

116925

# GAO

## Testimony

For Release  
On Delivery  
Expected at  
10:00 a.m. EST  
Thursday  
February 23, 1989

Commodity Futures Trading Commission  
and the Chicago Futures Exchanges'  
Detection of Trade Practice Abuses

Statement of  
Richard L. Fogel, Assistant Comptroller General  
General Government Programs

Before the  
Committee on Agriculture, Nutrition and Forestry  
United States Senate

116925

U.S. Department of Justice  
National Institute of Justice

This document has been reproduced exactly as received from the person or organization originating it. Points of view or opinions stated in this document are those of the authors and do not necessarily represent the official position or policies of the National Institute of Justice.

Permission to reproduce this copyrighted material has been granted by

Public Domain  
U.S. General Accounting Office

to the National Criminal Justice Reference Service (NCJRS).

Further reproduction outside of the NCJRS system requires permission of the copyright owner.



NCJRS

MAY 8 1989

ACQUISITIONS

044664/137999

POTENTIAL FOR FUTURES MARKET  
TRADE PRACTICE ABUSES

SUMMARY OF STATEMENT BY  
RICHARD L. FOGEL  
ASSISTANT COMPTROLLER GENERAL  
GENERAL GOVERNMENT PROGRAMS

In response to a request from the Honorable Patrick J. Leahy, Chairman of the Senate Committee on Agriculture, Nutrition and Forestry, GAO provided its views on the potential for trade practices abuses at the Chicago Board of Trade and the Chicago Mercantile Exchange.

In Summary: GAO identified three indicators the committee may wish to pursue in judging the intensity of CFTC and the exchanges' efforts to detect and sanction trading abuses. These were the adequacy of the framework of controls established; the number and nature of disciplinary actions taken; and the use of oversight results to improve the control system, target trends of abuse, and allocate scarce resources.

How Adequate is the Framework of Oversight Controls?

The advent of a 1-minute trade timing standard and the subsequent enhancement of computerized audit trail and evaluation systems substantially enhanced CFTC and the exchanges' ability to detect and investigate trade practice abuses. CFTC needs to monitor these systems as they evolve and follow up to ensure that weaknesses are corrected. Key questions GAO suggested the committee pursue include whether CFTC and the exchanges adequately assessed trading system vulnerabilities and established appropriate controls, how these oversight systems compare with those of the other markets and regulators, and whether the 1-minute timing standard is sufficient.

What are the Numbers and Nature of Disciplinary Actions Taken?

It is difficult to determine the adequacy of an oversight system's result because the universe of abuse is unknown. Low numbers of investigations or disciplinary actions can either mean the system is an effective deterrent, or that it needs revision because it is not finding abuses or punishing offenders severely enough. Key questions GAO suggested the committee pursue include whether reliable data is available to determine the universe of abuses, how disciplinary actions taken compare to those taken in other markets, and whether penalties from abuses need to be applied more consistently or made more severe.

How can Oversight Information be Better Used?

CFTC and the exchanges could make good use of summary data from trading activity, investigations conducted, and penalties imposed to improve their oversight programs. GAO suggested the committee pursue whether CFTC and the exchanges have the information they need, and whether they use it to improve their oversight systems.

**Mr. Chairman and Members of the Committee:**

We are pleased to appear today to discuss how the Commodity Futures Trading Commission (CFTC), the Chicago Mercantile Exchange (CME), and the Chicago Board of Trade (CBT) oversee futures market trading practices.

As you know, trading on these exchanges has been the subject of FBI undercover operations, the results of which are not yet public, but which have received much media attention alleging widespread trading abuses. CFTC officials told us that they can not comment on the extent of the agency's involvement in identifying or investigating the alleged abuses until after any indictments are issued. Therefore, we are not in a position now to comment on the effectiveness of CFTC oversight as related to these allegations.

Instead, our purpose today is to suggest an issue the committee may wish to pursue with CFTC and the exchanges in subsequent hearings, and to discuss the results of our preliminary work as it relates to that issue. The issue is the level or "intensity" of CFTC and the exchanges' efforts to detect and sanction trading abuses. This knowledge, accompanied by an understanding of the ways the trading system can be abused, should help the committee decide what changes, if any, are needed in the trading system and oversight programs.

It is not easy to quantify the intensity of oversight efforts. We have, however, identified three indicators that will provide useful qualitative measures. They are

- the adequacy of the framework of controls CFTC and the exchanges have established,
- the number and nature of disciplinary actions taken on identified abuses, and
- the use of oversight results to improve the control system, target trends of abuse, and allocate scarce resources.

Individually, these indicators provide a perspective on key aspects of the oversight system. Collectively, they provide a basis for judging how serious CFTC and the exchanges are about detecting and sanctioning trading abuses.

HOW CAN THE OPEN-OUTCRY  
TRADING SYSTEM BE ABUSED?

The CME and CBT trade futures contracts through a competitive system called open-outcry, where floor participants verbally bid and offer orders to each other at centralized locations in the exchange called trading pits. Several types of trade practice abuses can occur in this trading system. The CFTC and exchanges monitor trading in an attempt to detect these abuses. Most of the

abuses they try to detect are the same kind that media reports allege have been detected in the FBI operation.

Market characteristics may allow trade practice abuse

Several characteristics of open-outcry trading may allow floor participants to take advantage of customers:

- Futures prices can be volatile, and the same price may appear many times within a short timeframe or during a trading session. As a result, if a trade is executed within the price range occurring around the execution time reported, it will be more difficult to determine the execution price that the customer should have received.
- The large number of participants in a pit--in the hundreds for active futures contracts--makes floor surveillance for trade practice abuse more difficult.
- The exchanges rely on market participants to properly report their trading activity. Dishonest participants, particularly those acting in collusion, can falsify trading records in an attempt to conceal abuses.

A variety of trade practice abuses can occur

Trade practice abuses include various techniques to avoid competitive order execution. By avoiding competition, floor participants may secure a better transaction price than that available to other market participants, including customers and other traders. You can see from the charts the major abuses that CFTC and exchange officials look for. (See charts 1 and 2.) As I explain these, note that some of the definitions may partially overlap.

- Prearranged trading: agreeing to some aspect of a transaction before it is openly executed on the exchange floor.
  
- Accommodation trading: entering transactions to assist another floor participant in accomplishing improper trading objectives.
  
- Trading ahead of customer orders: trading for one's personal account or an account in which one has an interest, while having in hand any executable customer order in that contract.
  
- Bucketing: failure to introduce an order to the marketplace, traditionally occurring when a broker or firm noncompetitively takes the other side of a customer order.

- Wash trading: entering or purporting to enter into transactions to provide the appearance of trading activity without resulting in a change in market position.
- Curb trading: trading after the official close of trading.
- Cuffing: delaying the filling of customer orders to benefit another member.
- Cross trading: matching customer orders without offering them competitively.

#### Case study

To illustrate how cheating can occur and how customers are harmed, let me describe a case that CBT discovered and prosecuted.

In April 1985, CBT disciplined three exchange members--A, B, and C--for systematically cheating on customer spread orders. They executed trades among themselves at prices better than those available to other market participants. Spread trading is a strategy which involves, in this case, simultaneously purchasing one delivery month of one commodity and selling that same delivery month of a different commodity. The expectation underlying the strategy is that the price relationship between the two commodities will subsequently change and yield a profit. Consequently, it is



to the customer's advantage for the trades to be simultaneously executed at the cheapest buying price and highest selling price.

In this case, member A received a customer spread order to buy 160,000 bushels of July wheat and sell 160,000 bushels of July corn at the prevailing market prices. One of many subsequent rule violations occurred when member A disclosed this order to member C, and as an accommodation to her, for her personal account, prearranged to sell the July corn segment of the customer spread at a price lower than that at which July corn was trading at the time. Member C benefitted because she bought below the market price and presumably sold at the market price, realizing a gain. The customer lost the exact amount she gained. Trades executed among members A, B, and C elicited a member complaint and CBT launched an investigation.

The investigation, which reconstructed the members' trading activities, found that the three members were systematically prearranging trades on customer spread orders. In addition, they failed to report the trades as spreads as required by CBT rules, and they traded corn in the wheat pit. The CBT fined the members \$50,000 each and permanently barred them from exchange membership and from employment or association with any exchange member firm. The CBT concluded that the members had violated numerous exchange rules, including prearranged trading, failure to competitively offer the orders by open-outcry, failure to designate the orders as

spreads, accommodation trading, taking the other side of a customer order, trading outside of the designated commodity pit, and compromising the integrity of the exchange.

HOW ADEQUATE IS THE FRAMEWORK OF  
OVERSIGHT CONTROLS?

CFTC regulations give the exchanges primary responsibility for identifying, pursuing, and prosecuting trade practice abusers. The CFTC is responsible under the Commodity Exchange Act for ensuring the exchanges carry out their responsibility. It attempts to do so without interfering with efficient market operations.

CME and CBT programs

The CME and CBT identify and investigate trade practice abuses through similar programs. Abuses are detected through internal sources, including reviewing trade information assembled in an audit trail and observing trading floor activity. Abuses are also identified from external sources of information, including exchange member complaints, customer complaints, and CFTC referrals.

The most common source of all CME leads is member and customer complaints. These complaints were the source for 133 of the 164 investigations at CME in 1988. Although comparable numbers were

unavailable from CBT, all 16 of CBT's externally generated cases in 1988 came from members.

One of the most important sources of evidence that the exchanges use in supporting cases of trade practice abuse is their audit trail system. An audit trail system reconstructs trading activity by time of trade. Putting the trades in the order that they occur can help to isolate questionable trades, and detect and punish those involved in trade practice abuses. All CFTC regulated exchanges are required to have an audit trail system that is integrated into the exchanges' trade practice oversight program.

In 1986, CFTC amended its audit trail regulations to require that the exchanges determine trade execution times within 1 minute instead of within a 30-minute bracket. The CME and CBT worked together to develop a Computerized Trade Reconstruction (CTR) system that assigns times to each trade to meet this requirement. At both exchanges trade reconstruction may be imperfect because all times are imputed based on several data sources, and floor participants may intentionally or unintentionally make errors in recording and reporting such data. Further, while CFTC requires that CTR-imputed times be precise to the nearest minute, a single minute may include hundreds of trades, several of which could be made by a single floor participant.

Each exchange also has developed computer systems to analyze audit trail data to detect or corroborate potential trade practice abuses. The exchanges started to use these systems in conjunction with CTR data last year.

#### CFTC programs

An important feature of CFTC's oversight program for ensuring that the exchanges carry out their regulatory responsibilities is rule enforcement reviews. In addition, CFTC examines disciplinary action notices and exchange investigative logs to monitor the number of investigations conducted, types of violations being investigated and their disposition, as well as the timeliness and adequacy of sanctions. The CFTC also has its own trade practice surveillance program for reviewing audit trail data, observing trading floor activity, and investigating potential abuses. When CFTC finds that an exchange has failed to meet its obligation to enforce exchange rules, it can, among other sanctions, issue a cease and desist order directing the exchange to improve its enforcement activity. If the exchange does not comply with the order, it could lose its authority to operate as a contract market.

Rule enforcement reviews enable CFTC to evaluate how effectively exchanges' trade practice surveillance and disciplinary programs detect and prosecute possible rule violations. They also determine how well the exchanges have implemented previous recommendations.

The CFTC recently reported on rule enforcement reviews at CME and CBT.

In a September 1988 CME rule enforcement review, CFTC concluded that CME has an effective CTR system and trade practice surveillance program. The CFTC report stated that CME had incorporated CTR timing data into its computerized surveillance system, which had enhanced CME's surveillance capabilities.

In a June 1987 CME rule enforcement review report, CFTC concluded that CME maintained an effective trade practice surveillance program which initiated a significant number of internally generated investigations.

The CFTC recommended improvements in both reports and CME responded positively to all the recommendations. The CFTC has not yet followed up to determine if promised actions were taken.

The CFTC was more critical of CBT's CTR system and trade practice surveillance program than it was of CME's. The CFTC concluded in its February 1989 rule enforcement review report that CBT needed to improve its CTR system. It recommended that CBT take several actions to improve the usefulness of CTR times in detecting and prosecuting trading abuses. CBT officials told us these recommendations will be easy to implement and they will take action quickly.

In a September 1986 CBT rule enforcement review report, CFTC concluded that CBT had effective procedures for dealing with potential trade practice abuses initiated through complaints or referrals. However, CFTC made several recommendations for improvements, including expanding the coverage of routine surveillance to provide greater emphasis on internally detected trade practice abuses and internally initiated investigations; modifying the criteria employed in the internal surveillance program so that potential abuses would not be overlooked; ensuring that investigations were thorough; and completing inquiries in a more timely fashion.

The CBT responded by stating that it would implement the recommendations. However, CFTC's February 1989 rule enforcement review report stated that although some improvements have been made, inquiries were still taking too long, and too few disciplinary actions resulted from internally generated investigations. CBT officials said they have made progress in these areas since the September 1986 rule enforcement review, and will continue to do so.

#### Observations

Among the questions the committee may want to pursue concerning oversight structure are:

- Have CFTC and the exchanges adequately assessed the vulnerabilities of the trading systems and established appropriate controls?
  
- How do these oversight systems compare with those of other markets and regulators?
  
- Is a 1-minute audit trail time standard sufficient?

The advent of the 1-minute standard in 1986, and the subsequent development of computerized audit trail and evaluation systems at CFTC and the exchanges substantially enhanced their ability to detect and investigate trade practice abuses. Because the systems are new, the process for improving them is evolving.

Similarly, the two recent rule enforcement reviews at CBT and CME are CFTC's first public evaluation of these systems. While we have not yet evaluated the timeliness or thoroughness of CFTC's review process, some of the weaknesses CFTC identified, if corrected, should help better detect trade practice abuses. Thus, CFTC needs to follow up to ensure that the weaknesses identified are corrected.

WHAT ARE THE NUMBER AND NATURE  
OF DISCIPLINARY ACTIONS TAKEN?

Detecting abuse is only the first part of the process needed to minimize the number of abuses that occur. When potential abuses are investigated and the abusers are identified, the penalties must be timely and severe enough to act as a deterrent.

Exchange officials told us that disciplinary action can vary by the type of offense or the existence of a prior disciplinary record. Often this results in different disciplinary actions for what appears to be the same offense. They also said that most investigations of trade practice abuse, regardless of source, are closed without action because the subject is innocent, or evidence is insufficient.

Our first bar chart, developed from data in CFTC annual reports, shows the total trading volume by number of contracts at both exchanges. (See chart 3.) Volume has been higher each year at CBT.

Our second bar chart, developed from unaudited exchange-provided data, shows that disciplinary actions for trading violations have increased at CME and remained relatively constant at CBT. (See chart 4.) As you can see, from 1984 to 1988, the number of CME floor participants sanctioned for trade practice-related violations increased from 13 in 1984 to 105 in 1988. In contrast,



the number of CBT sanctions fluctuated between a low of 8 in 1985, to a high of 32 in 1986. In 1988, CBT sanctioned 13 floor participants.

Our third bar chart shows that, between 1984 and 1988, CME fines for trade practice abuses ranged from about \$155,000 to a little over \$1.7 million. (See chart 5.) Fines for all 5 years combined totaled about \$3.6 million. For the same period, comparable CBT fines ranged from about \$65,000 to about \$225,000. Fines for all 5 years combined were about \$811,000.

According to exchange officials, permanent expulsion or lengthy suspensions are even more severe penalties than fines because they deprive floor participants of their livelihood. As you can see from the tables, between 1984 and 1988, the number of members expelled on both exchanges averaged about two a year, including 8 expelled at CME in 1987. (See chart 6.) Suspensions at CME ranged from a low of 238 days in 1986 to a high of 12,392 in 1987. CME officials told us these suspensions represent a combination of business and calendar days. Therefore, the data are not comparable to CBT data. At CBT, suspensions were a low of 55 business days in 1984 and a high of 5,587 in 1986.

In addition to these exchange actions, CFTC may also take enforcement action. For fiscal years 1986 through 1988, CFTC initiated enforcement actions resulting in over \$900,000 in civil

penalties, 35 cease and desist orders, 43 trading suspensions or revocations, and 31 registration suspensions or revocations.

### Observations

Among the questions that need answering to assess the adequacy of oversight system results are:

- Is reliable data available to determine the universe of abuses that occur?
- How do disciplinary actions taken in the futures market compare to those taken in other financial markets?
- Do penalties for abuses need to be applied more consistently or made more severe?

It is difficult to determine the adequacy of an oversight system's results because the universe of abuses is not known. Low numbers of investigations or disciplinary actions can either mean that the oversight system is working well because it is an effective deterrent or that the oversight system needs revision because it is not finding abuses or punishing offenders severely enough. The final results of the FBI investigation may provide a better idea of the types of abuses occurring, and should be an important indicator of the effectiveness of the current oversight system.

HOW CAN USE OF OVERSIGHT  
INFORMATION BE BETTER USED?

We are just beginning our work to evaluate how the agencies use their oversight information. We have noted, however, that certain information is not routinely aggregated for management's use. For example, when we asked CBT and CME for summary statistics on the sources of their investigations, each had to generate the summaries for us from their detailed investigation logs.

CBT officials told us they have recently increased their budget by \$1 million for computer system enhancements to detect trading abuses. We will be looking at system enhancements at CFTC and the exchanges in more detail later.

Observations

The question to consider on the use of oversight information is broad:

- Do CFTC and the exchanges have the information they need, and do they organize and use the information available to improve their control systems, target patterns of abuse, and allocate scarce resources?

The answer is important because it seems to us that the CFTC and exchanges could make good use of summary data from trading

activity, investigations conducted, and penalties imposed to improve their oversight programs. For example, by evaluating the frequency and types of member complaints, CFTC and the exchanges could improve their computer systems' capability to identify the trading abuses that led to those complaints.

#### CONCLUSIONS

We have not completed sufficient work to reach conclusions about CFTC and exchange efforts to detect and sanction trading abuses. In light of recent events, CFTC and the exchanges are reexamining aspects of the open-outcry trading method and their surveillance systems to determine whether additional changes are needed to make abuses more difficult to perpetrate and easier to detect. As you have requested, we will continue to monitor these efforts and to assess what needs to be done.

- - - - -

Mr. Chairman, this concludes my prepared statement. We will be pleased to answer questions.

---

GAO Potential Trade  
Practice Abuses

---

- Prearranged trading
  - Accomodation trading
  - Trading ahead of customer orders
  - Bucketing
-

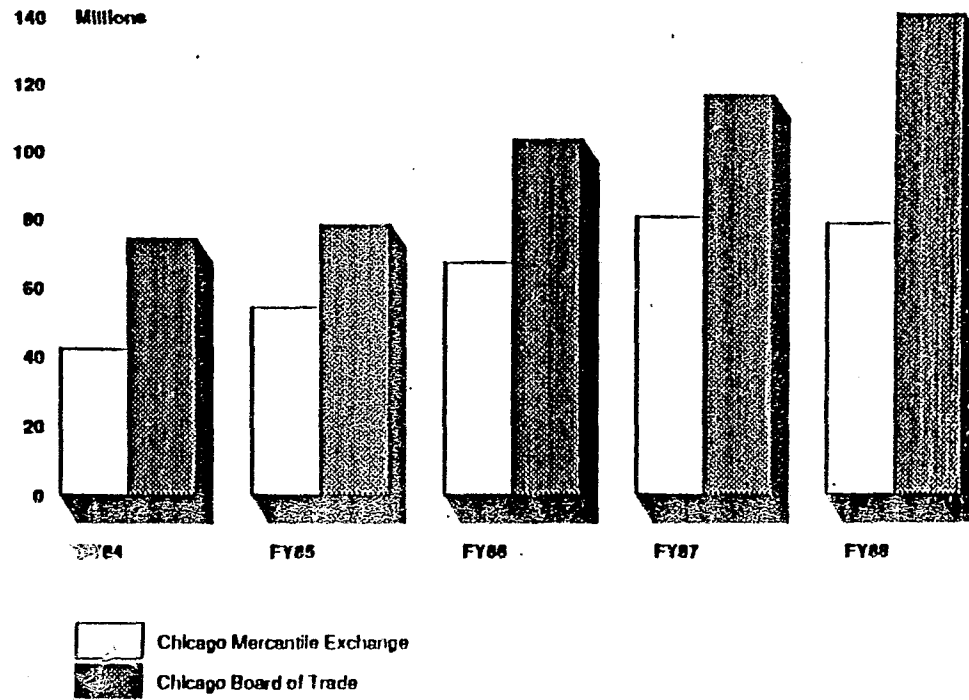
---

GAO Potential Trade  
Practice Abuses (cont.)

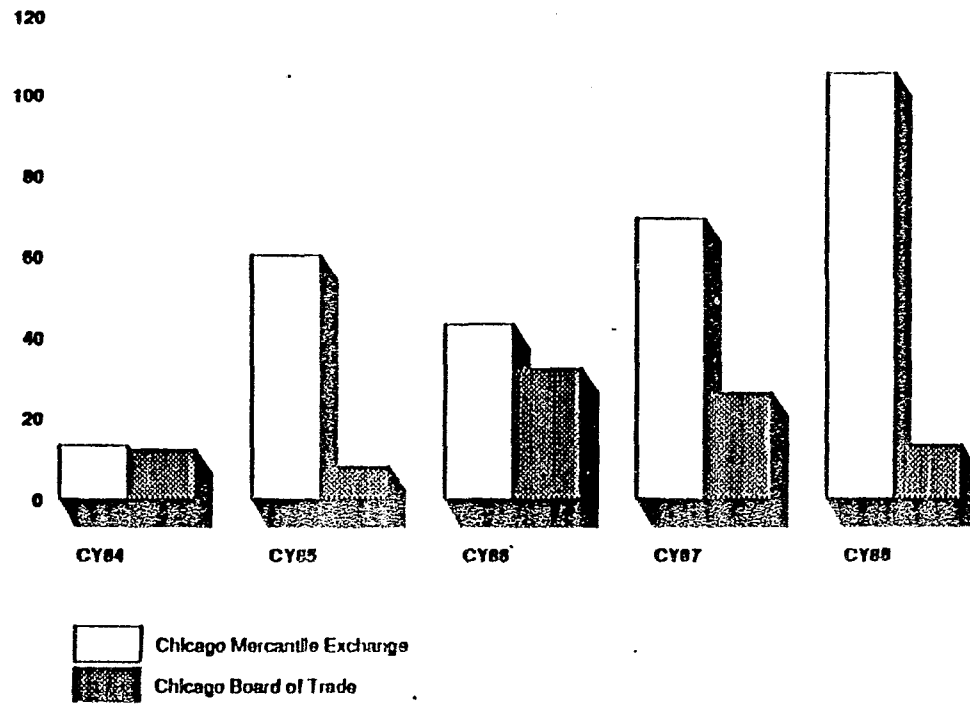
---

- Wash trading
  - Curb trading
  - Cuffing
  - Cross trading
-

# GAO Volume of Contracts Traded

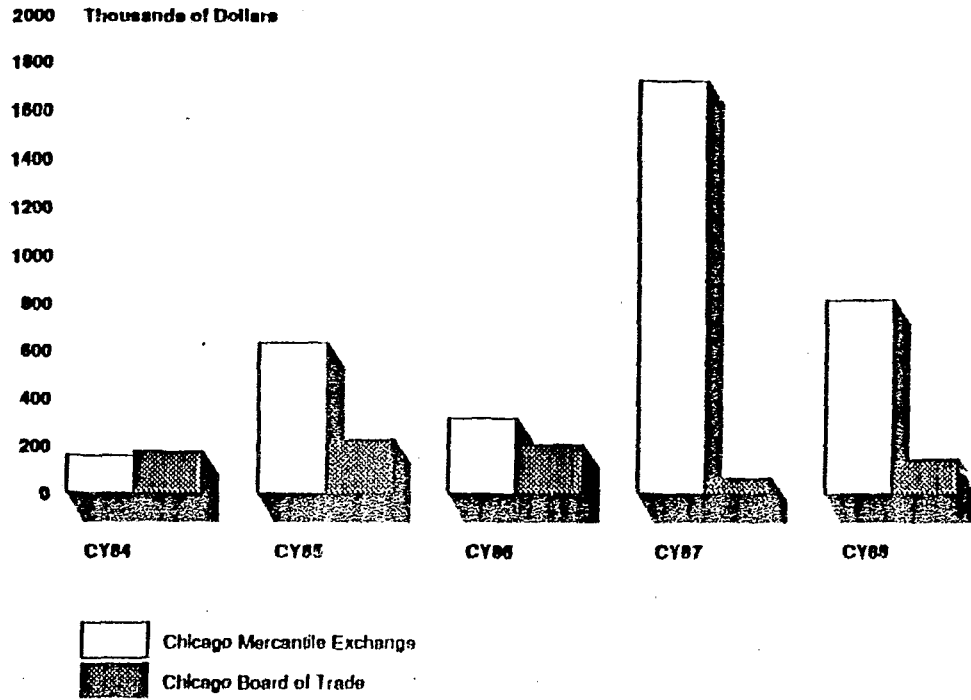


# GAO Number of Floor Participants Sanctioned





# GAO Amount of Fines



# GAO Disciplinary Actions

<u>The Chicago Mercantile Exchange</u>	<u>CY84</u>	<u>CY85</u>	<u>CY86</u>	<u>CY87</u>	<u>CY88</u>
Floor Participants Sanctioned	13	60	43	69	105
Fines	\$155,275	\$630,800	\$313,500	\$1,715,675	\$811,250
Expulsions	1	1	0	8	2
Suspensions (Bus./Cal. days)	570	6,368	238	12,392	6,110
 <u>The Chicago Board of Trade</u>					
Floor Participants Sanctioned	12	8	32	26	13
Fines	\$175,000	\$225,000	\$203,200	\$64,500	\$143,500
Expulsions	4	2	3	1	0
Suspensions (Business days)	55	539	5,587	166	4,339