Before the
DEPARTMENT OF THE TREASURY
Washington, D.C.


Comments of The United States Department of Justice

The Department of Justice ("Department") is pleased to submit these comments in response to the Department of the Treasury's ("Treasury's") request for comments on the Regulatory Structure Associated with Financial Institutions, 72 F.R. 58939, October 17, 2007.

SUMMARY

Based on its extensive experience investigating competitive conditions in various financial markets, including financial futures, options, and equities, the Department believes that certain regulatory policies governing financial futures may have inhibited competition among financial futures exchanges, potentially discouraging innovation and perpetuating high prices for exchange services.¹

More specifically, the Department believes that the control exercised by futures exchanges over clearing services – including (a) where positions in a futures contract are held ("open interest"), and (b) whether positions may be treated as fungible or offset with positions held in contracts traded on other exchanges ("margin offsets") – has made it difficult for exchanges to enter and compete in the trading of financial futures contracts. If greater head-to-head competition for the exchange of futures contracts could develop, we would expect it to result in greater innovation in exchange systems, lower trading fees, reduced tick size, and tighter spreads, leading to increased trading volume.

In contrast to futures exchanges, equity and options exchanges do not control open interest, fungibility, or margin offsets in the clearing process. This lack of control appears to have facilitated head-to-head competition between exchanges for equities and options, resulting in low

¹Our comments are directed solely at competitive issues raised by financial futures markets. Markets for commodities futures, such as energy futures markets, are outside the scope of this comment.
execution fees, narrow spreads, and high trading volume. Equities and options execution systems are also very sophisticated and feature-rich, more so than futures contract execution systems.

Although characteristics of the equities and options markets differ from those of financial futures markets, the clearing processes and related regulatory framework in equities and options markets appear to provide useful lessons in the futures arena. In light of the potential competitive benefits that could flow from regulatory changes that would facilitate competition in financial futures exchange markets, the Department recommends that Treasury propose a thorough review of futures clearing and its alternatives.

In these comments, the Department outlines its experience with competitive issues in financial markets and provides background information on futures markets. We then provide an overview of the competitive effects of exchange control of open interest, fungibility, and margin offsets, and how current policies may have inhibited execution competition. We specifically examine several failed efforts to enter financial futures markets and how efforts to enter were made more difficult by current clearing policies. We next discuss how options and equities clearing policies differ and have enabled beneficial trading venue competition. Finally, we consider whether there are significant benefits that can only be achieved under the current clearing arrangement.

I. THE DEPARTMENT OF JUSTICE’S EXPERIENCE WITH COMPETITIVE ISSUES IN FINANCIAL MARKETS

The Department’s experience spans the spectrum of financial markets, including futures, over-the-counter derivatives, fixed income, foreign currency, equities and options. In various sectors, the Department has examined the underwriting process, front-end systems for delivering information and data to market participants, execution systems, clearing processes and settlement processes. We have conducted investigations of potentially anticompetitive behavior by market participants, analyzed the likely effect of proposed mergers, and reviewed claims relating to intellectual property rights. The following investigations are especially pertinent to the issues discussed herein.

**Financial Futures.** The Department recently conducted an exhaustive investigation of the competitive consequences of the Chicago Board of Trade’s (“CBOT”) acquisition by the Chicago

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2 As discussed below, clearing in options is through the Options Clearing Corp. (“OCC”) and clearing in equities is largely through the National Securities Clearing Corp. (“NSCC”). The Department, in filing this comment, does not address the competitiveness of clearing markets in equities, options, or futures. Rather, the focus of this comment is on the effect current futures clearing policy has on the competitiveness of trade execution markets.
Mercantile Exchange ("CME"). The investigation included examination of competition in futures markets, particularly financial futures where CBOT and CME both offered products.

**Equities.** In collaboration with the Securities Exchange Commission ("SEC"), the Department in 1996 investigated a quoting convention among Nasdaq market makers that had the effect of significantly increasing transaction costs. Following these investigations, the SEC promulgated order-handling rules that made the securities order-execution process substantially more transparent. The Department’s recent experience also includes investigations of the Nasdaq/Instinet and NYSE/Archipelago mergers.

**Options.** Again in collaboration with the SEC, the Department in 2000 investigated and challenged an informal agreement among options exchanges not to list option contracts listed on another exchange. That effort led to the widespread listing of option contracts on multiple exchanges – spurring trading volume, increasing innovation, and significantly reducing trading costs in options.

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3The Department ultimately determined that, although the two exchanges account for most financial futures (and, in particular, interest rate futures) traded on exchanges in the United States, their products are not close substitutes, seldom competed head-to-head, and that the parties were unlikely to introduce new products that competed directly with the other’s existing products. See Statement of the Department of Justice Antitrust Division on its Decision to Close Its Investigation of Chicago Mercantile Exchange Holdings Inc.'s Acquisition of CBOT Holdings, Inc., June 11, 2007 (http://www.usdoj.gov/atr/public/press_releases/2007/223853.htm).


5S.E.C. Release 34-37619A, Order Execution Obligations 1996 WL 506154 at 9 and 27 (S.E.C. Sept. 6, 1996) (discussing the investigations). The Limit Order Display Rule requires that market makers display investors' limit orders when they are priced better than the market maker's quote. The Quote Rule requires market makers to publicly display their most competitive quotes.


7See Patrick De Fontnouvelle, Raymond P.H. Fishe, and Jeffrey H. Harris, The Behavior of Bid Ask Spreads and Volume in Options Markets During the Competition for Listings in 1999
II. BACKGROUND ON FUTURES AND FUTURES TRADING AND THE ROLE PLAYED BY CLEARINGHOUSES

Futures were originally developed as a means of hedging risks in agricultural commodities. In the 1970's, CBOT and CME introduced the first futures contracts on interest rate products. Their products allowed purchasers to hedge against volatility in the cost of capital and, when equity index futures were first introduced in the 1980's, to hedge against volatility in stock indices. In the recent past, futures exchanges have developed new financial futures contracts that commoditize over-the-counter ("OTC") traded products, particularly interest rate swaps and credit default swaps.

These uses of futures contracts continue today. While some traders use futures to speculate on future price movements, many others buy futures to hedge various types of risk, taking positions in futures to balance a portfolio or to minimize the risk to their portfolio from future price changes. Such hedgers seek futures products that closely match the risk profile of the positions they hold, and for them the differences between OTC products and futures in terms of cost, transparency, accessibility, and liquidity means that OTC products are only rarely good alternatives. As a result, futures contracts that address a given risk profile, the 10-year Treasury note future, for example, cater to a distinct market demand.

For buyers and sellers, the most important aspect of trading cost in futures is a contract's bid/ask spread, which is primarily a function of the availability of ready and willing buyers and sellers. All else being equal, the more buyers and sellers, the more liquid a market, and the tighter the bid/ask spread. Such "spread costs" are several orders of magnitude greater than other costs buyers and sellers incur, including separate fees paid to exchanges for executing transactions.

Once a buyer or seller has executed against a price quoted on an exchange, contract novation occurs, with the clearinghouse stepping in to be the counterparty to both sides of the transaction. This clearing process, in futures as well as equities and options, involves several steps. First, unless the trade is "locked in," the clearinghouse will compare the details of the transaction


Clearing is performed by an organization (or clearing division of an exchange) created to clear and settle all the transactions within a market or on an exchange. Its members (usually large securities firms) deal directly with the clearinghouse but also act as intermediaries for other securities firms in clearing their trades.
between buyers and sellers (or their brokers) to ensure the terms match.\(^9\) The clearinghouse then aggregates related transactions of each member and identifies offsetting commitments, e.g., buys and sells in the same instrument, to establish a member’s net liability and the net liability of the clearinghouse. Futures (and options) clearinghouses also ensure satisfaction of the terms of the contract by becoming the counterparty on each side of every trade, thus guaranteeing contract performance.\(^{10}\) Clearinghouses also ensure transactions are settled.\(^{11}\) Futures clearinghouses protect themselves from loss by requiring a good faith deposit (initial margin) to the clearinghouse of the member firm, and additional deposits (maintenance margin) as the value of the underlying position varies.\(^{12}\) Maintenance margin is set by calculating the value of outstanding contracts and recording the value of maturing contracts. This process of “marking to market” effectively results in a revaluation (and settlement) of profits and losses of outstanding futures contracts on at least a daily basis.\(^{13}\) By collecting additional margin, clearinghouses are able to cover prospective changes in the value of the portfolio.\(^{14}\)

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\(^9\) Matching is unnecessary for locked in trades. Almost all equities trades are locked in when reported to the clearinghouse, because the terms of trade are captured by the electronic system on which the trade occurs. Many options trades and futures trades are also locked in.

\(^{10}\) To fulfill this role, the clearinghouse maintains a list of traded products, trade terms and persons eligible to trade each product.

\(^{11}\) Settlement is a reference to completion of a transaction by, in equities, delivery of securities to the buyer and payment to the seller or, in futures and options, carrying out the terms of the contract or offsetting it. The vast majority of futures contracts are closed out before they reach expiration as the risk exposure of the holder changes and settled for the difference in cash value between the future and the underlying asset. For those that expire, \textit{i.e.}, mature, they may be either cash settled, like the Eurodollar futures contract, or require delivery, like various Treasury futures, depending on contract terms.

\(^{12}\) In futures markets, both the buyer and seller must provide initial and maintenance margin. In options markets, only the writer of the option must do so. Clearinghouses will engage in various forms of market surveillance to manage and contain risk to the market.

\(^{13}\) By comparing a commodity’s settlement price yesterday versus its settlement price today a clearinghouse can establish a value for outstanding futures contracts and determine whether changes in market value require further contributions to a member’s margin account.

\(^{14}\) CME’s clearing division alone held more than $46 billion in performance bonds in 2005. Whereas security deposits serve as a back-up source of funding in the event of a clearing member default, margin or performance bond requirements are the principal guarantor of performance.
III. THE EFFECT OF CURRENT RULES AND POLICIES RELATING TO CLEARING OF FINANCIAL FUTURES ON COMPETITION AND CONSUMERS

Under the current regulatory regime, an exchange controls where a financial futures contract is cleared and whether the clearinghouse may treat contracts as fungible or eligible for margin offset. There is reason to believe that this structure, interacting with the importance to traders of exchange liquidity, makes it more difficult for exchanges to introduce new financial futures products capable of providing sustained head-to-head competition against existing products. Competition in futures markets has tended to be limited to the introduction of new products, with the competition occurring only briefly as multiple exchanges attempt to establish themselves. The typical pattern has involved one of these exchanges attracting almost all liquidity in the product, leading the other exchange to cease offering a directly competitive futures product.

If exchanges did not control clearing, an appropriately regulated clearinghouse could treat contracts with identical terms from different exchanges as interchangeable, i.e., fungible. The incentives of such a clearinghouse would be to maximize its own profits, and it thus likely would treat identical contracts as fungible. In a world of fungible financial futures contracts, multiple exchanges could simultaneously attract liquidity in the same or similar futures contract, facilitating sustained head-to-head competition. A trader could open a position on one exchange and close it on another. In such a world, a trader could execute against the best price wherever offered without fear of being unable to exit the position because there is insufficient trading interest (or of being forced to exit at a poor price) on the new entrant trading venue when a trader...
chooses to exit.\textsuperscript{17}

In addition, if exchanges did not control clearing, an appropriately regulated clearinghouse could reduce member margin obligations by recognizing offsetting positions in correlated financial futures contracts traded on different exchanges. The ability to offset correlated positions in a futures clearinghouse can significantly reduce the capital required to trade. For example, CME’s clearing division – where the vast majority of statistically price-correlated financial futures positions are currently consolidated – offers its members margin offsets for related asset classes, thereby reducing risk collateral requirements, which results in savings to buyers and sellers unavailable on other exchanges.\textsuperscript{18}

Accordingly, we would expect that a change in the regulatory regime that eliminated exchange control of the clearing function would facilitate the emergence of greater competition between exchanges. The CFTC’s regulatory policies, which have permitted exchange control of clearing, are not mandated by the Commodities Futures Modernization Act of 2000 ("CFMA"). We therefore urge Treasury to propose a thorough review of futures clearing and its alternatives, including a careful examination into whether a regime more similar to that in the equities or options markets is feasible and would lead to significant consumer benefits.

\textbf{A. Current Regulation and Policy on Financial Futures Clearing}

Today, exchanges control clearing of financial futures contracts. The current structure of financial futures markets in the United States was put in place in the early 20th century when the Chicago Board of Trade Clearing Corporation ("BOTCC") began intermediating agricultural

\textsuperscript{17}The liquidity advantage has been made less significant in equities markets by trading venue guarantees to route transactions to markets with the best prices. These sophisticated routing systems have effectively linked the liquidity on different venues creating a single "virtual" liquidity pool.

\textsuperscript{18}When CME and CBOT combined their open interest in 2003, they claimed that the combination resulted in $1.4 billion reduction in performance guarantees for its members and $200 million in reduced security deposits. \textit{Q3 2003 Chicago Mercantile Holdings, Inc. Earnings Conference Call}, Fin. Disclosure Wire, Nov. 5, 2003, at 8. Consolidated clearing offers other efficiencies, including reductions in clearing fees, the cost and frequency of collateral movements, the number of bank transfers, the cost of intraday funding, systems development and maintenance, and employee training costs associated with having to interface with multiple, discrete clearing systems.
futures contracts on behalf of CBOT, thus assuming the risk of non-delivery from the exchange.19
When futures exchanges subsequently were subject to regulation with the enactment of the
Commodities Exchange Act ("CEA"), no provision of that statute expressly granted CFTC
authority to regulate futures clearing. What regulation there was of clearing had developed
indirectly through the CFTC’s oversight of those futures exchanges that had affiliated with
clearing systems.20 When financial futures products were introduced in the 1970’s, the CFTC
maintained its approach to clearing and thereby did not prohibit the application of the then-
prevailing exchange-controlled clearing model to financial futures.

The CFMA21 revamped the futures regulatory structure, giving the CFTC explicit authority over
clearing in futures markets and creating a new requirement that clearinghouses register with the
CFTC. As a result, the CFMA, for the first time, provided for the separate regulation of
execution and clearing.

The CFMA required the CFTC to conduct a study of the CEA and the Commission’s rules and
orders governing the conduct of registrants under the Act.22 In its Report, the CFTC noted that a
number of commenters had raised issues relating to clearing, including the desirability of changes
in regulatory policy that would permit futures contract fungibility and require clearinghouses to be
independent of the exchanges for which they clear.23 The CFTC concluded that the CFMA did
not mandate a change in its traditional policy of exchange-controlled clearing.24 Recognizing the
importance of the issue, however, the CFTC did announce a plan to conduct a roundtable of

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24Id. at 24. It concluded that: “The Act and Commission rules do not prevent the adoption of fungibility or common clearing. Nor do they require that the Commission mandate them.”
industry participants, at which the CFTC’s role in encouraging competition in the futures industry, including common clearing and fungibility were to be primary issues.\(^{25}\) At those hearings, a variety of industry participants, including representatives of the Futures Industry Association, major futures firms, and some exchanges called for an end to exchange control of clearing.\(^{26}\) The CFTC did not take formal action in response to these requests to end exchange control of clearing, but it has since approved CBOT Rule 701.01, which required CBOT members to transfer open interest from BOTCC to CME Clearing and thereby gave CBOT ongoing control of futures contracts.\(^{27}\)

The Department believes that adopting a regulatory policy that fosters exchange competition by, \textit{inter alia}, ending exchange control of financial futures clearing would be consistent with the objectives of the CFMA. The CFMA directs the CFTC to prevent the adoption of exchange or clearinghouse rules that unreasonably restrain trade or impose a material anticompetitive burden on the markets\(^{28}\) and directs the CFTC to facilitate the linking of futures clearinghouses with other regulated clearance facilities.\(^{29}\) In the Department’s view, these provisions reflect Congress’ desire to stimulate competition between exchanges and between clearing organizations.

\(^{25}\)\textit{Id. at} 24. The CFTC Chairman at the time, James Newsome, saw efforts to move the industry to common clearing and fungibility as a business issue that he preferred the opposing sides (futures commission merchants and futures exchanges) work out between themselves.


\(^{28}\)Core Principle 18: Antitrust Considerations – Unless necessary or appropriate to achieve the purposes of this chapter, the 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 on trading on the contract market.

\(^{29}\)The CFMA added Sec. 5b(f)(1) to the CEA Act which provides: “The Commission shall facilitate the linking or coordination of designated clearing organizations registered under this Act with other regulated clearance facilities for the coordinated settlement of cleared transactions.”
B. The Current Market Structure Has Impeded Successful Entry.

Under the current clearing framework, competition tends to be limited to that which occurs when a new contract, i.e., one addressing a market risk not addressed or not adequately addressed by existing products, is introduced. The introduction of a new contract by one futures exchange frequently prompts another exchange to offer a similar contract, and a battle to garner all the liquidity in the contract ensues. After one exchange wins most of the liquidity in the contract, the other exchange usually exits. In its investigations, the Department has found that, in each significant financial futures contract traded in the United States, one exchange has virtually all of the liquidity. Using the 10-year Treasury note future as an example, CME has a market share of essentially 100%. The “winner-takes-all” character of futures exchange competition is a function of liquidity: the more liquid the market, the greater the chance of execution at favorable prices. As a result, the market for a particular contract will tend to concentrate on a single exchange. This in turn gives the exchange a marked advantage over smaller firms and new entrants.30

While network effects provide a significant impetus toward the concentration of trading in any particular type of futures contract on a single exchange, they are not by themselves an insurmountable barrier to competition. Liquidity network effects of this sort have been successfully overcome in financial markets where regulatory policy facilitates competition among exchanges.31 In financial futures markets, however, efforts by competitors to overcome an initial liquidity disadvantage are further handicapped by the liquidity advantages of incumbent exchanges that flow from their control of clearing. Specifically, the Department believes that the control of clearing by incumbent futures exchanges prevents buyers and sellers from accessing

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30 Trading on a single exchange can also reduce market participant costs by facilitating “spread trading,” the taking of simultaneous offsetting positions in two correlated products, in effect betting on the relative price movements (or “spread”) between the two products. Currently, traders can conduct spread trades across different exchanges’ products by using third-party trading software. Such third-party supported spread trading entails, however, “execution risk,” the possibility that one leg of the spread trade will not find a counterparty. When both products that compose the spread are offered on a single exchange, execution risk can be eliminated by allowing the offsetting transactions to trade as a single product, such that neither leg executes unless both execute.

existing liquidity if they trade the same (or highly correlated) contract on another exchange, thereby making it significantly more difficult for entrants to gain sufficient liquidity to provide sustained competition with the incumbent.

Efforts over the last decade by exchanges to enter the U.S. financial futures markets with products that competed head-to-head with existing products, all of which failed, show the effect of exchange-controlled clearing and the potential competitive benefits of successful entry. In a number of instances where entry has been attempted, the prospect of entry forced a substantial, but only temporary, competitive response from the incumbent exchange. These competitive responses benefitted the market, but those benefits proved transitory because, under the existing regime of clearing, the entrant was unable to establish sufficient liquidity to maintain a sustained competitive presence and exited the market.

**BrokerTec’s entry into Treasury futures.**

BrokerTec Futures Exchange ("BTEX") was formed in 2000 as a joint venture of several large investment banks. It listed futures and options on futures electronically in the Treasury bond and note complex, competing directly against the CBOT. An affiliated company, BrokerTec Clearing Company, cleared its transactions. BrokerTec Clearing members were allowed margin offsets for positions opened at CBOT in U.S. Treasury futures at CBOT, but CBOT did not respond to BTEX’s request that it amend its margin rules to permit its clearinghouse, BOTCC, to reciprocate. As a result, buyers and sellers on BTEX were required to bear the increased costs of posting capital for offsetting CBOT and BTEX positions when those positions were held on BOTCC, but not when those positions were held in BrokerTec Clearing. The prospect of electronic competition from BTEX spurred CBOT to enter into a joint venture with Eurex on an electronic futures trading platform in the United States, causing a significant shift to electronic trading in Treasury futures contracts, and reducing fees. The shift to electronic trading, in turn,

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resulted in increased trading volume.\textsuperscript{35} BTEX failed to attain any meaningful share of the Treasury futures market and was subsequently purchased by Eurex US.\textsuperscript{36}

\textit{Eurex US' entry into Treasury futures.}

In January 2003, CBOT announced its plan to dissolve its electronic trading platform joint venture with Eurex and obtain platform services from another vendor. Eurex in turn announced its intention to provide an electronic Treasury futures exchange in competition with CBOT once the parties' non-compete agreement expired in February 2004.\textsuperscript{37} To facilitate this entry, Eurex was widely believed to be in discussions with BOTCC, which was CBOT's clearinghouse at the time, to clear its futures contracts.\textsuperscript{38} This ultimately resulted in CBOT entering into an agreement with CME for clearing of CBOT traded futures.\textsuperscript{39} That contract required the transfer of open interest from BOTCC to CME Clearing.\textsuperscript{40} This requirement was transmitted to the CFTC on July

\textsuperscript{35}Electronic execution makes futures trading more attractive because it increases the certainty of a trade at a desired price, thus making it easier to hedge. Gordon Platt, \textit{Chicago faces bleak future as online trading deposes open outcry system} Global Finance Vol. 16. Issue 2 Feb. 1, 2002 (2002 WLNR 11583314).


\textsuperscript{37}Jeremy Grant, \textit{Eurex to launch new derivatives exchange in U.S.} Financial Times UK, Jan. 10, 2003 (2003 WLNR 8225039). Euronext.Liffe was announced as the new platform provider for CBOT. \textit{Id.}

\textsuperscript{38}Nothing prevented BOTCC from treating Eurex products as fungible with CBOT's, or from allowing members to offset, in their margin accounts, positions taken in Eurex contracts with those taken in CBOT Treasury contracts. \textit{CBOT in talks with BOTCC over Contract FT Investor Feb. 14, 2003.}

\textsuperscript{39}CBOT demanded BOTCC enter into an exclusive clearing agreement (thereby protecting the open interest that had originally been executed on the CBOT exchange). When BOTCC did not respond, CBOT began negotiating with CME. \textit{Eurex is said to be 'in talks' with almost everyone – but nobody's talking} Secs. Week Vol. 30 Issue 19 May 12, 2003 (2003 WLNR 3220693).

\textsuperscript{40}Sections 8 and 10.5 of the Clearing Services Agreement, April 16, 2003. (Available, in redacted form, as Exhibit 10.3 to Chicago Mercantile Exchange Holdings, Inc. Form 10-Q (http://www.sec.gov/archives/edgar/data/1156375/000104746903027031/a2116188ex-10_3.htm). Section 3.3 of that agreement gave CBOT sole authority to determine whether contracts initially traded on CBOT could be risk offset or treated as fungible with any

Against this backdrop, Eurex’s attempted entry was unsuccessful. Eurex’s subsidiary, U.S. Futures Exchange, LLC. ("USFE"), was approved by the CFTC as a new exchange in February 2004 and began listing futures and options on futures on Treasury bonds and notes shortly thereafter.\footnote{C.F.T.C. Release 4886-04, CFTC Designates New Exchange (C.F.T.C. Feb. 4, 2004) (http://www.cftc.gov/opa/press04/opa4886-04.htm).} Eurex invested significant funds into the Treasury product – in the form of market making and other trading incentives – in an attempt to attract liquidity to its platform.\footnote{David Roeder, Eurex Planning to Take on Merc in Currency Trade Chicago Sun Times June 17, 2005.} While USFE’s application to offer exchange services was pending before the CFTC, CBOT announced that it was cutting transaction fees 54% for members and 20% for non-members.\footnote{Jeremy Grant, CBOT to cut fees to fend off Eurex Financial Times Oct. 21, 2003 (2003 WL 64595399).} Subsequently, CBOT reduced its electronic trading fees for its U.S. Treasury complex even further – exchange members received a six-month fee waiver (effectively taking their fee to zero), and non-member fees were reduced to 30 cents per side for futures and fifty cents per side for options on futures, a reduction of about 65%.\footnote{Daniel Collins, Eurex US is approved; Chicago operation launched Futures Vol. 33 Issue 4 Mar. 1, 2004 (2004 WLNR 14802623).} CBOT also announced a liberalization of membership requirements to allow more firms to qualify as members and receive the lower membership fees.\footnote{New CBOT Rule Allows CPOs and Large Funds to Become Exchange Members Sec. Week Vol. 30 Issue 36 Sept. 8, 2003 (2003 WLNR 3171430).}

other exchange’s contracts.

Despite these procompetitive responses by CBOT, USFE had some initial success, gaining about five percent of the market. By mid-2005, however, USFE admitted defeat, stating that its window of opportunity for Treasury products had passed and that it was turning its attention to foreign exchange futures. Shortly after USFE’s announcement, CBOT raised its fees for non-member trades by 50% and its fees for electronic transactions from three to five cents a contract. In July 2006, CBOT raised clearing fees for its financial futures contracts. CBOT raised exchange fees again in October 2006 for non-member trading of its Treasury complex.

_Euronext.Liffe’s entry into Eurodollars_

In late 2003, it was widely believed that CME would face competition from a European futures exchange in its core Eurodollar futures contract. In anticipation of this entry, CME reduced its electronic system trading fees by 60% for CME members, clearing members and their affiliates. It also established a market maker program on Globex – its electronic trading system – to provide

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49 _CBOT raising grain trading, clearing fees_ Chicago Tribune June 1, 2006 (2006 WLNR 9380499).


51 Eurex was the exchange most thought would begin offering a Eurodollar futures contract. _Eurex v. Chicago at FIA Expo_ Sec. Week Vol. 81 Issue 229 Nov. 10, 2003 (2003 WLNR 3183626). _See also_, Alex Skorecki, _Eurex plans US Treasury Trades_, FinancialTimes UK Sept. 11, 2003 (2003 WLNR 8179406). A Eurodollar future is based on a $1 million three-month deposit of U.S. dollars in overseas financial institutions, paying interest at the London Interbank Offered Rate.


By June 2004, Euronext appeared to have achieved significant success, with the execution of several large block trades that amounted to a large scale transfer of open interest in Eurodollar contracts from CME to LCH. However, CME was able to block further transfers by adopting a rule, under its authority as a self-regulatory organization, that forbade such trades as “fictitious.” The rule was certified as consistent with the CEA by the CME, such that it went into effect immediately. Liffe challenged CME’s action before the CFTC; the CFTC sought information from the parties to the dispute, but has not ruled on the merits.

Euronext.Liffe’s failure illustrates the difficulty of entering U.S. futures markets against an established incumbent with entrenched liquidity. Despite Euronext.Liffe’s substantial European presence and margin offset opportunities in a comparable product, its entry failed because the U.S. incumbent was able to prevent the transfer of open interest. Nevertheless, the temporary benefits of its attempted entry were substantial. In addition to a significant lowering of trading fees, Euronext-Liffe’s entry resulted in significantly reduced bid-ask spreads and increased trading volume. It also resulted in a substantial shift to electronic trading in Eurodollars.


54*Id.*


57The trades involved essentially simultaneous, equal and opposite transactions to close a Eurodollar position on CME and to open a Eurodollar position on Euronext.


59See Tse and Bandyopadhyay, *supra*, note 53. Effective bid-ask spreads on Globex, CME’s electronic platform, were reduced by approximately 30% in the seven months after
While Euronext continues to list Eurodollar contracts, since early 2005 it has not had a significant competitive presence in Eurodollar products, as there has been almost no open interest in Euronext’s contracts and no trading volume. CME was able to raise both clearing and execution fees on August 1, 2005.61

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One lesson of this brief history is that when entry into an existing product by a second exchange has occurred, there have been substantial beneficial effects – whether in lower prices, increased innovation, or expanded choice. Another lesson is that exchange control over open interest and clearing have impeded entry and the development of meaningful competition in execution services.62 Given the benefits of exchange competition, examining potential changes in regulatory policy appears warranted, unless it were clear that there are no viable alternatives to the current financial futures structure or that the current structure provides overriding benefits that justify its retention. Whether there are equally good alternatives can be informed by examination of the equities and options markets, which we examine in the next section. Section D below considers whether there are clear benefits that are achievable only under the current clearing framework.

Euronext’s entry. Id. at 335. Average effective bid-ask spread for the period June 2003 to February 2004 were 7.43 percent, using one mechanism for calculation, and 7.52, using another. For the period March 2004 through September 2004, the effective bid-ask spreads were 5.23 and 5.24, respectively. Id. In addition, monthly average trading volume increased by 44 percent on CME, with a significant shift of trading volume to electronic systems. Id. at 329. Floor trading volume actually decreased 22%, while Globex trading volume increased 860%. Id.

60In January 2004, 9.6% of Eurodollar contracts were traded electronically at CME. In November 2004, eight months after Euronext’s entry, 75% were traded electronically. Jeremy Grant, Capital Markets & Commodities FinancialTimes UK Nov. 25, 2004 (2004 WLNR 12196384).

61Sarah Rudolph, CME Stock Prices Jump After Fee Hikes, Record Volumes Sec. Week Vol. 32 Sec. 23 June 6, 2005 (2005 WLNR 12839370). In discussing the increase, a member said the move was a sign CME “feels pretty confident about beating Liffe at Eurodollars.” Id.

62These issues were also addressed by the European Competition Commission during its review of Deutsche Borse AG and Euronext AV proposals to acquire the London Stock Exchange plc. It concluded that full fungible access to an incumbent exchange’s clearing services is critical to successful entry into trade execution. Competition Commission, A Report on the Proposed Acquisition of the London Stock Exchange plc by Deutsche Borse AG or Euronext AV Nov. 26, 2005 at 6.
C. Equities and Options Exchanges Have Different Execution/Clearing Structures That Have Facilitated Exchange Competition

Clearing arrangements in other financial sectors facilitate exchange competition.

**Options.** The options market has a single regulated utility – the OCC – which serves as the clearinghouse for all exchanges and their members. The OCC was formed in 1973 when the Chicago Board Options Exchange listed the first stock option. In 1975, when the American Stock Exchange sought to offer an option on other stocks, the SEC directed that the OCC clear its trades. As a result of SEC policy, the OCC, jointly owned by the options exchanges, clears all option trades. In addition, in 1990, the SEC adopted Rule 19c-5, which permitted option exchanges to list equities options listed on another exchange.\(^{63}\) The listing of options by multiple exchanges was (and is) possible because the OCC substitutes its capital and resources for those of the parties in every transaction – becoming the buyer to every seller and the seller to every buyer. Because the clearinghouse serves as the universal counterparty, market participants can open a position on one exchange and close it on another. Because contract terms are generally set by the OCC,\(^{64}\) options contracts traded on one exchange are completely fungible with those traded on another.

Rather than conform to the directives of Rule 19c-5, the then-four options exchanges reached an understanding with one another to refrain from listing equity options classes that were already listed on another exchange. As a result, many frequently traded equity options were traded only on one exchange for most of the 1990s, like futures contracts are today. Since the summer of 1999, when SEC and Department investigations became public,\(^{65}\) options exchanges have actively competed in the listing of equity options. The benefits of this competition have been substantial and lasting.

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\(^{63}\) 17 C.F.R. §240.19c-5.

\(^{64}\) The terms of stock options contracts are effectively standardized. The terms of other options – like those on indices and on exchange traded funds – are established in consultation with the first exchange listing the option. Absent protected intellectual property rights, other exchanges may offer an option contract on the same terms.

Two new options exchanges have entered the market, one of which – the International Stock Exchange – has become the largest options venue. Spreads narrowed by 30-40% within six months of its entry, and have continued to fall since. With this competition, options volume is growing rapidly. Approximately 200 million contracts trade per month, more than four times the average monthly volume in mid-1999, and, as of 2006, all of the six options exchanges were experiencing increased growth with no single exchange having more than a third of the total volume. In addition, the average trade size has been increasing, suggesting increased involvement of institutional investors in what historically was a market dominated by retail investors. Increases in trading volume have even occurred in times of decreasing market volatility – times when options trading historically has decreased. Moreover, new trading systems have proliferated, execution fees have been substantially reduced, and exchanges have developed a host of service and system innovations to expedite order execution and settlement.

Equities. In the 1960s, when regional exchanges provided alternate venues for trading stocks listed on NYSE, clearing functions were operated by each exchange, as they are now in futures

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66Patrick De Fontnouvelle, Raymond P.H. Fishe, and Jeffrey H. Harris, The Behavior of Bid Ask Spreads and Volume in Options Markets During the Competition for Listings in 1999 58 J.of Fin. No. 6 (Dec. 2003);

67Battalio, Robert, Brian Hatch and Robert Jennings, Toward a National Market System for U.S. Exchange Listed Stock Options 59 J.of Fin. No 2 (April 2004). Multiple listing was followed by regulatory changes that have furthered competition in options trading, including rules that have linked option markets and moved the industry from fractions of a dollar to decimals. Equity options markets are in the final phases of a transition to pennies as the minimum trading increment, down from five cents. See U.S. Gov't Accountability Office Report 05-535, Securities Markets: Decimal Pricing Has Contributed to Lower Trading Costs and a More Challenging Trading Environment (U.S. G.A.O. May 2005) at 60.


70Id. at 38.

71See S.E.C. Release 34-49175, Concept Release: Competitive Developments in the Options Markets 69 FR 6124 (S.E.C. Feb. 3, 2004). Competition in option trading was further increased by the move to decimal trading increments and a series of order handling reforms imposed by the SEC as a consequence of its investigation.
markets. With the Securities Act Amendments of 1975, the SEC was directed to facilitate a national system for clearance and settlement of securities transactions. Congress' objective was that the several clearing systems be interconnected and operate under uniform rules.\textsuperscript{72} Shortly after the amendments, the NYSE, Amex and NASD agreed to establish a jointly owned entity to take over their clearing operations, which led to the incorporation of the NSCC. In approving the NSCC's application for registration as a clearing agency, the SEC imposed a number of conditions, including requiring NSCC to establish appropriate links to the regional exchanges' clearing agencies.\textsuperscript{73} Over time, regional exchanges have discontinued their clearing operations in favor of clearing through the NSCC.\textsuperscript{74} In addition, at the SEC's direction, exchanges submitted rules which provided for the revision of any rules tying the clearance and settlement of transactions to clearing agencies affiliated with the marketplace.\textsuperscript{75}

Like options market clearing, equities clearing facilitates exchange competition. When a trade occurs, the parties to the trade provide the exchange or electronic venue with the name of their registered clearing brokers who are, in the first instance, responsible for contract performance.\textsuperscript{76} The transaction is then sent to the NSCC which clears for almost all equity exchanges and electronic trading venues in the U.S. Securities held by NSCC members that can be transferred within the Depositary Trust Co. are eligible for continuous net settlement at the NSCC. NSCC then becomes the counterparty to each trade, guaranteeing that both the obligation to deliver securities and the obligation to make payment. As a result, once listed on an exchange, a stock may be traded on multiple trading venues, with a market participant purchasing it on one venue and selling it on another.\textsuperscript{77} The process is subject to SEC regulation.


\textsuperscript{74}The clearing registrations of a number of regional clearing firms, that of the Philadelphia Stock Exchange, for example, remain outstanding, but are effectively dormant.


\textsuperscript{76}Major electronic equity trading venues provide trade anonymity which requires that they interpose themselves as the counterparty to both sides of every transaction. For these trades, a clearing name is provided by the trading venue.

\textsuperscript{77}The terms of contracts in specialized securities – like shares of an exchange traded fund – are controlled by the originating fund, subject to SEC approval of the listing and contract terms. Once established, any exchange can list the ETF for trading, absent intellectual property rights that would permit listing constraints.
This structure—and its regulatory overlay—permits multiple exchanges and electronic trading venues to offer the same or equivalent instruments. There is significant competition among multiple equity trading venues, with low execution fees, narrow spreads, and widespread system innovation—all to the benefit of consumers.\textsuperscript{78} One study found that the NYSE’s entry into trading of ETFs led to double-digit percentage declines in bid-ask spreads.\textsuperscript{79}

The Department recognizes that there are significant differences in equities, options and futures trading. Nevertheless, the experience in options and equities markets appears to provide useful lessons for the potential role of exchange competition if regulatory policy relating to clearing by a futures exchange were changed.

\textbf{D. There Do Not Appear to Be Any Overriding Benefits of Preserving the Current Regime of Futures Clearing.}

The Department is aware of three principal arguments in favor of the current regime of exchange controlled clearing in futures markets: (1) that sufficient reward to promote innovation can only be assured if replica contracts are kept off the market and that exchange controlled clearing helps achieve that objective;\textsuperscript{80} (2) trading of futures on multiple exchanges could adversely affect traders by fracturing liquidity and diminishing market depth; and (3) the current system minimizes the risk of default.

The first contention, that the current structure is necessary to provide exchanges an incentive to innovate new futures contracts, boils down to the contention that competition is inconsistent with incentives to innovate. In fact, however, experience indicates that competition can spur firms to innovate by developing new products or making their existing products more attractive (including though product change as well as reduced prices and improved quality).\textsuperscript{81} Thus, any


study of regulatory change that would eliminate exchange control of clearing would need to consider the important incentives that may be created by competition.

A second argument offered in favor of preserving the current regime is that a change in regulatory policy that would facilitate the trading of futures contracts on multiple exchanges would adversely impact buyers and sellers by fracturing liquidity, diminishing market depth and price transparency, and by making it more difficult for buyers and sellers to find the best price to execute transactions. The market response to Eurex’s and Euronext.Liffe’s suggests that such concerns are not well founded. In both cases, new entry coincided with substantial increases in trading activity in the products traded. Experience with new entrants in the options and equities markets is to the same effect. In each case, market volumes increased and all indicators of market performance – fees, volume, spreads – either improved or did not change. Indeed, experience in options markets suggests that the likely effect of a change would be significantly lower exchange fees, narrower spreads, and greater trading volume.

A third argument is that the current system reduces risk to the market of participant default as transparency of market exposure is enhanced when related market positions of individual customers can be captured in one place. Exchange control of where products are cleared, however, does not appear necessary to achieve this result. Both the options and equities models have successfully protected investors from default.

IV. CONCLUSION

The Department believes that current rules and policies related to clearing futures contracts may be unnecessarily inhibiting competition among futures exchanges in the development and trading of financial futures contracts, to the detriment of the economy and consumers. Unnecessary restraints on competition threaten the ability of the U.S. financial markets to adapt to changing dynamics, including the increasingly global nature of those markets.

The Department believes that significant benefits might be achieved if regulatory policy were changed so as to foster exchange competition by, inter alia, ending exchange control of clearing (in conjunction with appropriate regulation to ensure that clearinghouses could not in turn

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83 Although exchanges have argued that they have an interest in selecting a sound clearinghouse to protect the public’s faith in their contracts, an exchange has, at best, a secondary interest in the issue. Clearinghouses act as every trader’s counterparty and, as a result, the clearinghouse has the greatest interest in protecting against trader defaults.
exercise market power). The clearing structure and regulatory framework in the equities and options markets are instructive. If regulatory policies that encourage and facilitate exchange competition were adopted, futures clearinghouses would likely clear for multiple exchanges and treat identical contracts as fungible.\textsuperscript{84} Futures exchanges would, in turn, compete in terms of price, quality of execution systems and the speed and completeness of information available to market participants. Futures markets would become more transparent and market risk would likely be more widely distributed as new participants are attracted to trading opportunities in the futures markets. The Department therefore recommends that Treasury undertake a careful and objective review of exchange-controlled clearing of financial futures, the regulatory structure that underlies it, and its alternatives.

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\textsuperscript{84}As discussed below, the options regulatory policy has resulted in the mandated use of a single clearinghouse by all options exchanges. In equities, SEC policy has permitted use of multiple, linked clearinghouses, and allowed clearing intermediaries a more substantial role.