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Treasury/Federal Reserve Study of Treasury Futures Markets Volume I: Summary and Recommendations

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Treasury/Federal Reserve Study Of Treasury Futures Markets

Volume I Summary and Recommendations

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The principal contributing authors are listed on the Acknowledgements page.

May 1979



THE SECRETARY OF THE TREASURY
WASHINGTON 20220

May 14, 1979

Dear Commissioner Stone:

In our separate letters dated October 19 and 25, 1978, we expressed concerns over the possible consequences of further rapid expansion in trading of Treasury futures contracts and requested a moratorium on new authorizations of such contracts until our staffs could conduct a thorough study of the markets for Treasury futures. That joint study has now been completed. The Treasury/Federal Reserve recommendations stemming from it are enclosed for your consideration, together with a summary of the study. The full study itself will be separately provided to you.

We appreciate the assistance which you gave us in this effort and your understanding of the important public interest issues involved in futures markets based on U. S. Government securities. We look forward to working with you to assure the appropriate development of these markets.

Sincerely,

W. Michael Blumenthal
Secretary of the Treasury

G. William Miller
Chairman
Board of Governors of the
Federal Reserve System

The Honorable
James M. Stone
Chairman
Commodity Futures Trading
Commission
2033 K Street, N. W.
Washington, D. C. 20581

Enclosure



IMMEDIATE RELEASE
May 14, 1979

CONTACT: Charles Arnold
202-566-2041

TREASURY ANNOUNCES NEW RULES
ON SECURITY AUCTIONS

The Treasury Department announced today that it is implementing two new rules concerning its offerings of marketable securities. Decisions on these new rules were reached in conjunction with the joint Treasury/Federal Reserve Board study of futures contracts based on Treasury securities.

First, effective immediately, the maximum award to any single bidder in Treasury security offerings will be limited to 25 percent of the total of the combined amounts of the competitive and the noncompetitive awards to the public. This modified a previous rule which allowed a single bidder in a Treasury auction to receive as much as 25 percent of the announced amount of the public offering. The new rule excludes from the 25 percent calculation those Treasury securities allotted to the Federal Reserve in exchange for maturing securities held both for its own account and for the accounts of foreign official institutions. It also excludes Treasury securities allotted to the Federal Reserve for new cash tenders on behalf of foreign official institutions.

This new 25 percent rule is needed because the proportion of Treasury bill offerings accounted for by the competitive plus noncompetitive award to the public has declined significantly in recent years. The Treasury Department expects this change to eventually broaden the competitiveness of the auction process and contribute to improved distribution of new securities.

Second, beginning June 18, 1979, the Treasury will require all bidders in its bill auctions to report on the tender form the amount of any net long position in excess

B-1601

of \$200 million in the bills being offered. This information should reflect positions held at the close of business on the day prior to the auction. Such positions would include bills acquired through "when-issued" trading, and futures and forward transactions as well as holdings of outstanding bills with the same maturity date as the new offering, e.g. bills with three months to maturity previously offered as six-month bills. Also, a primary dealer bidding on behalf of a customer will be required to submit a separate tender for the customer whenever the customer's net long position in the bill being offered exceeds \$200 million at the close of business on the day prior to the auction.

This information will be taken into consideration by the Treasury when awarding new bills. The Department's objective is to reduce the potential for undue concentration of ownership in new issues and to contribute to improved distribution. This new reporting requirement recognizes the rapid expansion of trading in Treasury bill futures as well as "when-issued" trading occurring between the offering announcement and the auction date.

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NEWS

COMMODITY FUTURES
TRADING COMMISSION

2033 K STREET, N.W.
WASHINGTON, D.C.

FEDERAL REGULATORY AGENCY
FOR FUTURES TRADING



FOR RELEASE Tuesday, October 24, 1978

CONTACT: William J. Monahan
Bruce Stoner
(202) 254-8630

ADVISORY

The following is a statement by William T. Bagley, chairman of the Commodity Futures Trading Commission, in response to a letter from Treasury Secretary W. Michael Blumenthal proposing a moratorium on new financial futures contracts.

"We certainly want to and will listen to the concerns of the Department of Treasury. And, correctly founded or not, I am convinced that these concerns are sincerely expressed in a constructive fashion. We welcome that approach on the part of Treasury. The CFTC is proud of the fact that, among regulatory agencies, the industry under our aegis has grown more than any other. Assuming that a joint study in financial futures is initiated, it should be concluded quickly so that healthy growth can continue. Unfortunately government has a way of studying a market-place until there is no longer any place to market."

#



FOR IMMEDIATE RELEASE
October 24, 1978

Contact: Charles Arnold
202/566-2041

TREASURY OPPOSES APPROVAL OF FUTURES CONTRACTS, PENDING STUDY

Secretary of the Treasury W. Michael Blumenthal has strongly recommended that the Commodity Futures Trading Commission not approve six futures contracts based on U.S. Government securities until the Treasury and Federal Reserve Board can study the effects of the proposed trading on Federal debt financing and the market for Government securities.

Secretary Blumenthal's request was made in a letter delivered on Monday, October 23 to Commission Chairman William T. Bagley. A copy of the letter is attached.

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THE SECRETARY OF THE TREASURY
WASHINGTON 20220

October 19, 1978

Dear Mr. Chairman:

I am pleased to respond to the requests of August 28 and September 11, 1978, from your office for the views of the Treasury Department with respect to the six applications for contract market designations by the Commodity Futures Trading Commission (the "Commission") listed in the appendix to this letter.

For the reasons stated below, the Treasury strongly recommends that the Commission not designate contract markets as requested by these applications, or any subsequent applications, based on United States Government securities, pending the outcome of a study to be conducted jointly by the Board of Governors of the Federal Reserve System and the Treasury Department, in cooperation with you.

The Treasury's concerns with futures contracts based on Government securities were discussed at length in Deputy Secretary Carswell's letters of April 13, 1978, to the Chairman of the Senate Subcommittee on Agricultural Research and General Legislation and to the Chairman of the House Subcommittee on Conservation and Credit and in Under Secretary Solomon's letter to you of August 10, 1978. As you know, these concerns were recognized in Public Law 95-405 which requires the Commission to consider the effect of contract market designations concerning Government securities on the "debt financing requirements of the United States Government and the continued efficiency and integrity of the underlying market for government securities."

The Treasury did not oppose the original designations of contract markets involving Treasury bills, nor has it opposed continued trading in these markets. There are potential problems, however, arising from the proposal to permit simultaneous trading on different exchanges of

13-week bill contracts based on the same Treasury bill auction. Trading on more than one exchange would create a potential for manipulation and other abuses which would appear to require, at a minimum, that the Commission provide for coordinated surveillance and regulation and consolidated reporting at the outset.

As you know, we have expressed a number of concerns with respect to contract market designations involving Treasury coupon securities. Unlike Treasury bills, which are highly liquid short-term instruments and are actively traded throughout their lives, the longer term Treasury notes and bonds are typically held by permanent investors. The Treasury relies on these investors to finance the major portion of the public debt. As these coupon securities are placed with them, secondary market trading and the availability of securities for delivery are significantly reduced. We have been concerned, therefore, that market prices on outstanding Treasury coupon securities, and thus prices on Treasury new issues, could be adversely affected by a large volume of trading in any futures contracts based on Treasury coupon securities.

It is essential that the Treasury maintain the flexibility to finance the public debt at the lowest possible cost consistent with the fiscal requirements of the Government and the needs of the economy. We have concluded, however, that in a very practical sense, Treasury's flexibility would be reduced by the establishment of a futures market which is heavily dependent upon an expected new issue by the Treasury. It should not be assumed that the regular issuance of Treasury cycle notes will continue in its present pattern. These note cycles were established beginning in 1974 to deal with the financing of the extraordinary budget deficits of recent years. As we continue toward the President's objective of reducing and eliminating budget deficits, the maturities of Treasury new issues may well change substantially. Just last month, in the face of declining financing requirements, the Treasury substituted a 15-year bond issue for the usual 5-year cycle note. While many market participants had expected a 5-year note issue, we did not have to deal with an established futures market in 5-year notes and we were able to accomplish this change on short notice with minimum market impact. Once a futures market dependent on issuance of certain Government securities comes into existence, Treasury could be influenced, as a practical matter, by the potential disappointment of the expectations (even though not strictly warranted) of participants in this market.

Treasury debt management flexibility would also be reduced by the existence of futures markets dependent upon the availability of outstanding Treasury coupon securities. For example, the Treasury has at times engaged in advance refundings of outstanding Treasury issues, and the Treasury recently gave serious consideration to actually purchasing certain outstanding issues to relieve congestion in certain maturity areas of the market. Such debt management operations by the Treasury could result in the unexpected withdrawal from the market of certain securities, or groups of securities, which constituted part or all of the anticipated deliverable supply in the futures market. Thus, it may not be possible to deliver the security specified in the futures contract. Even if the contract were based on a "basket of securities," as has been suggested, there is no assurance that the predetermined group of securities will be readily available in sufficient supply at the delivery date.

We are deeply concerned with the current proposals for futures trading based on 2-year notes, 4-year notes, and 4 to 6 year notes. Based on the limited information available to us now, it is our judgment that such trading could have an adverse impact on the debt financing requirements of the United States Government. The overriding purpose of the Government securities market is to finance the public debt, and any development that may detract from that purpose must clearly be viewed as contrary to the public interest until such time as it is proven not to do so. In view of this conclusion, we do not believe that the simple assertion of a board of trade to the contrary would permit the Commission to find that the board had "demonstrate(d) that transactions for future delivery in the (Government securities) for which designation as a contract market is sought will not be contrary to the public interest" as required by the Commodity Exchange Act.

I assure you that we did not come to this conclusion lightly. I am deeply committed to the philosophy that our economy functions best if free markets are permitted to flourish. Yet, after careful consideration of the special role of the Government securities market and the requirements of the Commodity Exchange Act, as amended, I have

concluded that U.S. Treasury notes and bonds should not be used as a basis for trading in the futures market until more information concerning the market is available to us.

In addition to the practical consequences for debt management, we are also concerned by the lack of adequate information about the relationship between the futures market and the cash market for Government securities. Under Secretary Solomon's August 10 letter raised serious questions concerning the adequacy of information about the cash market supplied to the Commission in connection with its consideration of the four-year note proposal of the Chicago Mercantile Exchange. This information gap has not yet been satisfactorily closed.

There is also a need for coordinated reporting of positions in the underwriting of Government securities in the spot market with positions in the futures market. In this regard, the Treasury and the Federal Reserve are expanding the primary dealer reporting system to include disclosure of futures trading activity. The New York Federal Reserve Bank would require separate daily dealer reporting forms which will include volume of trading activity as well as positions in futures contracts based on U.S. Government securities. When the expanded system becomes operative, we can conduct the essential studies of possible benefits and detriments of futures activity on the cash market for Government securities.

In view of the current proliferation of new proposals for futures contracts based on Treasury securities and the lack of information available to us, we cannot be assured that these markets will not develop in a manner inconsistent with the public interest. Thus, I believe that at this time no further contract designations based on Treasury bills or coupon securities should be approved. Although I realize that the Commission has the power to withdraw contract designations in the appropriate circumstances, it is unquestionably more difficult to exercise that authority than to delay approval of new contract designations where important information about their impact is lacking. We realize that no study can supply definitive answers to all the questions a new contract may raise. However, we believe that the Federal Reserve and the Treasury, with the Commission's cooperation, can conduct the necessary studies of the likely impact of these futures markets on the cash market for Treasury securities. Because of the unique importance to the public of the cost of Treasury financing, this information should be available before an extensive market in futures contracts based on U.S. Government securities is permitted to develop.

We have discussed preparation of such studies with the Federal Reserve Board which is expected to consider the matter in the near future. We are prepared to proceed immediately. We look forward to coordinating with you and discussing how that can best be done.

Sincerely,

A handwritten signature in black ink that reads "W Michael Blumenthal". The signature is written in a cursive style with a large, prominent "W" at the beginning.

W. Michael Blumenthal

The Honorable
William T. Bagley
Chairman
Commodity Futures Trading Commission
Washington, D.C. 20581

APPENDIX

FUTURES CONTRACT APPLICATIONS

<u>Contract Designation</u>	<u>Board of Trade</u>	<u>Date of Application</u>
4-Year Notes	Chicago Mercantile Exchange (IMM)	July 13, 1977 (Resubmission 9-5-78)
4- to 6-Year Notes	Chicago Board of Trade	July 26, 1978
13-Week Treasury Bills	Amex Commodities Exchange	August 1, 1978
13-Week Treasury Bills	Commodity Exchange Inc.	July 31, 1978
1-Year Treasury Bills	Commodity Exchange Inc.	July 31, 1978
2-Year Treasury Notes	Commodity Exchange Inc.	July 31, 1978

October 18, 1978

TREASURY/FEDERAL RESERVE STUDY
OF TREASURY FUTURES MARKETS

Volume I

Summary and Recommendations

May, 1979

ACKNOWLEDGMENTS

Peter Keir of the Board of Governors, along with Richard Kelly and Francis Cavanaugh of the Treasury were responsible for direction of this study.

Principal contributing authors were:

John Mingo, Frederick Struble, Leigh Ribble, Michael Assay and Brian Gendreau of the Board of Governors;

Paul Meek and Christopher McCurdy, of the Federal Reserve Bank of New York. Shelia Tschinkel (formerly of that bank) also contributed importantly to the study in its early stages.

Anthony Vignola and Charles Dale of the Treasury;

Kenneth Froewiss of the Federal Reserve Bank of San Francisco;
and

Paul Kasriel of the Federal Reserve Bank of Chicago.

Darlene Grant-Brown of the Board of Governors was responsible for overseeing the typing of the study and monitoring exchanges of editorial comments among the participants.

**IMMEDIATE RELEASE**

May 14, 1979

Contact: Charles Arnold
(202) 566-2041

TREASURY AND FEDERAL RESERVE MAKE
JOINT RECOMMENDATIONS ON FUTURES CONTRACTS
ON TREASURY SECURITIES

The Treasury Department and the Federal Reserve Board today released joint recommendations to the Commodity Futures Trading Commission (CFTC) on futures trading in Treasury securities.

The recommendations result from a study by the Treasury and Federal Reserve. The study was initiated after Treasury Secretary W. Michael Blumenthal and Federal Reserve Chairman G. William Miller, in October 1978 letters to the CFTC, expressed concerns over the possible consequences of further rapid expansion in trading of Treasury futures contracts.

In their October letters, Secretary Blumenthal and Chairman Miller suggested a moratorium on new authorizations of Treasury futures contracts until a Treasury/Federal Reserve study could be completed.

A report summarizing the study's findings and the joint recommendations is attached. It was sent today to the CFTC.

The Treasury and Federal Reserve recommend that:

1. Adequacy of Deliverable Supply

- The CFTC should consider not just the width of the maturity range defining issues eligible for delivery, but also the number of already outstanding issues that will move into that range as the contract approaches delivery, the size of those issues, and their likely availability in the secondary market (as suggested by the length of time they have been outstanding and their distribution by type of holder). These questions should be addressed explicitly in the analysis prepared for the Commission by its staff when new contract designations are being considered. Studies of how the prices of given issues vary relative to those of adjacent issues will help to shed light on this question of availability.
- In no case should the CFTC approve a contract that depends for its deliverable supply solely on a particular security yet to be issued.
- Where contracts specify a relatively narrow maturity range for the deliverable supply, approval should also be withheld on new contracts if the deliverable supply of already outstanding maturities consists of only

small amounts of closely-held issues.

- To assure that the exchanges regularly review the terms of all outstanding contracts in relation to changes in the structure of marketable Federal debt, the CFTC should reestablish a "sunset" provision for new contracts requiring them to be reviewed and reauthorized every few years.

2. Existing 1-year Bill Contract

- Because its deliverable supply depends wholly on a single new security not yet issued, the existing 1-year bill contract should be modified to assure a broader deliverable supply or, in the alternative, withdrawn.

3. Existing 3-month Bill Contract

- Because the 3-month bill contract has become so well established and so actively used in its present form, a redefinition of deliverable supply at this juncture seems unwarranted.
- However, in view of the concerns expressed by market participants that the 3-month contract has been vulnerable to squeezes under certain conditions, steps should be taken to minimize these possibilities through improved data collection and monitoring of interactions between the futures and cash markets.

4. Potential Risks of Contract Proliferation

- The CFTC should proceed gradually in authorizing additional contracts for financial futures. In the untested intermediate-term sector, for example, a first step might be to authorize only one note contract, on one exchange, with a range of eligible maturities sufficient to provide a reasonable "market basket" of deliverable supply. Further, the CFTC should not designate contract markets on more than one exchange for essentially identical contracts unless it has entered into formal agreements with each exchange to provide uniform reporting of contract positions to the CFTC and to establish uniform emergency procedures that would be implemented jointly and coincidentally at the request of the CFTC.

5. Safeguards for Investors

- Further study of investor protection and exchange regulation being conducted jointly by the CFTC, the Treasury, and the Securities and Exchange Commission should proceed. Among the issues to be explored should be appropriate customer suitability standards, margin requirements, and positions limits.
- In addition, the CFTC and the exchanges promoting futures contracts should make clear securities are not

obligations of the U.S. Treasury. To avoid any confusion on this question, the exchanges should not use pictures of the Treasury building or of Treasury securities in their promotional material.

The full study will be released later.

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Introduction

The rapid growth in recent years of futures trading in U. S. Government securities raises a number of questions of importance to the Treasury and to the Federal Reserve:

Does futures trading in U. S. Government securities affect adversely the efficiency and integrity of the underlying cash market for those securities?

Is the trading of futures contracts which depend on deliverable supplies of Government securities likely to constrain the Treasury in its debt management decisions?

Will the exchanges and the Commodity Futures Trading Commission (CFTC) be capable of maintaining effective surveillance of financial futures markets, particularly as essentially duplicative contracts trade simultaneously on several exchanges?

Is there a danger that unsophisticated investors will not fully appreciate the risks inherent in futures contracts whose names suggest the backing of the U. S. Treasury?

The September 30, 1978, legislation (P.L. 95-4-5), which renewed the authority of the CFTC to regulate futures markets, directs the Commission to solicit the advice of the Treasury and the Federal Reserve before authorizing any additional futures contracts that specify delivery of U. S. Government securities. The Act also requires the Commission to consider the impact of such futures trading on the debt management requirements of the Treasury and on the efficiency and integrity of the market for U. S. Government securities. Confronted with the need to comment on several pending contract proposals, yet lacking a body of research on which opinions could be firmly grounded, the Secretary of the Treasury and the Chairman

of the Board of Governors wrote the CFTC in October, 1978, suggesting an immediate Treasury-FRB study and requesting a moratorium on new authorizations of Treasury futures contracts until the study could be completed.

Since then the staffs of the Treasury and the Federal Reserve have conducted over thirty interviews with a wide variety of participants in both the cash and futures markets for Government securities. The findings from these interviews, from current staff studies, and from previous studies of futures markets are summarized below under three broad headings.

1. The potential benefits from these markets;
2. The potential problems which they might pose for the efficient operation of the underlying market in U. S. Government securities, for the Treasury in its debt management, and for particular categories of investors; and
3. Conclusions and recommendations.

The discussion of the findings is preceded by a brief introduction to the institutional background of financial futures. A much more complete discussion of the potential strengths and problems of futures markets is contained in a separate staff report (Volume II of this study), which also includes a summary of the interviews with market participants and a more extensive treatment of the regulatory structure of the industry.

The Institutional Background

1. The Product

A futures contract is an agreement to buy or sell a particular good--traditionally, an agricultural commodity--on some specified future

date, but at a price determined now by competitive bidding on the floor of an exchange. Since late 1975, futures contracts on a number of financial instruments have been introduced, including ones based on 3-month and 1-year Treasury bills, which trade on the International Monetary Market (IMM) of the Chicago Mercantile Exchange (CME), and one based on long-term Treasury bonds, which is listed on the Chicago Board of Trade (CBOT). Applications by these and other exchanges for additional contracts on Treasury securities are now pending before the CFTC. Some of them are essentially duplicative of the bill and bond contracts, but others propose futures contracts on Treasury notes ranging in maturities from two to seven years.

Trading volume in the 3-month bill and bond contracts has grown rapidly, averaging over 4,000 contracts a day for each. (A single bill contract is for \$1 million face value of bills; each bond contract, for \$100,000 par value of bonds.) The number of contracts outstanding (the "open interest") recently has been roughly 55,000 in the case of the 3-month bills and 45,000 for the bonds. Interviews with market participants indicate that this trading activity has been largely speculative, although there is evidence of hedging by investors seeking protection against the risk of interest rate changes. (The difficulty in distinguishing hedging from speculating is discussed below.)

Despite the heavy trading volume, typically only a relatively small number of contracts culminate in actual delivery on each maturity date, the remainder having been liquidated by offsetting trades. This pattern of few deliveries is common to all organized futures markets, i.e., markets on

which standardized contracts for future delivery are traded on regulated exchanges, which require all positions to be "marked to market" daily. By contrast, deliveries are the rule rather than the exception for forward contracts, which are unregulated agreements between two parties to exchange a good or security at an agreed-upon price on some specified future date, and which can be tailored to meet individual needs.

2. Exchanges

Exchanges are nonprofit associations whose membership is generally composed of individuals. The privileges of exchange membership include the right to trade on the floor for one's own account, the right to collect a brokerage fee for executing trades for others, and the right to vote for the members of the governing body of the exchange. The governing body--composed of both members and nonmembers--is ultimately responsible for enacting and enforcing the rules of the exchange and, thus, for much of the self-regulation of the futures industry.

Each exchange maintains a clearinghouse which acts as a third party to every trade. That is, the clearinghouse is directly or indirectly the other party in every futures contract: the buyer to every seller, and vice versa. In this sense, the exchange stands behind every contract.

Exchange members acquiring contracts for their own account or for their customers must deposit assets with the exchange equal to a certain proportion of their contractual obligations. Such deposits, which can take several forms including cash, Treasury securities or, in some cases, a

letter of credit, are commonly referred to as margins. They are, however, really in the nature of a bond that guarantees eventual performance of contract terms rather than a down-payment that limits the use of credit to purchase a security. The exchanges have exclusive authority to set margin levels.

The equity value of the exchange member's margin account will, of course, vary with the market price of contracts. At the end of each trading day the clearinghouse "marks to market" each account--i.e., the effects of the day's price movement are calculated. If a loss is incurred which depletes the margin account, the exchange member is notified and he must send a certified check before the start of business the following morning to restore the account to its required level.

The exchanges also require their members to obtain margins from their customers. These accounts are also marked to market, but the procedures members use for their customers on margining and marking to market do not have to be uniform.

3. The CFTC

The Commodity Futures Trading Commission, established in 1975, is composed of a Chairman and four other Commissioners appointed by the President and confirmed by the Senate to serve staggered five-year terms. The CFTC has broad regulatory authority over futures trading, and it must approve all futures contracts traded on U. S. exchanges, ensure that the exchanges enforce their own rules (which it must review and approve), and direct an

exchange to take any action needed to maintain orderly markets whenever it believes that an "emergency," such as market manipulation, exists.^{1/}

Potential Benefits from Financial Futures

Futures markets can benefit society by (1) reallocating risk to those more tolerant of it, and (2) aggregating information and making it available to everyone at a low cost. This section will describe how these services are provided by futures markets and examine whether they could be provided just as well without such markets, particularly in the case of financial futures. Also, it will note some of the other uses for financial futures beyond "hedging" and "speculating," as those terms are usually defined in textbooks and in trade literature.

1. Hedging and Speculating

An individual or institution whose business requires holding inventories of any good, finished or in process, may wish to be protected from the risk of adverse price movements of the good in question. A farmer might reasonably feel more competent to grow crops than to forecast their prices. A bank might be better able to assess the credit worthiness of a small business than to gauge what the cost of its own funds will be a year

^{1/} A recent court decision in the case of the March 1979 wheat contract on the CBOT, however, has raised important questions as to the adequacy of the CFTC's authority to require exchanges to take emergency actions.

in the future. The farmer might want to protect himself ("hedge") against the risk of unfavorable price changes by locking in now the prices at which he could sell his harvested crop at some later date and the bank might want to hedge against the risk of a rise in the interest rate it must later pay on its CD's. By the same token, individuals who have a preference for risk bearing and who specialize in forecasting prices might be willing to "speculate" by contracting now to buy the yet-to-be-harvested crop or the planned future issue of CD's.

Speculators, however, provide social functions other than relieving hedgers of risk. In order to survive, they must devote substantial resources to the generation of information concerning future events. As they act on this information, they transmit it to the public via the price system. For example, if their private information indicates that the world wheat harvest will be poor, they effectively communicate that information as they bid up the price at which they contract now to buy wheat from farmers at harvest time.

2. Advantages of Futures

The hedging and speculating activities described above could take place even if there were no futures markets. Forward contracts could be negotiated on an individual basis. Or, in the case of the anticipated wheat shortage, speculators could buy wheat from grain elevators and hold these stocks in inventory themselves, thus speculating in the spot market. But futures markets permit these activities to be carried out more

efficiently. The existence of a central market (the exchange) reduces the search costs involved in bringing hedgers and speculators together. The fact that the exchange's clearing corporation interposes itself between the contracting parties further reduces costs by lowering the risk to each side that the other party will default. By publicly providing up-to-the-minute price quotes on all trades, futures markets permit the rapid and widespread dissemination of the information possessed by individual speculators. Finally, purchase of a futures contract does not involve the inventory costs associated with purchases of a commodity in the spot market.

However, these advantages are less important in the case of financial futures. A variety of forward contracts exist, including "when-issued" trades of new securities, standby contracts (put options) on GNMA securities, and repurchase agreements. Hedgers and speculators can be brought together efficiently through the highly developed dealer network. That same network provides for the transmittal of the latest price quotes. Also, financial instruments do not require the storage and transportation costs required for tangible commodities.

Despite the availability of these alternative avenues for hedging and speculating in financial markets, futures trading still has some distinct advantages, such as the role of the exchange as guarantor of every contract. Furthermore, short-sales of securities, though possible in the spot market, are cheaper to execute in a futures market since the short does not have to pay a fee to borrow the security. The very fact that financial futures

have grown as rapidly as they have in the presence of these alternatives suggests that there are cost advantages to using futures contracts.

Whether financial futures markets increase the availability of information is moot, since the yield curve in the spot market already embodies the views which speculators hold regarding the future course of interest rates. But to the extent that financial futures markets encourage more speculation by lowering the cost of doing so, they also lead to the production of a greater amount of information than would otherwise be available. In other words, while the spot market yield curve may incorporate all available information, that yield curve may itself be altered by the existence of financial futures. There is disagreement among economists, however, as to whether the yield curve will be "improved," i.e., whether it will more accurately anticipate the actual future course of interest rates and whether the additional information generated through futures trading will represent an optimal use of society's resources.

3. Other Uses for Financial Futures

The dichotomy of hedging and speculating fails to capture the variety of motivations for using futures. Even the distinction between hedging and speculating is itself often unclear. For example, the decision to incur the costs of establishing a hedge may reflect one's forecast that prices will move adversely and thus involve an element of speculation. Furthermore, unless the maturity of the futures contract coincides exactly with the time when the crop is harvested or the CD's are issued--to

continue the earlier example--a hedged position will not be a riskless one. Nonetheless, hedging does reduce risk exposure, and the fact that there are few "pure hedgers" in the textbook sense operating in financial futures markets need not imply that these markets are not being used to reduce risks.

Financial futures may also be used for arbitrage purposes. An investor may at times find it profitable to, say, sell a 6-month Treasury bill and replace it with a 3-month bill and a tandem 3-month Treasury bill futures contract. Such a trade is "riskless" but it is not "hedging."^{1/} On the other hand, one may decide to speculate that the shape of the yield curve will change by taking simultaneous long and short positions in different delivery months for the same security. While such "straddles" are speculative, they typically involve less risk than simple open positions. The riskiness of these and other trades can really be judged only in the context of one's entire portfolio, not in isolation.

Potential Problems with Financial Futures

The preceding section described some of the uses to which financial futures can be put and some of the benefits--both to individuals and to society at large--which can accrue from these instruments. In order to decide whether the development of financial futures should be encouraged,

^{1/} It is arbitrage, in that it helps to drive futures and spot market rates into proper alignment and in that the arbitrageur knows his profits with certainty after consummating the trade.

however, it is necessary to weigh the purported benefits against any potential problems. A variety of such potential problems have been identified. This section attempts to assess their seriousness.

1. The Impact on
Spot Markets

A basic concern has been that futures trading in Government securities will have a destabilizing effect on prices in the spot market for these securities and that investors on whom the Treasury normally relies to finance its debt may be dissuaded from bidding in Treasury auctions if prices become less stable, thus leading to higher yields or costs to the Treasury. It is important from a policy perspective to distinguish the case in which destabilizing effects might arise even if futures markets are perfectly competitive from the case in which a small group of investors looms large enough in the markets to have a significant impact on prices.

In the perfectly competitive case, the usual argument for a destabilizing influence from futures goes as follows: (1) futures trading encourages speculation by reducing the costs involved; (2) speculators are likely to drive futures prices to levels not justified by market fundamentals; (3) wide price swings in futures markets will be transmitted to spot markets via arbitrage. Whatever the intuitive appeal of such reasoning, empirical studies of both agricultural and financial markets have not been able to prove that there is greater price variability in spot markets during periods in which the good or security in question was traded on a futures market.

A supplementary argument (again, in the competitive case) stresses the danger that, should investors be unable to close out futures positions because prices have already moved the daily limit, they may try to cover their positions with offsetting spot market transactions, thereby imparting additional price variability to the spot market. So far, Treasury bill futures prices have never moved their daily limit. Treasury bond futures have done so on a number of occasions, but market participants indicated in interviews that this appeared to be essentially a response to abruptly changed expectations about cash market prices. They did not believe there was any substantial spillover to the spot market from events originating in the futures market.

Still a third possible avenue for futures to have a destabilizing effect on spot prices is by drawing funds into the futures market which would otherwise be used in the spot market. The resulting thinness of the spot market could then make spot prices prone to wider swings. However, since securities dealers generally use the futures markets in conjunction with the spot markets, e.g., for hedging or for arbitrage, their activities should not contribute to any such diversion of funds. Moreover, many of the speculative positions taken by individuals in futures markets would probably have never been taken at all in the cash markets, given the costs of carrying the actual securities.

There is a related concern sometimes expressed that financial futures will divert funds from third markets, particularly the stock market. But buying a futures contract, for which securities in one's portfolio may

be pledged as initial margin, does not reduce the volume of funds available to underwrite real investments. In sum, under the assumption of perfectly competitive futures markets, fears that futures trading in financial instruments will disrupt the spot markets have not been documented.

These fears cannot be so lightly dismissed once the competitive assumption is relaxed, however. In speaking of possible ways in which prices (futures or spot) could be distorted, no distinction will be made between a "squeeze" and a "corner." According to the CFTC Glossary, a "corner" means controlling enough of a commodity so that its price can be manipulated, while a "squeeze" refers to a situation in which those who are short cannot repurchase their contracts except at a price substantially higher than the value of the contract in relation to the rest of the market. These definitions are inexact, and do not necessarily have any legal significance.

The possibility of either a corner or a squeeze in the case of the 3-month bill, for example, arises from the fact that the futures contract can be satisfied only with a single maturity, over which command of the available supply is not beyond the resources of a large securities dealer. The "available" supply may be considerably smaller than the total supply to the extent that a substantial portion of each auction goes to the Federal Reserve and to foreign central banks and other noncompetitive bidders who are not likely to be sensitive to price changes in deciding whether to resell. In some auctions during the last year, the Fed and foreign official accounts absorbed all but about \$1 billion of the new 3-month issue.

On, say, a \$3 billion issue, an individual dealer could take \$750 million and still stay within the Treasury guideline of not allotting more than 25 per cent to a single bidder. If, in addition, a dealer also took a sizable long position in the futures market, bought the new 3-month issue on a "when-issued" basis from others bidding or planning to bid in the auction, and had previously acquired a long position in the outstanding deliverable bill (auctioned originally as a 6-month issue), he might well be able to build a long position in the new bill that actually exceeded total auction awards to investors other than the Federal Reserve and foreign official accounts.

Interviews with market participants suggested that dealer positioning strategies of this kind may have succeeded in squeezing the secondary market price on one or two new bill issues during 1978. While market estimates of the resulting distortion in yield in those operations range from 10 to 40 basis points, such judgments cannot be effectively tested, due to the many other special factors that were influencing supply-demand relationships in the cash bill market at the same time. It should be noted, though, that observed spreads among immediately adjacent bill maturities did not widen to these proportions.

The Treasury bond contract differs from the bill contract in that an entire "market-basket" of securities is eligible for delivery. Although the basic trading unit is a bond with a \$100,000 face value at maturity and an 8 per cent coupon, any Treasury coupon issue can be delivered if it has

at least 15 years to maturity (or to first call). The contract's settlement price is adjusted if other than 8 per cent coupons are delivered.

Possibilities for the manipulation of Treasury bond prices, through joint action in the cash and bond-futures market, appear to be minimal, given the sizable number of issues deliverable under the current contract. While the market-basket approach thus reduces one major potential problem of financial futures, it also reduces one of the major benefits--that is, the uncertainty created as to which issue will ultimately be delivered makes the contract less useful for hedging. In the case of long-term bonds, this problem may be more hypothetical than real, given the flatness of the yield curve at the long end. However, it may pose a problem for the use of the market-basket approach in the intermediate portion of the maturity spectrum, where some of the proposed new contracts fall.

2. Constraints on Treasury

The central point to emerge from the above section is that, in the face of a relatively small deliverable supply of the security specified in a futures contract, the possibility of corners or squeezes leading to disruptive price movements in the spot market is a real one. The Treasury, in turn, could be hurt in the longer run if investors began to shun the market for its debt because of such factors. While the Treasury has the ability to prevent a squeeze by issuing more of the deliverable security, the Treasury should not be so constrained in its debt management decisions by problems in markets for financial futures.

If new contracts were approved for Treasury notes, the chances of problems arising that would make the Treasury feel constrained in its debt management actions might well be increased. Notes are not issued every week as bills are, and the outstanding supply in the proposed contract maturity areas is not as great as for the bond contract. Were there futures contracts on, say, a 4-year note, trading now with maturities extending into 1981, the question would arise whether the Treasury ought to feel obligated to plan to issue such securities two years from now.

An appreciation of the Treasury's need for flexibility in debt management can be gained by considering the different problems which it faces at times of large deficits and of small ones (or of surpluses). With a rapidly expanding debt in recent years, the Treasury shifted from bill financing to regular intermediate note issues to raise new money as it sought to avoid a rapid build-up in the supply of short-term debt, which would have resulted from the combination of deficit financing and shortening of the outstanding debt with the passage of time. A large increase in a bill offering taken to forestall a squeeze in a bill futures contract would be at cross-purposes with this goal. As the rate of growth of the debt shrinks, on the other hand, as budget deficits decline, the Treasury may interrupt or terminate some of its regular offerings in the intermediate note area. In fact, the Treasury interrupted the 5-year note cycle and certain other note issues in recent quarters, because of declining cash needs.

Market participants have generally argued that the Treasury should not feel constrained to tailor its debt offerings to the requirements of futures markets. But the Treasury cannot be unconcerned with the possibly disruptive effects of its actions on the Government securities markets. Whether the Treasury could feel free to ignore the needs of futures markets in making debt management decisions, thus, would depend on (1) how effectively the exchanges meet the requirements of the Commodity Exchange Act and the CFTC guidelines regarding the adequacy of deliverable supply and (2) how futures markets react to such things as abrupt changes in the size of deliverable supplies. A key consideration is the ability of the exchanges to cope with situations of that kind. The exchanges do have specific rules and procedures for dealing with such emergencies, but the question is how aggressively they would implement them.

3. Possible Dangers to
Specific Groups of Investors

The bank regulatory agencies must naturally be concerned with the dangers that financial futures might pose for banks which deal in these instruments. There is evidence that financial futures can be used by banks effectively to hedge portions of their portfolios against interest rate risk. The difficulty is in determining whether a given bank's futures position acts to reduce or increase interest rate risk (i.e., whether the position constitutes a hedge or is speculative). Such a determination cannot be made by looking at a futures transaction along with a corresponding cash position. Rather the risk of a futures position must be judged against

the interest rate risk of the bank as a whole (including the risk of off-balance-sheet commitments) and not relative to any single transaction.

No bank has yet failed or required supervisory attention as a result of involvement in financial futures. However, trading in forward, and standby contracts for GNMA securities has threatened the solvency of some banks, and injudicious trading in commodities futures was the proximate cause of the failure of a foreign banking subsidiary of a large U. S. bank. Caution should be used in drawing inferences based on these experiences. The forward market, which lacks the mark-to-market procedure of futures, allows large gains or losses to accrue without the discipline of daily margin settlements. And the bank failure associated with commodities futures involved a large number of questionable banking practices.

Apart from banks, small investors are another specific group for whom financial futures may cause problems. One fear is that these investors will not distinguish futures contracts on Government securities from the underlying securities themselves. Additionally, such participants may not recognize that the highly leveraged nature of futures can make them extremely risky. In such circumstances, unsophisticated investors can become especially vulnerable to aggressive, if not ill-advised, selling tactics by brokerage firms promoting futures. While these dangers may be real ones, once again it is important to add that organized futures markets have more built-in safeguards for small investors than do forward markets.

Conclusions and
Recommendations

Given the particular concerns that prompted the Treasury/Federal Reserve study of markets for Treasury futures, the resulting conclusions and recommendations are focussed on three principal issues: (1) the adequacy of deliverable supply for existing and proposed contracts; (2) the problems that might develop from a rapid proliferation of contracts for Treasury securities in general, and of substantially similar contracts on more than one exchange in particular; and (3) the additional safeguards that might be needed to protect the growing number of investors being encouraged to participate in Treasury futures transactions. On each of these issues, recommendations are first listed and then explained.

1. Adequacy of
Deliverable Supply

Proposed new coupon contracts. When reviewing requests for new futures contracts in Treasury coupon issues, it is recommended that the CFTC adhere to the following general guidelines on deliverable supply.

--The CFTC should consider not just the width of the maturity range defining issues eligible for delivery, but also the number of already outstanding issues that will move into that range as the contract approaches delivery, the size of those issues, and their likely availability in the secondary market (as suggested by the length of time they have been outstanding and their distribution by type of holder). These questions should be addressed explicitly in the analysis prepared for the Commission by its staff when new contract designations are being considered. Studies of how the prices of given issues vary relative to those of adjacent issues

will help to shed light on this question of availability.

- In no case should the CFTC approve a contract that depends for its deliverable supply solely on a particular security yet to be issued.
- When contracts specify a relatively narrow maturity range for the deliverable supply, approval should also be withheld on new contracts if the deliverable supply of already outstanding maturities consists of only small amounts of closely-held issues.
- To assure that the exchanges regularly review the terms of all outstanding contracts in relation to changes in the structure of marketable Federal debt, the CFTC should reestablish a "sunset" provision for new contracts requiring them to be reviewed and reauthorized every few years.

The IMM has stated that the substantial variability of the Treasury yield curve in the intermediate maturity range would create major market uncertainties concerning the value as a hedge of any new note contract that specified a broad "market-basket" of deliverable supply. For this reason it has restricted the definition of deliverable supply for its proposed 4-year note contract to issues with maturities ranging from only 3-years and 9-months to 4-years and 3-months. While the exchange acknowledges that this relatively narrow band of deliverable maturities might create some risk of an occasional shortage in deliverable supply, it asserts that if such a development should occur, this would not represent a significant problem.

Exchange officials note that they operate under explicit rules for dealing with deliverable supply shortages, are perfectly prepared to use these procedures when needed, and can require settlement of a contract

in cash if this becomes necessary. Consequently, they see no reason why an unexpected shortage in deliverable supply should disrupt the cash market, or exert special pressure on the Treasury or the Federal Reserve to deal with the shortage. At the same time, they are concerned that any significant broadening of the deliverable supply for the 4-year note contract would substantially reduce its appeal to investors as an instrument for hedging.

Notwithstanding this IMM contention, the record of commodities exchanges in dealing with deliverable supply shortages in non-financial commodities has been inconsistent. Contracts in Treasury futures pose special problems, since shortages in the deliverable supply can develop with little warning close to the contract delivery date. For example, if an auction of an expected issue were suddenly canceled or substantially reduced in size only a few days before contract delivery, a squeeze on the deliverable supply could develop very unexpectedly. If the deliverable supply were eliminated completely, the exchange would be forced to call for an emergency measure such as settlement in cash. But if the supply were simply reduced significantly below expectations, the exchange and the CFTC might be inclined to temporize, leading to sharp adjustments in cash market rates. In such a situation, the Treasury could be placed in the difficult position of deciding whether to follow through on, or forego, a debt management action which would significantly reduce the deliverable supply of a maturing futures contract.

The risk that squeezes in futures markets might develop and inhibit Treasury debt management flexibility would be reduced if contracts authorized

by the CFTC involving delivery of intermediate-term securities were required to adopt a suitable "market-basket" approach to deliverable supply. The fact that some exchanges plan to use this approach on their proposed intermediate-term contracts suggests that they do not see it as a major defect in the contracts.

Existing 1-year bill contract.

--Because its deliverable supply depends wholly on a single new security not yet issued, the existing 1-year bill contract should be modified to assure a broader deliverable supply or, in the alternative, withdrawn.

The existing contract in 1-year Treasury bill futures entails a significant risk of an insufficient deliverable supply because the only issue eligible for delivery is the newly auctioned 1-year bill. Thus, for any given 1-year auction, there is no certainty as to the amount of, or even the issuance of, the bill until about a week before delivery on the futures contract. Any Treasury decision not to roll over, or to reduce significantly the size of the new bill consequently produces an immediate deliverable supply problem, only shortly before the contract delivery date.

The recent postponement of the Treasury's April year-bill auction (necessitated by the Congressional delay in extending the Federal debt ceiling) provided an example of how unforeseen developments can arise shortly before delivery. As a result of that postponement, the IMM was forced to limit trading in the April futures to transactions for closing out positions and to introduce a standby emergency procedure for cash settlement. At the last moment, the Treasury did finally issue the bill, before cash settlement became necessary.

Since trading in the year-bill futures contract has generally been quite light, and the open position in the April maturity was small, the delay in making settlement exerted no evident deleterious effect on the cash market. But the experience did dramatize the extreme vulnerability of any contract that relies for its deliverable supply solely on a security yet to be issued.

The deliverable supply of the 1-year bill contract might be expanded, for example by making the previous 1-year issue, already outstanding, deliverable as well. However, any broadening of the maturities in the supply base would make the contract somewhat less efficient as an instrument for hedging. With contract months for 3-month bill futures now running beyond one year, it appears that investor needs to hedge against potential changes in short-term rates can be reasonably well accommodated in that more liquid market. Thus, a withdrawal of the 1-year contract would be an alternative resolution of this potential problem.

Existing 3-month bill contract.

--Because the 3-month bill contract has become so well established and so actively used in its present form, a redefinition of deliverable supply at this juncture seems unwarranted.

--However, in view of the concerns expressed by market participants that the 3-month contract has been vulnerable to squeezes under certain conditions, steps should be taken to minimize these possibilities through improved data collection and monitoring of interactions between the futures and cash markets.

Some market participants perceived particular instances where, in their judgment, the deliverable supply for the 3-month bill contract was

squeezed. The particular conditions that were cited for creating this possibility were a combination of restricted market supply (resulting from heavy pre-emptive demands in the auction for new 3-month bills from both the Federal Reserve and foreign central banks), and strong interest-in-elastic investor demands to hold the deliverable bill (because it fit their particular maturity needs). Although some market participants assert that the margin of interest-sensitive investors willing to sell the deliverable bill and switch to higher yielding alternatives is always sufficient to deter any serious manipulation of bill futures prices, the risk of a squeeze seems real enough to suggest the implementation of additional steps that will further minimize this possibility.

During the month before delivery, the CFTC should routinely collect data on cash and forward positions in the deliverable issue from any entity which has large open positions in the futures contract. The CFTC has already indicated that in special situations, when requested by the Treasury or the Federal Reserve Board, it would be prepared to provide data on a strictly confidential basis showing any large positions in specific futures contracts approaching delivery that are held by Government securities dealers who report to the Federal Reserve. This information will help to supplement the more general data on positions in futures and forwards that the Federal Reserve soon expects to obtain on a daily basis from its reporting dealers. Knowledge that these improved reporting and surveillance procedures are in place should place a further constraint on any major market participant who

might otherwise be tempted to try to exert a squeeze on the deliverable supply.

In addition, since the percentage of Treasury bill offerings accounted for by the combination of competitive and private noncompetitive awards has declined significantly in recent years, the Treasury has decided to modify a rule which until now has allowed allotment to a single bidder in a Treasury auction of as much as 25 per cent of the announced amount of the public offering. The new rule will permit a maximum allotment to any single bidder of up to 25 per cent of the combined amounts of the competitive award and the private noncompetitive award. This new base excludes Treasury securities allotted to the Federal Reserve in exchange for maturing securities held both for its own account and for the accounts of foreign official institutions. Over time this rule modification should broaden the competitiveness of the auction process and contribute to improved distribution of new security issues. The new rule applies to all Treasury security offerings.

The Treasury will also require bidders in its bill auctions to report on the tender form any net long position of more than \$200 million taken prior to the auction in the bill being offered. Such a position includes both new bills acquired through "when-issued" trading and futures and forward transactions, and holdings of outstanding (3-month) bills (auctioned previously as a 6-month issue) that carry the same maturity as the new bill. These data will be taken into consideration by the Treasury when awarding new bills in order to reduce the potential for

undue concentration and to contribute to improved distribution. This new reporting requirement recognizes the rapid expansion of trading in Treasury bill futures, as well as bill trading on a "when-issued" basis occurring between the announcement and offering dates on auctions.

The alternative of having the Treasury or the Federal Reserve act directly to modify potential squeezes on the deliverable supply of 3-month bills--either through a Treasury increase in the size of the new bill auction, or Federal Reserve sales of the outstanding issue from its portfolio--is not acceptable. While there may be occasions when the Treasury should add to the share of its marketable debt represented by 3-month bills, such actions ought to be taken only as needed to implement the Treasury's general debt management objectives; they should not be initiated to help resolve the particular needs of the commodity exchanges.

Similarly, the Federal Reserve should not be expected to sell 3-month bills from its portfolio to help counter a developing market shortage in the issue deliverable on the maturing bill futures contract. Since the early 1950's the Fed has consistently avoided intervention in the Government securities market for the purpose of adjusting spreads between yields on closely adjacent issues. Earlier experience had shown that any pattern of Federal Reserve market intervention initiated for purposes not clearly seen to be for the implementation of monetary policy tended to create uncertainties about what the System was trying to do, and how its substantial market power might be used to influence prevailing rate relationships. There is a risk that when confronted with such uncertainties dealers

and other market professionals will become less willing to take positions in Treasury securities and to operate on reasonable price spreads--thus reducing the general efficiency of the market.

2. Potential Risks of
Contract Proliferation

In view of the differences in self-regulation among the various commodity exchanges and the limited staff resources available to the CFTC for monitoring and surveillance, it is recommended that:

--The CFTC proceed gradually in authorizing additional contracts for financial futures. In the untested intermediate-term sector, for example, a first step might be to authorize only one note contract, on one exchange, with a range of eligible maturities sufficient to provide a reasonable "market-basket" of deliverable supply. Further, the CFTC should not designate new contract markets on more than one exchange for essentially identical contracts unless it has reached formal agreements with the exchanges involved to provide uniform reporting of positions in such contracts to the CFTC and to establish uniform emergency procedures that would be implemented jointly and coincidentally at the request of the CFTC.

A gradual approach would give the CFTC time to enhance its surveillance capacity and would help to demonstrate whether an intermediate note contract, designed conservatively, could elicit an active investor interest without increasing the potential for a squeeze on the deliverable supply.

Even under the best of circumstances, the extension of trading in Treasury futures to new maturity sectors and to additional exchanges would require careful, step-by-step implementation and close surveillance of results. In the circumstances that exist, the task appears to be more

complicated, since some exchanges have less clearly defined rules than others, and the philosophies with which they implement these rules vary. In addition, for the CFTC to provide the close surveillance that would be required to do an effective job of monitoring additional, essentially duplicative contracts on several exchanges, it would apparently need an expansion of staff with expertise in financial markets.

Uncertainties about the adequacy of deliverable supplies produced by the prospect of contract proliferation are greatest for the proposed intermediate-term contracts, since none of these is yet trading. Nevertheless, pending requests for additional bill contracts also raise similar questions. The proposed AMEX bill contract seeks to minimize competition for deliverable supply with the existing IMM contract by making bills maturing in the first month of the quarter eligible for delivery--rather than those maturing in the third month, as is the case of the IMM contract. However, the IMM in its contract designation has authority to trade additional months. Also, the 3-month and 1-year bill futures contracts being requested by Comex specify issues for delivery that would be substantially overlapping with the existing IMM contracts.

It can be argued, in principle, that the combined demands for delivery generated by several overlapping futures contracts will not be significantly greater than those generated where only a single contract is being offered. But it seems more likely that a proliferation of contracts would lead, in practice, to enlarged total demands for delivery. In their requests for additional contracts, the exchanges seeking CFTC approval of

overlapping contracts have asserted that they do not believe a proliferation would diminish trading volume on existing exchanges, since they expect their marketing and promotional activities to expand overall demand.

A larger demand for deliveries would mean that there would be a correspondingly larger volume of short positions outstanding just prior to delivery date. This might in turn be viewed as an added potential for profiting from a market squeeze, particularly if market participants thought they could build up a relatively large long position on several exchanges, without attracting the same attention that a similar total position would attract if it were concentrated on a single exchange. To guard against this possibility the CFTC, before permitting contract proliferation should have in place procedures that assure regular checking of positions being taken by particular operators on more than one exchange. This may require reporting of smaller position totals on single exchanges than is now the case.

If the CFTC were to authorize essentially similar contracts on several exchanges at about the same time, it would be important to assure that consolidated position data reported from these exchanges was carefully evaluated, and that, in cases where emergency procedures had to be implemented, identical procedures were implemented on each exchange at the same time. There can be no assurance that exchanges will respond to a given emergency in a coordinated manner unless the CFTC by written agreement is authorized to require such action. Specifically, the CFTC should specify by agreement with the relevant exchanges identical emergency procedures for essentially comparable contracts--including rights of substitution,

changes in margin and other measures to encourage a liquidation of open interest, and, if need be, a suspension of trading. Such procedures should also be given greater publicity, so that market participants gain a better understanding of them. This would help to avoid a competitive devaluation of self-regulatory standards.

3. Safeguards for Investors

In view of the rapid growth in Treasury futures and the potential for widespread participation by individual investors:

--Further study of investor protection and exchange regulation being conducted jointly by the CFTC, the Treasury, and the Securities and Exchange Commission should proceed. Among the issues to be explored should be appropriate customer suitability standards, margin requirements, and position limits.

--In addition, the CFTC and the exchanges promoting futures contracts should make clear that futures contracts based on Government securities are not obligations of the U. S. Treasury. To avoid any confusion on this question, the exchanges should not use pictures of the Treasury building or of Treasury securities in their promotional material.

The posting of margin and daily marking to market are important aspects of futures exchanges that are designed to protect all participants. Such safeguards substantially reduce the credit risks associated with transactions for future delivery, are helpful in encouraging good management control, and significantly reduce the likelihood that harmful situations will develop. Unfortunately, however, the existing reporting system on

particular transactions does not appear sufficient to preclude unethical practices from occasionally occurring within a trading day. Serial tapes, which record the prices and quantities of all transactions as they occur, would help to eliminate the potential for such abuse. Hence the CFTC should continue to encourage the use of serial tapes by the exchanges.

As existing contract markets for Treasury futures expand and additional contracts are offered, it seems quite likely that a growing range of participants will be attracted to these markets--some of whom may not have particularly strong financial positions. Existing safeguards and procedures, including the taking of margin and daily marking to market, appear to afford adequate protection for those involved in most cases. However, although clearing members are required by the exchanges to post margins and mark-to-market, they are not required to use uniform margin and marking-to-market procedures for their own customers. Thus, in some cases, individual customers and/or clearing members may be exposed to undue risk.

Some firms, have, nevertheless, established customer suitability standards of their own and have required considerably larger margin on certain types of accounts for which they undertake transactions. Additional efforts in this direction--and perhaps the development of more formal suitability standards--should be encouraged.

Some participants have indicated that they were contacted by over-zealous representatives of firms that were active in the marketing of futures who appeared to have an insufficient understanding of futures transactions.

At present this does not appear to be a serious problem, and it is an expected outcome when one market is expanding rapidly at a time when profitability and employment in other financial markets have been steady or shrinking. It does seem appropriate, however, for the CFTC and the exchanges to explore approaches that could strengthen the surveillance of smaller dealer firms. Periodic reviews of general sales and marketing techniques could also prove beneficial. And it seems appropriate for the CFTC and the exchanges to undertake a program that would inform the public about the risks associated with such highly leveraged transactions, since these may not be sufficiently emphasized by private firms and individual salespersons. Such a program would also be helpful in clarifying emergency procedures and reasons for their possible implementation.