon, the plaintiff alleged that a variety of NYSE rules and practices, in particular fixed commission rates, violated the Sherman Act. In reviewing the issue, the Court made clear that determining antitrust immunity and/or implied repeal involved a fact-intensive analysis: “Resolution of the issue of antitrust immunity for fixed commission rates may be made adequately only upon a thorough investigation of the practice in the light of statutory restrictions and decided cases.” Upon conducting this review, the Court concluded that “the commission rate practices of the exchanges have been subjected to the scrutiny and approval of the SEC. If antitrust courts were to impose different standards or requirements, the exchanges might find themselves unable to proceed without violation of the mandate of the courts or of the SEC.” Accordingly, the Court dismissed the matter based on the Implied Repeal/antitrust immunity doctrine.

The next significant implied repeal case involving an antitrust matter and the Commodity Exchange Act was decided by the Second Circuit in 1985: Strobl v. New York Mercantile Exchange. This matter is important from an implied repeal perspective because the underlying

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112 After Gordon at 119 & 122 (“under the Commodity Exchange Act at [the] time, [t]he [CEA’s] area of administrative authority does not appear to be particularly focused on competitive considerations; there is no express provision in the Act directing administrative officials to consider the policies of the antitrust laws in carrying out their duties…”)(citing Ricci at 302 n.13).
113 Ricci, 409 U.S. at 302-06.
114 Id. at 302. Notably, the Court stated that it did not “find that Congress intended the Act to confer general antitrust immunity on the Exchange and its members with respect to that area of conduct within the adjudicative or rule-making authority of the Commission…” Id.
116 Id. at 661.
117 Id. at 663.
118 Id. at 689. The Court distinguished Silver by noting that “the regulatory agency [in Silver] could not prevent application of the rules that would have undesirable anticompetitive effects; there was no governmental oversight of the exchange’s self-regulatory action, and no method of insuring that some attention at least was given to the public interest in competition.” Id. at 684.
119 768 F.2d 22 (2d Cir. 1985), cert. denied, 474 U.S. 1006 (1985). In the interim period, the Supreme Court found implied repeal in a securities case, United States v. National Association of Securities Dealers, Inc., 422 U.S. 694 (1975)(“NASD”). In NASD, the Court was faced with the question whether the National Association of Securities Dealers, and other entities, had agreed to restrict the sale, and to fix the resale prices, of mutual fund shares in the secondary market. Id. at 700. The NASD Court held that the “pervasive regulatory scheme” gave the Securities and Exchange Commission authority to regulate such conduct and that the implied repeal of the Sherman Act with
factual claims in the case involve price manipulation – an offense that is specifically prohibited under the CEA. The defendants in *Strobl* argued that, based on *Silver* and *Gordon*, the antitrust laws no longer applied to activity that violated the CEA. The Second Circuit was not persuaded and, found that the case law held otherwise:

Defendants claim that *Silver* and *Gordon* can be read to say that when a commodities exchange activity is subject to the jurisdiction of some regulatory body, it is exempt from the antitrust laws. This over-simplified reading does not survive closer analysis. Both *Silver* and *Gordon* discussed potential conflicts between the antitrust laws and a regulatory scheme. [citations omitted]. Their holdings teach that antitrust laws may not apply when such laws would prohibit an action that a regulatory scheme might allow.

The *Strobl* Court then articulated the *Gordon* “plain repugnancy” standard, i.e., that only where there is a plain repugnancy between the antitrust laws and the underlying regulatory scheme will implied repeal be found. The Court further noted that a simple “overlap” between the antitrust laws and the regulatory scheme is not sufficient for implied repeal.

After a detailed analysis of the price manipulation provisions of the CEA, as well as the legislative history of the 1974 amendments to the CEA, the *Strobl* Court held that “Congress desired the continued application of the antitrust laws to those anti-competitive practices that also violate the Commodity Exchange Act. There is no doubt that such laws have traditionally been applied to the commodities industry.”

Almost twenty years later, the Second Circuit was again faced with an implied repeal matter – in the securities, rather than commodities area: *In re: Stock Exchanges Options Trading Antitrust Litigation*. While not overruling or even negatively commenting on *Strobl*, the Second Circuit appeared to reverse course and find implied repeal of the antitrust laws in a securities law matter. The Court held that implied repeal was necessary “to preserve the authority of the SEC to regulate th[e] conduct [at issue].”

respect to that conduct was necessary in order to preserve the Commission flexibility to perform its authorized function. *Id.* at 734-35.

120 *Id.* at 25-26, n.1.
121 *Id.* at 26.
122 *Id.* at 27.
123 *Id.*
124 *Id.*
126 317 F.3d 134 (2d Cir. 2003).
127 *Id.* at 148 (“To be sure, antitrust immunity is not to be presumed from the mere existence of overlapping authority; rather the analysis must focus on the ‘potential’ for ‘conflicts between the antitrust laws and an authorized’ regulatory scheme”).
128 *Id.*
The “conduct at issue” involved trading of equity options on multiple exchanges. The Stock Options Court went to great pains to demonstrate that the Securities and Exchange Commission ("SEC") had considered this question under its governing statutes at great length and over a period of thirty years, taking contradictory positions over time. The Court identified the implied immunity test as “operating in narrowly-defined situations”:

First, when an agency, acting pursuant to a specific Congressional directive, actively regulates the particular conduct challenged, … and second, when the regulatory scheme is so pervasive that Congress must be assumed to have forsworn the paradigm of competition.

The Court noted that a conflict between the antitrust laws and the regulation of equity options trading did not exist; nonetheless:

The appropriateness of an implied repeal does not turn on whether the antitrust laws conflict with the current view of the regulatory agency; rather it turns on whether the antitrust laws conflict with an overall regulatory scheme that empowers the agency to allow conduct that the antitrust laws would prohibit.

Accordingly, despite the Strobl Court’s clear focus on “conflicts” between the antitrust laws and the regulatory scheme at issue as the lynchpin in the implied repeal context, the Stock Options Court “saw no way to reconcile [] SEC authority… with the antitrust laws” even absent any apparent conflicts between the statutes. We note that the Court reached its decision despite an amicus brief from both the SEC and the Department of Justice urging that it not grant immunity.

The Supreme Court recently touched – but did not make any new pronouncements on – implied repeal in the context of the Telecommunications Act of 1996 in Verizon Communications v. Law Offices of Curtis Trinko. This case is significant from a number of perspectives in that the Court addressed issues important in the commodities area – refusals to deal in regulated industries, the “Essential Facilities” Doctrine, as well as monopoly leveraging. These topics are discussed in greater detail in Section ___.

Briefly, Trinko involved an antitrust challenge by a customer of a competitor of Verizon Communications, which was the local exchange carrier (“LEC”) for telecommunications in New York State. The 1996 Telecommunications Act sought to “uprooo[t]” the incumbent LEC’s monopoly and to introduce competition in its place. In other words, the statute provided for

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129 Id. at 139-42.
130 Id. at 147.
131 Id. at 149.
132 Id. at 150.
133 540 U.S. 398 (2004). While this Section of the Article focuses on the Implied Repeal cases from the securities and/or commodities area, we feel it worthwhile to review Trinko because of its recent comments on the Implied Repeal doctrine, as well as the fact that Trinko was the basis of the decision in New York Mercantile Exchange v. IntercontinentalExchange, 389 F.Supp.2d 527 (S.D.N.Y. 2005), discussed infra.
134 Trinko, 540 U.S. at 402.
new competition to emerge in the local telephone market. Trinko alleged that, despite Verizon’s obligations to act fairly and competitively vis a vis its competition pursuant to the statute, as well as a consent decree that it had entered into with the Federal Communications Commission, Verizon was filling rivals’ service orders on a discriminatory basis “as part of an anticompetitive scheme to discourage customers from becoming or remaining customers of competitive LECs, thus impeding the competitive LECs’ ability to enter and compete in the market for local telephone service.”

As to implied immunity, the Trinko Court, in dicta, noted that:

[A] detailed regulatory scheme such as that created by the 1996 Act ordinarily raises the question whether the regulated entities are not shielded from antitrust scrutiny altogether by the doctrine of implied immunity. In some respects the enforcement scheme set up by the 1996 Act is a good candidate for implication of antitrust immunity, to avoid the real possibility of judgments conflicting with the agency’s regulatory scheme “that might be voiced by courts exercising jurisdiction under the antitrust laws.”

As such, while the relevant passage is only dicta, it can be argued that Trinko appears to reinforce the Strobl standard of reviewing whether the antitrust laws and the regulatory scheme at issue “conflict” in some respect, as opposed to the general “pervasive regulatory scheme” analysis put forward by Stock Options.

B. Making Sense of the “Get to Court” Cases

To say that the Implied Repeal/Primary Jurisdiction cases do not provide adequate guidelines or a satisfactory standard to follow in future cases is an understatement. Nonetheless, there appear to be a few “boundaries” that, at least, highlight the edges of the doctrine.

We suggest that the law on antitrust immunity should rest on several tenets. First, that an administrative agency has the ability to immunize firms from antitrust immunity. Presumably, the whole point of an administrative agency is that it has specialized authority over a segment of the economy where open markets are subject to some type of failure. Thus, it is not surprising that an agency may wish to trump the antitrust laws. Courts should consider allowing this out of respect for the agency’s mission.

This does not mean that it is should be easy to gain antitrust immunity. Consumers’ rights to the benefits of competition are important, and should be protected. If agencies do not directly assert antitrust immunity, or have policies that directly contradict antitrust principles, then it should not be granted. Here, we believe there is much wisdom in the “plain repugnancy” standard articulated by the Gordon court.

The early cases in the line discussed above hold true to these principles. It is only when we get to the Stock Options case that problems arise. In that matter, the defendants were granted

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135 Id. at 404.
136 Id. at 406 (citations omitted)(emphasis added).
antitrust immunity, despite a plea otherwise from the SEC, the relevant regulatory authority. Further, the grounds for the denial was not that the activity directly regulated by the SEC, but that it *could* be directly regulated by the SEC. Thus, such a ruling does not even allow a regulatory agency to deny authority.

The *Trinko* decision, while not as troublesome as *Stock Options*, also generates some qualms for us. *Trinko* related to a competitive matter directly regulated by the FCC. FCC regulation is broad and perhaps all-encompassing. If any party has a complaint about that system, the FCC has a clear administrative process to deal with such a complaint.

Now compare the FCC to the CFTC. Unlike the FCC, the CFTC does not have a broad regulatory regime. Historically, much of its authority has been delegated to self-regulatory organizations, such as the CME and CBOT. Though antitrust was added as a core principle in 2000 in the CFMA, to date the CME/LIFFE matter is the first case the CFTC has been asked to opine upon.

Other questions remain. If a complaint is sent to the CFTC, does the CFTC have to respond? If it does not, is the complainant precluded from going to court? Further, what remedies does the CFTC have? The CFTC administrative process is enormously time consuming. As of the beginning of 2005, the CFTC had cases that involved events occurring in 1994 and before still before it. Should the CFTC have the ability to grant injunctive relief? Should the CFTC be able to assess treble antitrust damages?

All this implies that the CFTC should have the right to assert antitrust immunity for certain matters. But if the CFTC does not, that should not preclude parties from gaining their day in court.

IV. **Types of Antitrust Cases**

Rule of reason cases can fall into several categories. Of particular importance to commodity exchanges are vertical restraint cases, predation cases, and essential facilities cases.

A. **Vertical Restraint Cases**

1. **Theory**

   A vertical restraint is a restraint that a producing firm places on its customers. For example, refiners often constraint their affiliated gasoline stations not to sell other brands of gasoline. Automobile manufacturers require their dealers to have extensive showrooms.

   Non-price vertical restraints are subject to rule of reason. The rule of reason requires an anticompetitive theory and evidentiary support for that theory. Here we will focus on the

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   Vertical restraints that set a minimum price are *per se* illegal. See *Dr. Miles Medical Co. v. John D. Park & Sons Co.*, 220 U.S. 373. Vertical restraints that set a maximum price are subject to rule of reason analysis. See *State Oil Co. v. Khan*, 522 US 2 (1997).
potential for such a restraint to create significant barrier to entry, and therefore significant reductions in the ability of an entrant to compete in the market.  

Such an anticompetitive theory has three necessary conditions. First, there must be significant economies of scale in the relevant industry. This condition seems to be met with respect to commodity exchanges. It would appear that to be viable in a particular contract, a trading platform must have a substantial share of the relevant market. Indeed, we discuss above how competition between exchanges is “for the market,” with the winner of the competition gaining all of the relevant business.

Second, the number of firms potentially precluded by the restraint in question must be of such size to deter the potential entrant from growing large enough to achieve financial viability. In this case, if the competition is truly for the entire market, excluding any sizable block of customers might be enough to “tip” the market back toward the incumbent.

Finally, the restraint itself must be of “competitive significance.” That is, it must pose a large enough economic deterrent to stop the affected firms from switching away from the incumbent. Thus, if the restraint in question “ties up” one percent of a market, it is not likely to be of competitive significant. On the other hand, if it ties up 50 percent of a market, it is likely to be competitively significant.

It is also possible that such a restraint has pro-competitive effects on economic efficiency. The standard example is to deter free riding or “shirking” on an unpriced resource. An issue that may be of importance in commodity exchange competition is one exchange “free-riding” off the settlement (closing) price of another exchange.

2. Application I: USFE v. CBOT/CME

In November 2003, U.S. Futures Exchange (USFE, a subsidiary of EUREX, a German exchange company) filed suit in Federal Court against the Chicago Board of Trade and the Chicago Mercantile Exchange. The suit essentially asserted that CBOT (with perhaps some help from CME) attempted to preclude a U.S. Futures entrant exchange from having access to clearinghouse and regulatory services.

In brief, the pertinent facts are as follows: On January 10, 2003, Eurex announced that USFE would launch a U.S. exchange to compete with CBOT and CME in financial and stock

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138 Alternative anticompetitive theories of vertical restraints deal with restraints as collusive facilitation devices. Get citation. These do not appear relevant, at least to date, for commodity exchanges.
futures and derivatives. In April of 2003, CBOT announced it was ending its 78 year old relationship with TCC, a clearinghouse owned in part by CBOT members.

On May 20, 2003, Eurex entered into an agreement with TCC to purchase all of TCC’s stock, apparently for the purposes of using TCC as a clearinghouse for the incoming USFE exchange. On May 19 (one day previously) CBOT offered to purchase TCC for (according to the USFE November 2003 brief at 10) “approximately $150-200 million, for the single purpose of shutting down TCC.” This offer was rejected by TCC. Subsequently, TCC stockholders voted to approve the acquisition by Eurex, after Eurex agreed to pay TCC stockholders additional monies.

Taking the allegations by USFE as true, we can see the clear outline of a rule of reason antitrust case. Commodity exchanges are potentially a concentrated market. Given the discussion above of network effects, they would appear to have important barriers to entry. Clearinghouses are necessary to compete in the commodity exchange market. Thus, if CBOT can deny USFE access to clearinghouse services, a vertically related product, then CBOT would be able to maintain any market power they might have over services provided at a commodity exchange.

This theory, however, poses several factual challenges. First, USFE will be required to show that commodity exchanges are a relevant antitrust market. In particular, a variety of financial contracts are traded “over the counter,” as the result of bilateral negotiations between parties. To advance its market definition argument, USFE asserted [para 63] that “[a] registered exchange differs from other trading environments, such as over-the-counter trades, because the regulatory environment allows for anonymity, greater liquidity, a distinct customer base, important trading and position benefits, and distinct tax advantages.”

Second, USFE needs to show that acquiring TCC reduced significantly the cost and/or the time of acquiring clearinghouse services. Certainly USFE could have created its own clearinghouse service, or perhaps used the EUREX clearinghouse in Germany for this regards. But these alternatives may well have been costly and likely not successful based on the experience of previous exchanges.142

Finally, even should USFE be able to show antitrust liability on the part of the defendants, they would still need to show damages. Here, the damages would be the extra funds needed to acquire TCC, above and beyond what they would have paid had CBOT not interfered in the process.

But CBOT also has a potential burden of its own. There is likely no efficiency justification for purchasing a firm merely to shut it down, as the USFE complaint alleges. This type of output-contracting arrangement, as with price fixing and territorial allocation, is arguably per se illegal under the antitrust laws

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142 For example, the BrokerTec Exchange, discussed infra established its own clearing house at much expense and lack of success.
The reason for per se cases is now well known. In the three-pronged theory, if a particular practice is 1) likely to cause harm, 2) unlikely to generate benefit, and 3) showing the economic effects of that harm may be difficult to show, a per se rule can represent an efficient legal standard. Shutting down a clearinghouse to stop it from being acquired by a potential rival may well meet this standard.

First, shutting down an economic unit that would otherwise operate is likely to reduce economic output, harming consumers. Second, it is very difficult to establish an economic efficiency argument from this behavior. Third, if the Cellophane trap problem discussed above makes it difficult to establish market definition in these contexts, then economic effects may well be difficult to show empirically. Thus, CBOT may have difficulty defending its actions from a legal attack based on a per se theory.

Currently, the case between USFE and CBOT is in the discovery phase. CBOT and CME filed motions to dismiss the lawsuit. The Court, in a short, but harshly worded opinion, denied these motions, sending the case into discovery. If the case is not resolved by way of settlement or summary judgment, it will likely go to trial in 2007.

3. Application II: CME/LIFFE.

a. The Restraint in Question

CME operates a trading platform for Eurodollars futures contracts. Long or short positions in Eurodollars futures essentially constitute a position on the future movement of interest rates over a three month period. The payoff to owning (going long) N contracts, each with “nominal value” of $1,000,000, acquired at a reference price P, equals

\[ \text{Payoff} = \left( \frac{90}{360} \right) N * $1 \text{ million} * (CD - (1-P)), \]

where CD is a calculated “average” offer rate on three month commercial deposits of U.S. dollars in London banks at the relevant point in time. (So the 90/360 represents the length in years of the contract.) For example, assume a customer take a long position in 200 contracts at a reference price (P) of 0.96 for settlement in three months. At the time of settlement, the average CD rate on U.S. dollars in London is 4.4 percent annualized. The customer’s payoff is therefore

\[ \text{Payoff} = \left( \frac{90}{360} \right) *$200 \text{ million} * (0.044-0.04) = $200,000. \]

(This works out to $25 per basis point per contract.) Eurodollars are designed to hedge risk for firms that that have pre-existing risks due to fluctuations in short term interest rates. Such firms,

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144 U.S. Futures Exchange v. Board of Trade of the City of Chicago, 1:04-cv-06756 (N.D. IL August 22, 2005)(Judge James B. Zagel).
145 This is equivalent to the London Interbank Offer Rate (LIBOR) used in other interest rate products.
146 Due to financial market conventions, the proper way to interpret a reference price of 0.96 is as an interest rate of 1 minus the price, 0.04, or a 4 percent annualized rate.
for example, could be either long or short in short-term commercial loans or paper that has floating interest rates denominate in U.S. dollars.\textsuperscript{147}

LIFFE was a new entrant in Eurodollar futures trading platforms, competing with CME’s established Eurodollar futures platform. LIFFE began competing on March 18, 2004. CME had previously created a “block trading facility,” which allowed customers to trade large blocks of Eurodollar contracts without exposing them on the “floor” of the CME exchange. The basic rationale behind block trading facilities is that block trading allows large numbers of contracts to be transacted at a single price without the “price slippage” that would occur were these contracts to be traded on the floor of the exchange.

A major customer of CME used the CME’s block trading facility to liquidate its position of approximately 36,000 Eurodollar contracts with several different settlement dates on CME and moved them to LIFFE on June 11, 2004. Then, through pre-arrangement, the customer replicated this position by purchases on LIFFE’s Eurodollar futures exchange.

Subsequent to this action, CME revised its interpretation of its own exchange wash trading rules, Rule 432.D, and declared that further such prearranged trading would be considered a “fictitious” or a “wash trade.”\textsuperscript{148} LIFFE then presented a petition to the CFTC, asserting that this interpretation of CME’s rule constituted an anticompetitive restraint of trade, in violation of Core Principle 18 of the 2000 CFMA.

\textbf{b. Can a Manufacturer Restrict Its Rivals’ Customers from Using its Facilities?}

Before we further delve into this issue, one topic must be dealt with. It is clear that CME is under no antitrust obligation to offer a block trading facility. Thus, given that they offer a block trading facility, under the antitrust laws, are they required to offer it in a non-discriminatory fashion to customers of their rival, LIFFE?

This question was directly addressed in the D.C. Circuit \textit{en ban per curiam} decision in the Microsoft case.\textsuperscript{149} A crucial issue in that case was whether Microsoft could impose restrictions on the use of its products when they were licensed to original equipment manufacturers (OEMs). The Justice Department’s theory of the case asserted that Microsoft’s restrictions on OEM’s use of its products was anticompetitive. Microsoft claimed, however, that its property rights under copyright laws precluded antitrust liability.

Microsoft’s argument was not well received by the D.C. Circuit. In finding the relevant restraints actionable under the antitrust laws, the court stated:

\begin{refnotes}
\item[147] For details on the CME Eurodollars specifications, see http://www.cme.com/clearing/clr/spec/contract_specifications_all.html?type=itr.
\item[148] Wash trading is \textit{per se} illegal by the Commodity Exchange Act, codified as U.S. Code. Title 7, Chapter 1, Sec. 6c. However, the definition of wash trading is not clear. Here we will abstract from the highly complex and confusing issues surround the definition of the term “wash trade.”
\end{refnotes}
Microsoft argues that the license restrictions are legally justified because, in imposing them, Microsoft is simply "exercising its rights as the holder of valid copyrights." Appellant's Opening Br. at 102. Microsoft also argues that the licenses "do not unduly restrict the opportunities of Netscape to distribute Navigator in any event." Id.

Microsoft's primary copyright argument borders upon the frivolous. The company claims an absolute and unfettered right to use its intellectual property as it wishes: "If intellectual property rights have been lawfully acquired," it says, then "their subsequent exercise cannot give rise to antitrust liability" Appellant's Opening Br. at 105. That is no more correct than the proposition that use of one's personal property, such as a baseball bat, cannot give rise to tort liability. As the Federal Circuit succinctly stated: "Intellectual property rights do not confer a privilege to violate the antitrust laws." In re Indep. Serv. Orgs. Antitrust Litig., 203 F.3d 1322, 1325 (Fed. Cir. 2000).150

We suspect that the court’s opinion does not do justice to the nuances of Microsoft’s position. Nevertheless, the decision is clear: claims of property rights do not preclude antitrust liability.

The parallel between Microsoft and CME/LIFFE is also clear. Microsoft was under no requirement to license its products. Given that it did, however, such licenses could not contain anticompetitive provisions. This rule therefore implies that CME was under no obligation to offer a block trading facility. Given that it did, however, CME’s rules governing the facility can not contain anticompetitive provisions.

c. Available Information on Market Definition

As discussed above, for a monopolization case to proceed, the moving party must show that the threat of monopoly occurs in a distinct antitrust market. This can pose a very difficult task, as can be observed in the CME/LIFFE matter.

Eurodollar futures contracts are linked to the commercial interest rate on U.S. dollar-denominated bank deposits in London. They are one of a class of contracts referred too as “short term interest rate” (or “STIR”) products. STIR products serve to mitigate the interest rate risk a variety of firms have on their short-run financial obligations. Two obvious substitutes for Eurodollar contracts are Euribor futures contracts, a three month contract based on Euro interest rates instruments, and the one month LIBOR contracts, which, like Eurodollars, are based on the London interbank rate. In addition, there are a variety of over the counter (non-exchange traded) STIR instruments available.

According to Kolb and Overdahl, there has been a great deal of customer switching in these products in the last 20 years.151 In particular, customers have moved from three month

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150 Id. at 92-93.
151 Kolb and Overdahl, Understanding Futures Markets,(2006, 6th ed.), 276-278.
treasury futures to Eurodollar futures. This might imply the two products are in the same market. Under the Merger Guidelines approach, however, the test is whether customers would switch were there a “small but significant” change in the fees for using a particular exchange.

The challenge for LIFFE in this proceeding was to present evidence showing that Eurodollar futures trading platforms constituted a separate antitrust market. Indeed, LIFFE had to demonstrate a market for Eurodollars that does not include the other STIR products. It is difficult to conclude that LIFFE met its burden before the CFTC.

In its November 19, 2004 letter to the CFTC, LIFFE asserted as one sign of market power that CME engaged in price discrimination against different classes of members. The theory here is that in a competitive market all customers must be offered the same price, or the lower priced firm will take customers from the higher priced firm. CME’s pricing, however, can be seen as merely offering lower prices to those members who invested capital in CME. It is perfectly consistent with competition. For example, one could imagine a private golf country club opening up its course to non-members once a week for a large greens fee, even in a competitive market for golf clubs.

LIFFE also asserted in its answers to questions on November 19, 2004 that Eurodollar futures are functionally different from other STIR products that are denominated in other, as those have different interest rate fluctuations. In addition, LIFFE posited that OTC instruments are not substitutes because they are not exchange traded, and therefore do not offer anonymity, price transparency, or resolve credit concerns.

Focusing on different product attributes is a beginning to a market definition analysis. But the moving party needs to show that these differences are competitively important to these products’ customers. LIFFE did not do so.\textsuperscript{152}

Perhaps the best LIFFE attempt was in its April 11, 2005 letter (at 13-15). In this letter LIFFE presented a series of price and product changes CME made after LIFFE announced its decision to enter into a Eurodollar platform, similar to the approach that prevailed in Staples. However, CME made the obvious rebuttal that these innovations were a part of general industry trends toward modernization and new products. To sustain its point, LIFFE would have to show that these actions were a result of the LIFFE entry, and that other firms producing STIR products did not make similar actions. LIFFE did not address this question.

In conclusion, LIFFE did not meet its burden of showing that Eurodollar futures trading platforms constitute a separate antitrust market.

\textsuperscript{152} In addition, LIFFE asserted (at 12) that Eurodollars have a “high degree of price correlation to OTC instruments,” which would imply that OTC instruments might be a competitive substitute for Eurodollars. As Werden and Froeb, Correlation, Causality, and All that Jazz: The Inherent Shortcomings of Price Tests for Antitrust Market Delineation, Review of Industrial Organization June 1993; 8(3): 329-53, show, however, price correlations do not shed useful information on questions of market definition.
d. **Barrier to Entry Analysis**

Once the market definition analysis is complete, it is then necessary to determine whether or not the restraint in question constituted a “significant” barrier to entry. There are two ways we will approach this question in the CME/LIFFE matter. First, we will ask if the restraint in question significantly increased the time it would take for LIFFE to become a competitive force in Eurodollars. Second, we will example the costs the restraint may have imposed upon customers who may have desired to switch from CME to LIFFE.

(i) **Time To Entry Analysis**

One alternative for LIFFE’s customers to avoid the CME rule is for these clients to simply allow their positions on CME to expire, and then take up new positions on LIFFE. There are, however, two potential problems with this remedy.

The first problem is that it could be expensive for customers to hold positions on two different exchanges for the length of their contracts. This might require two sets of monitoring clearing operations, and two sets of broker-dealer relationships. LIFFE, however, did not make an argument that these costs would be important.

It can also be argued that time is an important barrier to entry here. If LIFFE customers are required to have their CME positions expire, it will take them time to move onto LIFFE. How much time depends on the length of the contracts.

To examine this question, we looked at CME Eurodollar open interest on April 22, 2005 (a date chosen at random). We calculated in each three month period what fraction of contracts expired. There were approximately 8.15 million open contracts on April 22. 1.4 million contracts, or 17.3 percent, expired in three months. Obviously, 17.3 percent is not sufficient to support new entry in a network economy, where networks effects due to liquidity issues make the competition for the entire market.

One year into the future, the fraction of expired contracts rises to 60.3 percent, and two years in to the future the fraction of contracts rises to 83.4 percent. Given that network effects imply one has to have a majority of the relevant market (under the maintained assumption that Eurodollar futures exchanges are the relevant market), this data clearly indicates that the restraint could enable a Eurodollar monopolist (as CME is posited to be) to enjoy monopoly profits for at least one year.

Making a determination of time to entry past one year requires certain assumptions. Over half of the contract would be available at the one year mark. It seems unreasonable, however, to expect a new entrant to get (almost) 100 percent of the new contracts that are entered into that are designed to replace to expiring contracts.
Table 2
CME Eurodollar Open Interest
April 22, 2005
Total Contracts: 8,157,285
Source: Wall Street Journal

<table>
<thead>
<tr>
<th>Months to Settlement</th>
<th>Cumulative Contracts</th>
<th>Percent of all Contracts</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>1,409,281</td>
<td>17.3%</td>
</tr>
<tr>
<td>6</td>
<td>2,796,916</td>
<td>34.3%</td>
</tr>
<tr>
<td>9</td>
<td>4,044,894</td>
<td>49.6%</td>
</tr>
<tr>
<td>12</td>
<td>4,918,277</td>
<td>60.3%</td>
</tr>
<tr>
<td>15</td>
<td>5,584,939</td>
<td>68.5%</td>
</tr>
<tr>
<td>18</td>
<td>6,059,146</td>
<td>74.3%</td>
</tr>
<tr>
<td>21</td>
<td>6,519,868</td>
<td>79.9%</td>
</tr>
<tr>
<td>24</td>
<td>6,805,676</td>
<td>83.4%</td>
</tr>
<tr>
<td>27</td>
<td>7,030,697</td>
<td>86.2%</td>
</tr>
<tr>
<td>30</td>
<td>7,205,636</td>
<td>88.3%</td>
</tr>
</tbody>
</table>

(ii) Cost of Exit as a Barrier to Entry

Assuming that simply allowing positions to roll over is not a competitive alternative, the remaining path, absent the use of the block trading facility, for CME customers to switch to LIFFE is for them to trade out their positions on CME, and trade back into them on LIFFE. The question then becomes whether or not the costs of such trades are significant, relative to the cost savings that a more competitive exchange might offer.

LIFFE has asserted that to switch the 36,000 contracts from CME to LIFFE by trading on the CME floor would impose a cost on the relevant customer of approximately $1.1 million, or about $30.55 per contract. The cost is generated by calculating the average bid-ask spread that a customer would have to pay to move contracts.\textsuperscript{153} Our review indicates that LIFFE did not accounted for any price slippage\textsuperscript{154} (especially on LIFFE) that would have occurred should a customer attempt to get out of this many positions. Thus, the LIFFE figure appears to be an underestimate.

How much could a customer save in exchange usage fees by switching to LIFFE? Perhaps not very much. LIFFE stated that a customer could save only at most 18 cents per contract.\textsuperscript{155} Since contract fees appear relatively small relative to contract values (perhaps 40

\textsuperscript{153} LIFFE April 11, 2005 letter at 2-3.
\textsuperscript{154} For a discussion of price slippage (or “market impacts”) see Harris, Trading and Exchanges (2003) 72-73, and the discussion above.
\textsuperscript{155} LIFFE April 11, 2005 letter at 4.
cents on a contract), this may well have been a reasonable estimate. Thus, the costs of switching contracts are far greater than the savings on those contracts, and thus may well be considered a significant barrier to entry.156

The figures LIFFE presented to the CFTC were made available to CME, and CME was given the opportunity to respond to them. CME, however, chose not to respond.157 Given this, it may be appropriate to accept LIFFE’s position on this issue.158

e. CME/LIFFE Conclusion and the Difficulty with the *Trinko Dicta* in the Commodity Exchange Arena

Faced with a complaint, the CFTC did very little. It issued no subpoenas. There is no evidence it conducted interviews with interested parties. It merely issued requests for the two parties to submit letters to it.

The CFTC never issued any opinion in this matter. Rather, on August 31, 2005, seventeen months after it filed its complaint, LIFFE announced it was closing its Eurodollar trading facility. LIFFE had little choice, for after CME issued its “interpretation” of its wash trading rule, LIFFE was unable to wrestle any significant Eurodollar open interest or volume from CME.159

While, as noted *infra*, Section ____, the Supreme Court’s recent decision in *Trinko* did not make any new law in the implied immunity doctrine, it did make some dangerous “noise” by way of *dicta* concerning when courts should and should not take on a case that involves both antitrust issues and a regulatory authority. In *Trinko*, the Court noted that where there is a detailed regulatory scheme, it is incumbent on courts to consider whether “the regulated entities are not shielded from antitrust scrutiny altogether by the doctrine of implied immunity” and that it is important for courts “to avoid the real possibility of judgments conflicting with the agency’s regulatory scheme.”160

For whatever reason, LIFFE decided to pursue its complaint with the CME’s rule interpretation before the CFTC, rather than pursuing the matter in court. Undoubtedly, had LIFFE gone the court route, the CME would have argued, *inter alia*, that under *Trinko* and the rest of the implied immunity cases, the matter should have been dismissed (and the only relief would be before the CFTC). Our belief is that, had these events occurred, CME’s argument should have failed and LIFFE would have had the opportunity to pursue this matter in court (indeed, LIFFE may still have a cause of action against CME).

156 Note, however, that LIFFE did not present to the CFTC the cost of using the block trading facility to move the 36,000 contracts.
158 Typically, a vertical restraint would be subject to an analysis of if it had any pro-efficiency consequences. CME, however, explicitly denied that the restraint was designed to reduce free-riding. According to CME, “CME’s interpretation does not directly or indirectly address the free-riding problem.”
159 In fairness to the CFTC, however, LIFFE never asked for any specific relief. It merely asked the CFTC to look into the matter.
Given that the law and regulations governing commodity exchanges changed significantly in 2000 by way of the passage of the CFMA, it would have been difficult for CME to argue, along the lines of Verizon in *Trinko*, that a “pervasive regulatory scheme” is in place that effectively grants a “get out of jail free” card (implied immunity) to CME. The CFMA was revolutionary in regulatory oversight in that it effectively shifted the power of regulation from the CFTC to the exchanges it regulates. That is, the CFMA went from a prescriptive regulatory regime to a “Core Principles” approach. In simple terms, once an exchange is granted “Designated Contract Market” status (an exchange license), it is able to “self-certify” most anything it wants with respect to its rules and operating procedures. The CME took this approach when it “self-certified” its rule interpretation. It simply told the CFTC that it was going to take this approach to deal with what it viewed as wash trading under its self-regulation duties.

Thus, the regulator and the regulatory scheme did not dictate any result in the matter. As a result, the CFTC apparently was not certain how to respond to the complaint from LIFFE, so it did not do anything. Because this matter went unresolved and the status quo prevailed, the CME won the battle and LIFFE’s Eurodollar contract went bust.

Importantly, the CFTC has done very little – if anything – in response to an exchange self-certification since the passage of the CFMA. (Indeed, to the best of our knowledge, the CFTC has not done anything to stop an exchange self-certification since the CFMA amended the CEA in 2000.) Thus, if the CFTC were to do anything in the LIFFE-CME matter, it would be plowing new ground. There were, nonetheless, steps the CFTC at least theoretically could have taken.

The mildest action would have to simply asked CME to demonstrate its continuing compliance with the CEA. The most punitive measure would have been to initiate a criminal proceeding via referral to the Justice Department. The range of responses is listed below in order that they are included in the Act, not in order of severity. Initially, however, a brief background on the self-certification process is provided.

Under Section 5c(c) of the CEA, Exchanges "may elect . . . to approve and implement any new rule or rule amendment, by providing to the Commission . . . A written certification that the new contract or instrument . . . complies with this Act."

As noted, supra, Section ___ of this article, one of the requirements of the Act is found in Section 5(d)(18), which provides that "Unless necessary or appropriate to achieve the purposes of the Act, [contract markets are required] to endeavor to avoid--adopting any rule or taking any actions that result in any unreasonable restraints of trade or imposing any material anticompetitive burden on trading on the contract market."

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161 Exchanges, at their own discretion, still have the ability to seek Commission approval of their rules or procedures under the Act. *See* 7 U.S.C. § 7a-2.
If an exchange submits a false certification, there are a number of possible remedies available under the Act and rules. Under section 5c(d) the Commission may determine whether a registered entity is violating any applicable core principle. If the CFTC finds that the entity is violating a core principle, it shall notify the registered entity of its determination and afford the registered entity an opportunity to make appropriate changes to bring the registered entity into compliance. If the registered entity does not do so, then the Commission may take such further action in accordance with the act. Under the Act, the following further remedies would be available:

1. Under 6b, the Commission may bring an administrative action (including fines and cease and desist orders) if any registered entity is violating or has violated any of the provisions of the Act. Accordingly, the Commission may bring an administrative action for a false certification.

2. Under 6c, the Commission can seek an injunction or ask for a temporary restraining order whenever it appears to the Commission that a registered entity is violating or is about to act in a practice constituting a violation.

3. Under section 5e, the failure of a registered entity to comply with any provision of the Act, shall be cause for the suspension of the registered entity, or to have its designation revoked.

4. Under section 8a(7) of the Act, the Commission is empowered to "alter or supplement the rules of a registered entity insofar as necessary or appropriate . . . for the protection of persons producing, handling, processing or consuming any commodity traded for future delivery, or for the protection of traders." Section 8a(7) sets forth a specific procedure that must be followed, but it is basically notice and comment rulemaking, with some additional requirements.

5. Under section 9(a) it is a felony to "knowingly make any statement in any application report or document required to be filed which was false or misleading with respect to a material fact." Because this is a criminal provision, it requires proving scienter so it would generally be difficult to apply, but would be available, with referral to the Justice Department, if the facts warranted.

6. As a separate matter, under Part 38 and the Act, the Designation Application requirements apply initially and on a continuing basis thereafter. Accordingly, the Commission at any time can ask an exchange under rule 38.5(b) to demonstrate that the contract market is in compliance with one or more core principles.

7. Also as a separate matter, under Section 15(b), the Commission itself is required to take into consideration the public interest to be protected by
the antitrust laws. . . In issuing any order or adopt. . . Or requiring or approving any bylaw, rule or regulation of a contract market."

Nonetheless, despite these remedies under the CEA, we were unable to find any action in which the CFTC utilized any of its authority in response to anticompetitive actions by an exchange. Thus, the exchanges may have had the opportunity to engage in virtually any anticompetitive activity that they wanted unchecked. The CEA, as amended by the CFMA has therefore had the effect of helping incumbents maintain their monopolies as they are allowed to create rules (or, for example, incentive programs for traders) that benefit and support their monopolies, as demonstrated by CME in their wash trading rule interpretation.

Accordingly, we would recommend that courts faced with an antitrust (or other) complaint against a commodity exchange take a close look at the ability of the CFTC to take action (and its history in taking action – or, more appropriately, not taking action) before liberally interpreting the *dicta* in *Trinko*. Unfortunately, it can often be the case that, by deferring to a regulatory agency, courts leave antitrust plaintiffs without a remedy. Stated differently, antitrust defendants are able to hide behind the doctrine of implied immunity knowing full well that they may be violating the antitrust laws. As a result, the ultimate goal of antitrust law – providing the efficiency of the markets – is not served.

B. Predation Cases

1. Theory

The basic predatory pricing theory goes something like this: To combat entry, an incumbent firm lowers its price below its marginal costs. It continues this practice until it drives its rival out of business. Once its rival has exited, the incumbent raises its prices to the pre-entry level.

Predatory pricing is a very old story in antitrust. But proving a predation case can be remarkably difficult.

While predation as a strategy may have a certain intuitive appeal, a hypothesized predator must face several difficulties. First, in lowering its own price it lowers its revenues and profits on its pre-predation volume. Lowering price also increases the demand by consumers in the market. Since selling below cost is a usual precondition for predation, increasing demand increases the predator’s losses. In addition, lowering price will cause the intended victim to reduce its output, increasing demand (and therefore losses) for the predator’s product. Putting these three elements together imply that the predator’s losses through a predatory strategy are likely to be far in excess of the victim’s losses.

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The predator faces an additional problem. The fewer barriers to exit there are for the victim, the easier it will be for the predator to induce the victim to leave the market. Exit barriers are usually considered to be “sunk costs,” costs of investment that cannot be recouped upon exit. But for predation to be profitable, the predator must be able to make supra-competitive profits after the predatory period is over. This in turn implies that no new firms will enter in response to the post-predation high prices, which in turn implies significant barriers to entry. However, barriers to entry are generally thought of as sunk costs, which make them identical to barriers to exit.

For example, the importance of barriers to entry assume that an independent entrepreneur with only limited financial resources decides to enter into the operation of a gasoline station. That entrepreneur is able to overcome to relevant barriers to entry, which appear to deal with obtaining an appropriate site, an environmental permit for the site, and an environmentally appropriate storage tank for the gasoline. Now assume that once that operator enters business, it is the target of a predatory strategy by a larger firm. Such a strategy may well drive this operator out of business, but that does not imply that such a strategy is profitable for the predator.

The difficulty for the predation strategy arises because causing a particular operator to stop operating a particular station is not the same as preventing that station from operating. The assets of a station are likely to still exist, even if a particular operator has left the business, and may well be owned by the creditor of the operator, such as a bank. Once the predator raises price to capture its profits, the creditor has important incentives to sell the property to another, perhaps better financed entity, and have the property reenter operation as a gasoline station.

In particular, the theory of predatory pricing implies is that a successful predator desires an industry with significant barriers to entry, but insignificant barriers to exit. Such a situation may occur only rarely, but may well apply to commodity exchanges. As discussed above, the most useful way for an entrant exchange to gain customers is to pay them to use that exchange. This represents a sunk cost that cannot be recouped should the new firm be forced to exit.

In addition, a necessary condition for predation is market power in an appropriately defined antitrust market. A prerequisite for market power is a high market share. As discussed above, if one commodity constitutes an antitrust market, this criterion is likely to be met.

Legally, the Supreme Court’s 1993 *Brooke Group* decision lays out several elements of the relevant legal test. First, the prices charged must be below marginal cost. This may be a difficult test to meet in commodity exchanges, where much of the cost is up-front, and only a small amount of cost is incurred per trade.

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164 *Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.*

165 Average variable cost is often used as a proxy for marginal cost, where average variable cost equals (total costs – fixed costs) divided by quantity produced.
In such circumstances, courts have been reluctant to support cases of predation. For example, in the recent prominent case *U.S. v. American Airlines*, the Department of Justice alleged that American Airlines engaged in predatory pricing with respect to a variety of airline routes in and out of Dallas-Forth Worth. For the purposes of predatory pricing cases, the airline industry is much like the commodity exchange industry, with high fixed costs and low marginal costs.

The Justice Department argued that in determining marginal costs, “incremental” costs for flying a particular route should be included. The District Court rejected this argument as contrary to a large number of precedents with respect to measurement of costs.

The Justice Department also contended that American Airlines was trying to create a “reputation” for predation, along the lines of recent theoretical work in economics. According to this theory, if there is a even a small probability that instead of being profit maximizing a dominant firm “enjoys” predation, a “pooling equilibrium” may exist where profit-maximizing firms mimic the “irrational” firm and engage in predation. In effect, the profit-maximizing firm “pretends” to be irrational and is thereby able to deter entry into its market. The District Court rejected this theory as largely speculative, stating.

The problem with all such strategies is not that we doubt their existence or even their anticompetitive consequences. Rather, identifying them in the particular case without chilling aggressive, competitive pricing is far beyond the capacity of any antitrust tribunal. Once we cross the threshold and permit prices above cost to be condemned as predatory, we throw the doors open to all kinds of speculation about the pricing strategies of large firms -- speculation that judges ordinarily address by opening discovery, including evidence of presumed anticompetitive intent, and making a jury the final decision-maker. *Antitrust begins with the premise that all firms, even dominant firms, are permitted to compete aggressively, and that hard competition is a desideratum rather than an evil. Thus prices above the relevant measure of cost become an absolute safe harbor.*

Though it would be difficult, a predation case in the commodity industry can conceivable make some type of sense. This industry has high barriers to entry where new firms are trying to gain an initial foothold.

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166 140 F. Supp. 2d 1141 (D. Kansas 2001)
168 *U.S. v. American Airlines* (at 152-53)(italics original)
2. Application III: USFE v. CBOT/CME

USFE sued CBOT and CME for inter alia, predation in addition to its vertical theory. USFE asserted that immediately prior and during USFE’s entry into the treasury market, CBOT engaged in predatory pricing. In particular, USFE asserts that CBOT changed its trading charges (execution fees) for electronic trading according to the following table:

**Table 3**

<table>
<thead>
<tr>
<th>CBOT Changes in Treasury Futures Trading Charges Per Contract</th>
<th>According to USFE Brief</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Trades≤25,000/ month</td>
</tr>
<tr>
<td>Member’s Account with Member Trading</td>
<td>$0.12</td>
</tr>
<tr>
<td>Member’s Account with Non-Member Trading</td>
<td>$0.274</td>
</tr>
<tr>
<td>Non-Member’s Account</td>
<td>$1.054</td>
</tr>
<tr>
<td>Non-Member Leasing CBOT Seat</td>
<td>NA</td>
</tr>
</tbody>
</table>

While there are other factors possibly at play (such as clearing fees, membership fees, etc.) that will be raised in the litigation, the table above implies that CBOT lowered its average trading charges on Treasury futures from prices an average of $0.376 to $0.086, or slightly over 77 percent.

Of course, this information, by itself, is not sufficient to show predatory pricing. The next relevant piece of information is the marginal cost to the exchange of trading. It may well be that this cost is very low. Exchanges could be like airlines, in that the marginal cost of providing service is small compared to the capital cost. If so, the teaching of the *American Airlines* case implies that winning a predatory pricing case in the commodity exchange industry could be quite difficult.

However, there are some perhaps interesting facts (for a predation theory) in this case. The following chronology details these allegations:

169 (May 10, 2004 brief at 9)
• On February 3, 2004, knowing that USFE would be approved within days, CBO announced new preemptive cuts in its electronic transaction fees for U.S. Treasury futures and options, retroactive to February 1, 2004. Notably, the CBOT did not introduce similar price cuts in its non-electronic trading services for these products, which Eurex U.S. did not offer.

• On February 12, 2004, after USFE had been available as a competitive alternative to CBOT’s monopoly for one week (and Eurex US had decent numbers in its treasury market in terms of percentage of trades), CBOT announced a further price cut.

• At the time of these price cuts, the Chairman of the CBOT, Charles Carey, wrote a letter to the members of the CBOT informing them that the price cut would be reviewed in 6 months and was likely temporary.170

• USFE had some success with the treasury product during the late summer/early fall of 2004 due, in large part, to an aggressive incentive program dubbed the “Liquidity Initiative.” As the heart of the USFE Liquidity Initiative was expiring in December 2004 and USFE was beginning to lose market share, CBOT announced a price increase in its Treasury products.

• By June 2005, USFE’s market share in the Treasury products was less than 1 percent on a daily basis. As such, USFE declared the war for the Treasuries over and indicated that it would no longer support the product, but it would keep it listed. Approximately two months later, CBOT announced a significant price increase in its Treasury products.171

These factors might seem to imply predatory intent on the part of CBOT. On the other hand, CBOT could argue that it was simply reacting to the emergence, and later the ending, of new competition and setting its prices according. In addition, CBOT will likely argue that, despite the fact that it was charging $0 for trading to a significant percent of the market at the time USFE was attempting to initially compete in the market (approximately 40 percent did not pay any execution fees), it was still not charging below costs. Moreover, CBOT will likely argue that there are product substitutes for Treasury futures, such as the over-the-counter market, i.e., the unregulated derivative market.

However, as noted above, proving predation under the antitrust laws – even in a fairly clear-cut case – is a difficult proposition. In any event, the case – should it proceed to summary judgment and/or a trial – will provide interesting, and perhaps groundbreaking insights into the law of predation.

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170 David Roeder, *Eurex snags 6-8% or market 1st day*, Chicago Sun-Times at 53 (February 10, 2004); Jeremy Grant, *New exchange shakes up pricing: Eurex has made waves and CBOT, with its higher cost base, is at a disadvantage*, Financial Times at 33 (February 4, 2004)

171 Andrei Postelnicu, *CBOT lifts fees for US Treasury contracts* Financial Times at 20 (August 30, 2005); see also Testimony of John Damgard before the Senate Banking Committee (September 8, 2005).
C. Essential Facility or “Duty to Deal” Cases

1. Theory

In a broken and arguably inconsistent line of cases dating back to *Terminal Railroad*[^172^], the Supreme Court and lower courts have asserted that firms with market power can have a duty to deal with their fledgling competitors, allowing such competitors to use their rivals’ “essential facilities.”[^173^] These, however, cases have been subject to a large degree of criticism in the academic literature.

The basic economic theory behind the essential facilities doctrine is that the relevant firm is “leveraging” its monopoly from one market into another, vertically related market. But leveraging is not a recognized concept in economics. Economic theory points out that in the vertical chain for a product there exists one and only one monopoly profit. A firm can gain that profit by monopolizing any part of the production chain. Thus, if a firm has market power at one stage of production, it cannot increase that power by gaining a monopoly at another stage of production.[^174^]

The most important recent essential facilities case is *Aspen Skiing Co. vs. Aspen Highlands Skiing Corp.*[^175^] In this matter, the Aspen Ski Corporation controlled three of the four skiing mountains in Aspen, Colorado. The fourth mountain was controlled by the Aspen Highland Corporation. The two relevant firms entered into an agreement for a joint ski ticket, which clearly reduced transactions costs for skiing consumers. After the initial agreement lapsed, the Aspen Ski refused various entreaties from Aspen Highland to extend the agreement.

Aspen Highland sued Aspen Ski on antitrust grounds, and the Supreme Court found for the plaintiff. Viewing the joint agreement as clearly in consumers’ interest, the Supreme Court ordered it continued.

There are many critiques one can make of *Aspen Ski.*[^176^] For example, a rule that requires firms to extend agreements they have made with their rivals discourage such agreements from being entered into in the first place. In addition, it is not clear at all how courts should generally

[^172^]: 224 U.S. 383 (1912).
[^173^]: Lower courts and commentators often call this the “essential facilities doctrine,” though the Supreme Court has repeatedly eschewed such a direct formulation.
[^174^]: Criticism of leveraging generally extends to the essential facilities doctrine because “the rationale of the essential facility doctrine is exactly the same as that of the leveraging cases.” Gregory J. Werden, The Law and Economics of the Essential Facility Doctrine, 32 St. Louis U. L.J. 433, 460 (1987); David Reiffen & Andrew N. Kleit, *Terminal Railroad Revisited: Foreclosure of an Essential Facility or Simple Horizontal Monopoly?*, 33 J.L. & Econ. 419, 420-21 (1990) (“[E]conomic theory suggest[s] that there is no need for an essential facilities doctrine, as firms do not have anticompetitive reasons to deny access.”); IIIA Phillip E. Areeda & Herbert Hovenkamp, Antitrust Law: An Analysis of Antitrust Principles and Their Application 174 (1996) ("[C]onsumers are no better off when a monopoly is shared; ordinarily, price and output are the same as they were when one monopolist used the input alone."); *Blue Cross & Blue Shield United of Wisconsin v. Marshfield Clinic*, 65 F.3d 1406, 1413 (7th Cir. 1995).
[^175^]: 472 U.S. 585 (1985)
set remedies in such cases. Perhaps continuing the agreement in *Aspen Ski* made sense, at least for some time. But in a dynamic economy, how can a court regulate an economic agreement between firms? Antitrust courts are not regulators. They do not generally set prices or conditions.

Perhaps in response to this criticism, the Supreme Court significantly reduced the legal scope of the duty to deal in the recent *Trinko* 540 U.S. 124 (2004) matter. In *Trinko*, the Court indicated that the essential facilities doctrine could not be used to require a duty to deal if either 1) there had not been a prior contract between the parties on the relevant point (as in *Aspen Ski*), or 2) there was a regulatory agency that could, as part of its regulatory mission, require and directly regulate such a relationship.

### 2. **Application IV: ICE v. NYMEX**

A host of issues were raised in the recently decided *ICE v. NYMEX* case. NYMEX operated the only commodity exchanges in natural gas (based on Henry Hub, Louisiana) and oil (West Texas Intermediate, based on Cushing, Oklahoma). ICE attempted, in various ways, to compete with NYMEX in these products. After its initial attempts in this market, ICE decided that it need to offer its customers clearing services to become competitive. In particular, ICE believed it needed to offer its customers “marking to market” services, as discussed in Section II.

Marking to market requires final closing prices, and that was the major bone of contention in the ICE/NYMEX matter. ICE original offered an “over-the-counter” trading platform in oil and natural gas. On this platform, parties “met” and traded products. Clearing and delivery issues were, however, left to the contracting parties. ICE decided to expand its operations by operating clearing services for the contracting parties. Such services, however, required end of day prices.

For clearinghouse services to be the most efficient, they require the most accurate end of day prices. ICE could have used its own prices. But, as the upstart exchange, ICE had less trading, a less liquid exchange, and therefore less accurate closing prices. ICE desired to use NYMEX’s closing price for its settlement purposes, and NYMEX refused.

While the details are involved, there is a long history of the property rights aspects of market prices. In short, the law is that prices belong to the exchanges that generate them, though with reporting requirements discussed below. Thus, under basic contract law NYMEX could deny ICE access to these prices.

ICE’s plea for relief was a combination of essential facilities and vertical restraint theories. ICE asserted that NYMEX’s prices were “essential” to the operation of its rival trading

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178 Another difficulty with *Aspen Ski* is the market definition, which was the self-contradictory “destination skiing in Aspen.”
platform. By itself, as discussed above, this would do nothing to create competition in the relevant market. NYMEX could simply charge ICE the relevant monopoly premium.

ICE, however, also asserted that allowing it access to NYMEX’s prices would strengthen its own exchange. Thus, ICE’s theory was that, given access to NYMEX’s prices, ICE’s exchange would increase in volume and develop higher quality closing prices. This, in turn, would eliminate ICE’s need to use NYMEX’s prices.

In a summary judgment ruling, the District Court focused on ICE’s essential facilities claim. In its first argument, citing *Trinko*, the court noted that an essential facilities claim should be denied when a “federal agency has effective power to compel sharing and regulate its scope and term.” The court then asserted that the CFTC had this power. This conclusion is far from clear.

In its core principles, the CFTC has the right to compel exchanges to release information, without charge, to the public. But this compulsion has two important limitations. First, exchanges are not required to release information in a timely manner. Thus, many exchanges will sell a premium information service that provides “real time” information, while releasing information for free that is twenty minutes old. Second, exchanges can limit the use of their information in commercial parties that are sold, in one form or another, to third parties. Thus, it is not certain that the CFTC has the ability to force the sale of time-sensitive information for use by third parties.

The CFTC’s core principles also require it to evaluate antitrust issues in commodity exchanges. But even together with its principles on releasing information, it is far from clear if the CFTC could compel release of the information at issue in ICE/NYMEX. Even if the CFTC had that power, it is unclear what rates the CFTC would impose on the transaction. The CFTC has never imposed rate regulation on any products, and it is not clear how it would do so, even if it had the authority. As with most information products, the marginal cost of supplying information to outside parties is close to zero. The costs of providing information are largely in up-front capital expenses, as well as the risk of product failure. Thus, cost of service regulation, as is done by state regulatory commissions and the Federal Communications Commission, would not be appropriate to this question.

The court was on firmer ground in its second argument. The essential facilities test in *Aspen Ski* that did survive the *Trinko* decision is the rule that a prior contractual relationship is a sign of an economically efficient relationship. Unlike Aspen, ICE was not seeking to renew a previous sharing agreement with NYMEX. Thus, its claim was flawed. In a complementary argument, the court also noted that NYMEX has an efficiency reason not to deal with ICE – to prevent ICE from free-riding on its price-generating operations.
VI. Conclusion

The rise of competition in commodity exchanges also brings with it antitrust enforcement. Where this enforcement will take place, however, is unclear. Courts will be challenged to articulate a logical theory of antitrust immunity that allows administrative agencies to carry out their regulatory missions while still allowing parties their day in court.

As shown in recent cases, antitrust principles can be applied to antitrust disputes between and among commodity exchanges. While regulatory agencies may wish to set their own policies, there is no obvious need for such an event. Indeed, as the CME/LIFFE matter shows, regulatory agencies may not be in a position to grant aggrieved firms effective relief. Thus, courts should be reluctant to grant parties antitrust immunity.