

May 1999

THE COMMODITY EXCHANGE ACT

Issues Related to the Commodity Futures Trading Commission's Reauthorization



General Government Division

B-281936

May 5, 1999

The Honorable Richard G. Lugar
Chairman
Committee on Agriculture, Nutrition
and Forestry
United States Senate

The Honorable Larry Combest
Chairman
Committee on Agriculture
House of Representatives

The Honorable Thomas W. Ewing
Chairman
Subcommittee on Risk Management,
Research, and Specialty Crops
Committee on Agriculture
House of Representatives

As part of your deliberations on the Commodity Futures Trading Commission's (CFTC) upcoming reauthorization, you have expressed an interest in exploring issues related to derivatives¹ that are traded on-exchange as well as those that are privately negotiated off-exchange, or over-the-counter (OTC). This effort builds on your previous proposals to revise the Commodity Exchange Act (CEA) to help ensure that the U.S. derivatives markets are appropriately regulated and remain competitive. In your December 18, 1998, letter, you requested that we provide information on several topics that your committees plan to cover during the reauthorization process. We briefed your offices on these topics in preparation for the CFTC reauthorization roundtable discussion that you sponsored in February 1999. This report presents information on the requested topics in appendixes I through VIII. Additionally, a summary of the CEA's legislative history is provided in appendix IX, and a glossary and list of GAO-related products are provided at the end of the report.

Results in Brief

Agreement exists on the basic objectives of financial market regulation—to protect financial system integrity, market integrity and efficiency, and

¹ Derivatives are contracts that have a market value determined by the value of an underlying asset, reference rate, or index (called the underlying). Underlyings include stocks, bonds, agricultural and other physical commodities, interest rates, foreign currency rates, and stock indexes.

customers. However, the most appropriate means of meeting these objectives has been subject to debate by Congress, federal regulators, and market participants as the markets have grown, new products have been introduced, and competition has increased. As reflected in appendixes I through VIII of this report, the debate has encompassed questions about the appropriate U.S. regulatory structure for exchange and OTC derivative contracts, markets, and market participants. The appendixes address the following eight topics:

- CFTC exemptive authority for OTC derivatives,
- regulatory reform efforts for exchange-traded derivatives,
- the Shad-Johnson Jurisdictional Accord,
- the Treasury Amendment,
- the forward exclusion,
- agricultural trade options,
- electronic trading systems, and
- international regulatory coordination.

Generally, each appendix discusses the issues related to the topic; captures the views of interested parties, including those expressed at the roundtable discussion;² and closes with public policy questions related to the topic.

In the context of CFTC's reauthorization, at least two significant questions surface from a discussion of these topics: (1) what types of derivative transactions and market participants should be covered by or excluded from CFTC regulation under the CEA and (2) how should the various types of transactions and market participants covered by the CEA be regulated? Reaching agreement among interested parties—OTC and exchange-traded market participants, federal financial regulators, and Congress—on actions needed to address these questions has proven difficult. Recognizing that in an increasingly global and competitive marketplace the cost of not reaching agreement could be high, congressional and industry leaders have begun discussions that could lead to a consensus.

Background

Derivatives provide users a means of shifting the risk of price changes in the underlying to those more willing or able to assume this risk. Derivatives include exchange-traded and OTC contracts. Exchange-traded derivatives generally have fixed terms—except for price, which the market determines. OTC derivatives generally have negotiable terms, including terms such as price, quality and quantity of the underlying, and method of

² See appendix X for a list of roundtable participants.

payment. Derivatives include forwards,³ futures,⁴ options,⁵ and swaps⁶ contracts. Traditionally, futures have been exchange-traded, while forwards and swaps have been negotiated OTC. Options are traded on exchanges as well as negotiated OTC.

The increased demand for risk-shifting products, along with technological advances, has fueled the development of innovative exchange-traded and OTC derivative products as well as the growth of these markets. Driven by the introduction of financial futures, such as interest rate and currency contracts, the U.S. exchange-traded futures market has experienced substantial growth. Between 1986 and 1998, annual trading volume on U.S. futures exchanges increased by about 227 percent, from 216.1 million to 707.4 million contracts. Following the U.S. lead, foreign futures exchanges have introduced new products and increased their share of the worldwide exchange-trading volume from 21 to 58 percent over this period. Additionally, the development of swaps and other OTC derivatives has led to the rapid growth and globalization of the OTC derivatives market. As of June 1998, the total notional amount⁷ of the OTC derivatives market worldwide was estimated at \$69.9 trillion, up from \$47.5 trillion as of March 1995.⁸

CFTC, an independent agency created by Congress in 1974, administers the CEA. The act gives CFTC exclusive jurisdiction over all futures and certain option contracts. It also establishes a regulatory structure that was historically designed to ensure that all futures were traded on self-

³ Forward contracts, according to CFTC, are privately negotiated, cash transactions in which commercial buyers and sellers agree upon the delivery of a specified quantity and quality of goods at a specified future date. A price may be agreed upon in advance or determined at the time of delivery. Delivery is typically expected, although it may not occur.

⁴ Futures contracts are agreements that obligate the holder to buy or sell a specific amount or value of an underlying asset, reference rate, or index at a specified price on a specified date. These contracts may be satisfied by delivery or offset.

⁵ Option contracts (American style) give the purchaser the right, but not the obligation, to buy (call option) or sell (put option) a specified quantity of a commodity or financial asset at a specified price (the exercise or strike price) on or before a specified future date.

⁶ Swaps are privately negotiated contracts that typically require counterparties to make periodic payments to each other for a specified period. The calculation of these payments is based on an agreed-upon amount that is not typically exchanged.

⁷ The notional amount is the amount upon which payments between parties to certain types of derivatives contracts are based. Because this amount is not typically exchanged, the total notional amount shown is not an aggregate measure of the amount at risk.

⁸ Due to differences in the methodology used, the estimates of notional amounts are not directly comparable.

regulated exchanges and through regulated intermediaries. In addition to providing a means for shifting price risk, the exchange-traded futures market has traditionally been a mechanism for discovering price.

Scope and Methodology

To provide information on the various topics concerning the exchange-traded and OTC derivatives markets, we reviewed the CEA and its legislative history, Federal Register notices, and comment letters on CFTC concept releases and rule proposals. In addition, we reviewed congressional hearings, legal cases, journal articles, and reports on the CEA and the exchange-traded and OTC derivatives markets. We interviewed CFTC officials about the various topics covered in our report. We also attended the February 1999 CFTC reauthorization roundtable discussion, recent congressional hearings on the exchange-traded and OTC derivatives markets, and a futures industry conference.

We requested comments on a draft of this report from the Chairperson, CFTC, and Chairman, SEC, or their designees. In separate meetings held on April 16, 1999, the Director of the Office of Legislative and Intergovernmental Affairs, CFTC, and the Chief Counsel of the Division of Market Regulation, SEC, provided us with oral comments. These comments are discussed below. Additionally, we discussed the contents of a draft of this report with officials of the Department of the Treasury and Federal Reserve Board; self-regulatory organizations (SRO),⁹ including two futures exchanges and a securities exchange; and four industry trade associations. They provided technical clarification that we incorporated into the report where appropriate. We did our work in Chicago, IL, and Washington, D.C., between January and April 1999 in accordance with generally accepted government auditing standards.

Agency Comments

CFTC and SEC generally agreed with the accuracy of the information presented in this report and provided technical clarification that we incorporated into the report where appropriate.

We are sending a copy of this report to Senator Tom Harkin, Ranking Minority Member, Senate Committee on Agriculture, Nutrition and Forestry; Representative Charles Stenholm, Ranking Minority Member, House Committee on Agriculture; Representative Gary A. Condit, Ranking Minority Member, Subcommittee on Risk Management, Research, and Specialty Crops, House Committee on Agriculture; the Honorable

⁹ SROs are private membership organizations given the power and responsibility under federal law and regulations to adopt and enforce rules of member conduct. They include all of the U.S. commodities and securities exchanges, the National Futures Association, the National Association of Securities Dealers, and the Municipal Securities Rulemaking Board.

Brooksley Born, Chairperson, CFTC; the Honorable Arthur Levitt, Chairman, SEC; and other interested parties. We will also make copies available to others upon request.

Major contributors are listed in appendix XI of this report. Please contact me at (202) 512-8678 or Cecile O. Trop, Assistant Director, at (312) 220-7600 if you or your staff have any questions.

A handwritten signature in black ink that reads "Thomas J. McCool". The signature is written in a cursive style with a large, prominent 'M' and 'C'.

Thomas J. McCool
Director, Financial Institutions
and Markets Issues

Contents

Letter		1
Appendix I		10
CFTC Exemptive Authority for OTC Derivatives	Rationale for CFTC Exemptive Authority	10
	Limitations of CFTC Exemptions	11
	Efforts to Address OTC Market Issues	12
	The Long-Term Capital Management Recapitalization Has Raised Regulatory Concerns	14
	CFTC Left Open the Opportunity for the Development of an OTC Clearinghouse	15
	Public Policy Questions Raised By CFTC Exemptive Authority For OTC Derivatives	16
Appendix II		18
Regulatory Reform Efforts for Exchange-Traded Derivatives	U.S. Futures Market Regulation	18
	Derivatives Market Growth and Competition	19
	CFTC Exemptive Authority	20
	CFTC and Congressional Efforts to Provide Regulatory Relief	20
	Proposals for Revising Market Oversight	22
	Costs and Benefits of Futures Market Regulation Are Difficult to Measure	24
	Public Policy Questions Raised by Regulatory Reform Efforts for Exchange-Traded Derivatives	26
Appendix III		27
The Shad-Johnson Jurisdictional Accord	Rationale for the Accord	27
	Evidence of Continued Uncertainty	28
	Addressing the Prohibition on Stock-Based Futures	29
	Public Policy Questions Raised by the Accord	31
Appendix IV		32
The Treasury Amendment	Rationale for the Treasury Amendment	32
	Problems Interpreting the Treasury Amendment	32
	Proposals to Clarify the Scope of the Treasury Amendment	36
	Public Policy Questions Raised by the Treasury Amendment	37

<hr/>	
Appendix V	38
The Forward	38
Exclusion	40
	38
	38
	40
<hr/>	
Appendix VI	41
Agricultural Trade	41
Options	41
	41
	42
	43
	43
<hr/>	
Appendix VII	44
Electronic Trading	44
Systems	44
	45
	46
	47
	48
	49
<hr/>	
Appendix VIII	51
International	51
Regulatory	51
Coordination	52
	52
	52
<hr/>	
Appendix IX	53
Legislative History of	53
the Commodity	53
Exchange Act	54
	54
	55
	55
	56
	57

Contents

Futures Trading Act of 1986 (Pub. L. No. 99-641)	58
Futures Trading Practices Act of 1992 (Pub. L. No. 102-546)	58
CFTC Reauthorization Act of 1995 (Pub. L. No. 104-9)	59
Omnibus Appropriations Act of 1998 (Pub. No. 105-277)	59

Appendix X	60
Participants at CFTC Reauthorization Roundtable Discussion Held in Washington, D.C., on February 25 and 26, 1999	
Moderators	60
Panelists	60

Appendix XI	61
Major Contributors to This Report	

Glossary	62
----------	----

Related GAO Products	72
----------------------	----

Abbreviations

CFTC	Commodity Futures Exchange Commission
FSA	Financial Services Authority
BIS	Bank for International Settlements
CBT	Chicago Board of Trade
CEA	Commodity Exchange Act
CFFE	Cantor Financial Futures Exchange
CME	Chicago Mercantile Exchange
DTB	Deutsche Terminborse
FCM	futures commission merchant
HTA	hedge-to-arrive
LTCM	Long-Term Capital Management
NFA	National Futures Association
NYMEX	New York Mercantile Exchange
OTC	over-the-counter
SEC	Securities and Exchange Commission
SRO	self-regulatory organization

CFTC Exemptive Authority for OTC Derivatives

Rationale for CFTC Exemptive Authority

Because of their similarities to exchange-traded futures, swaps and other over-the-counter (OTC) derivatives have faced the possibility of falling within the judicially crafted definition of a futures contract.¹ This possibility posed a legal risk for many OTC derivatives because of the Commodity Exchange Act (CEA) requirement that futures be traded on an exchange to be legal and, thus, enforceable. In 1989, to reduce the legal risk facing swaps, the Commodity Futures Trading Commission (CFTC) issued a swaps policy statement to clarify the conditions under which it would not regulate certain swaps as futures. In part, CFTC predicated its policy statement on the rationale that swaps lacked certain elements that facilitated futures trading on exchanges, such as standardized terms and a clearinghouse. CFTC's policy statement removed the legal risk that CFTC would take enforcement action against certain swaps, but it did not remove the legal risk that a swaps counterparty might try to have a court invalidate a swap as an illegal, off-exchange futures contract. (See the glossary at the end of the report for definitions.)

Under the Futures Trading Practices Act of 1992, Congress gave CFTC broad authority to exempt any contract from all but one of the CEA provisions, provided the exemption was consistent with the public interest and the contract was entered into solely between eligible participants, as defined in the act. According to the 1992 act's legislative history, Congress expected CFTC to use its exemptive authority promptly to reduce legal risk for swaps, forwards, and hybrids. It further noted that CFTC could exempt a contract without first determining that it was a futures contract. Finally, the legislative history stated that the goal of providing CFTC with broad exemptive authority was to give CFTC a means of providing certainty and stability to the markets. Under its exemptive authority, CFTC could impose any conditions on an exemption that it deemed appropriate and could exempt contracts from any provisions of the CEA, except section 2(a)(1)(B) (discussed below).

In January 1993, CFTC exempted a broad group of swaps from virtually all CEA provisions, including the exchange-trading requirement. Under this exemption, CFTC retained the CEA's antimanipulation and antifraud provisions for swaps but only to the extent they were futures. It also imposed four conditions that swaps had to meet to qualify for an exemption. First, they had to be entered into solely by eligible participants, including banks; securities firms; insurance companies; commercial firms meeting minimum financial requirements (e.g., net worth exceeding \$1 million); and individuals with total assets exceeding \$10 million. Second,

¹ The CEA does not define the term futures contract.

they could not be standardized as to their material economic terms. Third, the creditworthiness of the counterparties had to be a material consideration. Under this condition, exempted swaps could not be cleared through clearinghouses that are similar to those used to clear exchange-traded futures. However, CFTC noted that it would consider the terms and conditions of an exemption for a swaps clearinghouse in the context of a specific proposal. Fourth, exempted swaps could not be entered into and traded on or through a multilateral execution facility, such as a futures exchange. According to CFTC, these four conditions were intended to reflect the way that swaps transactions occurred when the exemption was granted and to describe when such transactions would not raise significant regulatory concerns under the CEA.

In January 1993, CFTC also exempted hybrids from virtually all CEA provisions, including the exchange-trading requirement; it granted a similar exemption to specified OTC energy contracts in April 1993. CFTC's hybrid exemption was designed to exempt instruments that were predominantly bank deposits or securities and included a condition to ensure that they would be covered under banking or securities regulations. CFTC's energy exemption responded to congressional encouragement that CFTC determine whether exemptive or other action should be taken for certain OTC energy contracts. In response to a request by a group of commercial firms in the energy market, CFTC granted an exemption to specified OTC energy contracts, which included Brent oil contracts. CFTC retained the CEA's antimanipulation provisions, but not the act's antifraud provisions under this exemption.

Limitations of CFTC Exemptions

CFTC's swaps, hybrid, and energy exemptions eliminated the legal risk that qualifying contracts could be deemed illegal, off-exchange futures. If CFTC or a court found an exempted contract to be a futures contract, the contract would still be legal because the CEA exchange-trading requirement would not apply. In granting the exemptions, CFTC was not required to, nor did it, determine that the OTC derivatives covered by the exemptions were futures. According to an industry association, no swaps have been found to be futures contracts. However, a question has remained about the extent to which CFTC can subject OTC derivatives to additional regulation under the CEA, such as by amending the conditions of the exemptions.

CFTC's swaps exemption did not provide the same legal certainty to securities-based swaps, contracts whose returns are based on prices of securities and securities indexes, as it did for interest rate, currency, and other swaps. Even if a securities-based swap met all the conditions of the

swaps exemption, it would not be exempt from CEA section 2(a)(1)(B), which codified the Shad-Johnson Jurisdictional Accord. (See app. III on the accord.) According to market observers, if securities-based swaps were found to be futures contracts, they could be in violation of CEA section 2(a)(1)(B) and, thus, be illegal and unenforceable. In issuing its swaps exemption, CFTC noted that counterparties to securities-based swaps could continue to rely on its 1989 swaps policy statement, which sets forth the conditions under which CFTC would not regulate certain swaps as futures. According to an industry association, counterparties to securities-based swaps have continued to rely on this policy statement to address their legal concerns under CEA section 2(a)(1)(B).

Efforts to Address OTC Market Issues

Congress Proposed Legislation to Reduce Legal Uncertainty

In 1997, a Senate bill (S. 257) was introduced that included provisions intended to provide greater legal certainty for securities-based swaps by codifying the existing swaps exemption and extending its scope to include securities-based swaps. As noted in an accompanying discussion document, the provision would not have affected CFTC's power to grant additional exemptions or to amend the existing exemption to make it less restrictive. However, the provision would have required a statutory change to make the existing swaps exemption more restrictive. According to market observers, the provision would have addressed the concern of OTC market participants that CFTC could modify the swaps exemption in a way that could disrupt the market. In related hearings, CFTC testified against the provision, noting that it would eliminate the agency's ability to modify the existing swaps exemption in response to market developments. In a February 1997 letter to Chairman Lugar, SEC expressed concern about the provision and stated that legal certainty for securities-based swaps could be better achieved by excluding from the CEA these products and all hybrid securities that are not predominantly futures.

CFTC Issued a Concept Release on OTC Derivatives

In May 1998, CFTC issued a concept release on OTC derivatives that sought public comment on whether the swaps and hybrid exemptions continued to be appropriate in light of market changes. In the concept release, CFTC asked, among other questions, whether additional oversight of the OTC markets was required, including whether current fraud and manipulation prohibitions were sufficient. CFTC indicated that it was receptive to broadening its exemptions or imposing additional safeguards, if warranted. Additionally, CFTC noted that the release did not alter the current status of any instrument or product under the CEA and that all of

its currently applicable exemptions, interpretations, and policy statements remained in effect.

The Treasury Department, Federal Reserve, and Securities and Exchange Commission (SEC), as well as some market participants, have expressed concern that CFTC's concept release raises legal and regulatory uncertainty in the OTC derivatives markets. First, concern exists that the release creates legal uncertainty by suggesting that exempted swaps may be futures, thereby calling into question the legality of securities-based swaps and other OTC derivatives potentially subject to CEA section 2(a)(1)(B). Second, concern exists that the release creates regulatory uncertainty by raising the possibility that CFTC might amend the conditions of its exemptions to subject exempted OTC derivatives to additional regulation under the CEA.

Opponents of the concept release have stated that it is unnecessary to extend the CEA to OTC derivatives. They assert that the OTC derivatives markets generally do not serve a price discovery function and are not readily susceptible to manipulation. They further assert that counterparties to OTC derivatives are capable of protecting themselves from losses arising from counterparty defaults and fraud using remedies outside the CEA, such as those provided under state statutory or common law. They also maintain that the regulatory uncertainty resulting from the release threatens the competitiveness of the U.S. financial markets. In addressing these concerns, Congress directed CFTC, via the Omnibus Appropriations Act (P.L. 105-277), not to issue or propose new regulations affecting swaps and hybrids before March 31, 1999. As of April 20, 1999, CFTC had not proposed or issued any new regulations affecting swaps or hybrids.

Industry Views on the Need to Address Legal Uncertainty

At a February 1999 roundtable discussion on CFTC reauthorization issues, the participants discussed the desirability of resolving legal uncertainty in the OTC derivatives market. Five of the participants characterized it as the most important issue that Congress needs to address during CFTC's upcoming reauthorization. According to one of these participants, following the issuance of CFTC's concept release, his firm was inundated with calls from clients and counterparties, asking about the legal enforceability of their OTC derivatives. Another roundtable participant commented that SEC is also a source of legal uncertainty. He said that SEC has indicated that some swaps are options and within the agency's jurisdiction. He added that SEC will need to be involved in the discussion to fully resolve the legal status of OTC derivatives.

In a joint statement submitted to the Senate and House Agriculture Committees on March 19, 1999, the U.S. Securities Market Coalition² stated that clarifying that equity swaps, types of securities-based swaps, do not fall under the CEA would reduce unnecessary legal risk for U.S. financial markets. The Coalition further stated that, if Congress decides to provide greater legal certainty for equity swaps, it should make it clear that SEC has the authority to exercise appropriate regulatory oversight over them. The Coalition opposed granting CFTC exemptive authority for equity swaps because the Coalition believes that doing so could affect SEC's ability to react to issues in this market. Finally, the Coalition stated that Congress should work with SEC to resolve the legal uncertainty issue.

The President's Working Group Is Studying the OTC Derivatives Markets

In a June 1998 letter, the Treasury Department, Federal Reserve, and SEC told Congress that CFTC's concept release raised important questions. However, they indicated that these questions were most appropriately addressed by the President's Working Group on Financial Markets because they raised jurisdictional issues among the federal regulators. Accordingly, in September 1998, Senator Lugar and Representative Smith requested that the Working Group study the OTC derivatives market and develop legislative recommendations by the spring of 1999. According to the Federal Reserve, the Working Group's study will address the following policy objectives: (1) deterring market manipulation, (2) deterring fraud and protecting certain counterparties to transactions, (3) promoting the financial integrity of markets by limiting potential losses from counterparty defaults, (4) providing legal certainty with respect to the enforceability of contracts, (5) avoiding significant competitive disparities across financial markets and institutions, (6) appropriately limiting systemic risk, and (7) harmonizing regulations internationally.

The Long-Term Capital Management Recapitalization Has Raised Regulatory Concerns

In September 1998, the Federal Reserve Bank of New York organized a meeting that led to a private sector recapitalization of Long-Term Capital Management (LTCM), a hedge fund that traded in OTC and exchange-traded derivatives. Although the Federal Reserve Bank had no regulatory authority over LTCM, officials were concerned that the firm's financial problems, if not immediately addressed, could adversely affect the markets and market participants not directly involved with LTCM.

Although LTCM was not subject to federal banking or securities regulations, it was subject to CFTC regulation as a commodity pool

² The U.S. Securities Market Coalition includes the American Stock Exchange, Boston Stock Exchange, Chicago Board Options Exchange, Chicago Stock Exchange, Cincinnati Stock Exchange, NASDAQ Stock Market, National Securities Clearing Corporation, New York Stock Exchange, Pacific Exchange, Philadelphia Stock Exchange, and The Options Clearing Corporation.

operator because it had U.S. investors and traded on futures exchanges. As a commodity pool operator, LTCM was subject to registration, recordkeeping, and limited reporting requirements as well as the antifraud provisions of the CEA. In March 1998, CFTC staff received LTCM's 1997 audited annual financial statements and found them to be in compliance with its reporting requirements. According to CFTC, nothing in these statements indicated a reason for concern about the firm's financial condition; thus, it did not share them with other regulators. CFTC's ability to share any concerns that it may have had was governed by section 8(e) of the CEA, which permits CFTC to share information with other federal agencies only upon their request. According to CFTC, this requirement would not have impeded its ability to share LTCM's financial statements because CFTC could have solicited a request from an agency, if needed.

In response to the LTCM recapitalization, the Secretary of the Treasury asked the President's Working Group in September 1998 to study the potential implications of hedge funds and their relationship with creditors. In March 1999, Treasury testified that the Working Group was evaluating the costs and benefits of potential policy options, including relying on market discipline enhanced by greater regulatory scrutiny of and guidance for regulated suppliers of credit; resorting to more direct forms of regulation, such as expanded use of margin requirements; and imposing direct regulation on some currently unregulated market participants. According to the Federal Reserve, the central policy issue raised by LTCM is how financial leverage—which LTCM achieved through a number of means, including the use of OTC derivatives—can be constrained most effectively in a market-based economy. It added that the Working Group's hedge fund study is separate from its OTC derivatives study because the issues are distinct—regulation of OTC derivatives raises a wider range of issues, many of which are unrelated to LTCM. According to CFTC, the near failure of LTCM demonstrates the unknown risks that OTC derivatives may pose to the U.S. economy and to financial stability around the world—including the risk arising from lack of transparency—thereby highlighting the need to address the questions raised in its concept release.

CFTC Left Open the Opportunity for the Development of an OTC Clearinghouse

Recognizing the potential benefits of a clearinghouse—including reducing counterparty credit risk and increasing market liquidity and transparency—CFTC's swap exemption left open the opportunity for the development and use of a swaps clearinghouse, subject to CFTC's prior approval. In its concept release, CFTC noted that a clearinghouse's benefits are obtained at the cost of concentrating risk in the clearinghouse; thus, federal oversight of the clearinghouse might be necessary. According to CFTC, the extent to which it would need to impose conditions on a

clearinghouse would depend on, among other things, the design of the facility and the applicability of other regulatory regimes.

In June 1998, the London Clearing House petitioned CFTC for an exemption from most of the provisions of the CEA for its swaps clearinghouse, called SwapClear. The London Clearing House sought exemptive relief to alleviate the legal and regulatory uncertainty that U.S. entities using SwapClear would face under the CEA. That is, because CFTC's swap exemption does not extend to swaps cleared through a clearinghouse, the status of otherwise exempted swaps could be jeopardized if cleared through SwapClear. In March 1999, CFTC approved the London Clearing House's petition, exempting from most CEA provisions and CFTC regulations certain swaps cleared through SwapClear. CFTC exempted SwapClear, in part, because the clearinghouse and its participants will be subject to a comprehensive regulatory regime in the United Kingdom, including oversight by the Financial Services Authority (FSA). The exemption will not take effect until CFTC and FSA have executed an addendum to their information-sharing agreement (see app. VIII on international regulatory coordination), and FSA has notified CFTC that it has approved SwapClear.

At the roundtable discussion on CFTC reauthorization issues, one participant advocated that Congress mandate the creation of a national clearinghouse for OTC derivatives. He asserted that such a clearinghouse would reduce systemic risk and increase market efficiency through the use of multilateral netting and other mechanisms. Other roundtable participants said that an OTC derivatives clearinghouse is not needed. Still others said that the competitive advantage associated with the higher credit ratings of most major OTC derivative market participants reduces their incentive to support a clearinghouse that would enable entities with lower credit ratings to compete against them.

Public Policy Questions Raised By CFTC Exemptive Authority For OTC Derivatives

Financial Integrity/Systemic Risk and Market Integrity/Efficiency:

1. What financial integrity/systemic risk or market integrity/efficiency issues do the OTC derivatives market raise, if any, and what role should CFTC and/or other federal financial regulators play in addressing them?
2. To what extent, if any, does the lack of legal certainty for securities-based swaps pose systemic risk or introduce competitive concerns for the U.S. markets?

-
3. What lessons does the LTCM recapitalization provide about the need to enhance federal regulations, private market mechanisms, and/or domestic and international coordination and cooperation to protect market stability?
 4. Under what conditions would it be appropriate to subject an OTC derivatives clearinghouse to U.S. regulation, and what role should CFTC and/or other federal financial regulators play in providing any such regulation?

Customer Protection:

5. What customer protection issues do the OTC derivatives market raise, if any, and what role should CFTC and/or other federal financial regulators play in addressing them?

Regulatory Reform Efforts for Exchange-Traded Derivatives

U.S. Futures Market Regulation

The traditional function of the exchange markets has been to provide a mechanism for discovering price and a means for users to shift the risk of price changes in the underlying to those more willing or able to assume this risk. Federal regulation of the U.S. futures market stems from a need to ensure the market's economic utility by encouraging its competitiveness and efficiency; ensuring its integrity; and protecting market participants against manipulation, abusive trade practices, and fraud. The market's regulatory structure consists of federal oversight provided by CFTC and industry oversight provided by self-regulatory organizations (SRO)—the futures exchanges and the National Futures Association (NFA). (See the glossary at the end of the report for definitions.)

Reliance on the futures SROs is based on a belief that they should be able to act more quickly and effectively than the federal government. Futures SROs are responsible for establishing and enforcing rules governing member conduct and trading; providing for the prevention of market manipulation, including monitoring trading activity; setting qualifications for futures industry professionals; and examining members for financial strength and other regulatory purposes. Their operations are funded by the futures industry through transaction fees and other charges.

In regulating the futures market, CFTC independently monitors, among other things, exchange trading activity, large trader positions, and certain market participants' financial condition. CFTC also investigates potential violations of the CEA and CFTC regulations and prosecutes alleged violators. Additionally, CFTC oversees the SROs to ensure that each has an effective self-regulatory program. In this regard, CFTC designates and supervises exchanges as contract markets and NFA as a registered futures association, audits SROs for compliance with their regulatory responsibilities, and reviews and approves SRO rules and products that are traded on designated exchanges. CFTC is funded through congressional appropriations but also collects fees from the industry to recover the costs of certain services and activities.

Traditionally, futures have been exchange-traded; as such, they have been regulated under a structure designed to protect customers and the market. The regulatory structure covers not only certain market participants but also the products and markets on which they trade. Unless exempted or excluded from the CEA, futures must be traded on designated exchanges and through regulated intermediaries that are subject to minimum capital, reporting, examination, and customer protection requirements.

Derivatives Market Growth and Competition

In the past two decades, technological advances and fundamental changes in the global financial markets have accelerated the development and use of exchange-traded and OTC derivatives. Such advances and changes have led to tremendous growth in not only the U.S. futures market but also the foreign futures and OTC derivatives markets. Between 1986 and 1998, annual trading volume on U.S. futures exchanges increased from 216.1 to 707.4 million contracts, or about 227 percent; annual trading volume on foreign futures exchanges in the same products increased from 55.9 to 966.4 million contracts, or about 1,629 percent. As a result, foreign exchanges' share of worldwide trading volume increased from 21 percent in 1986 to 58 percent in 1998. Around this period, the OTC derivatives market also experienced tremendous growth, in part from the development of swaps and other innovative products. As of June 1998, the Bank for International Settlements (BIS) estimated that the total notional amount of the OTC derivatives market worldwide was \$69.9 trillion, up from an estimated \$47.5 trillion as of March 1995.¹ Swaps accounted for about 50 percent of the 1998 total.

While the U.S. futures market has experienced substantial growth, it has also evolved far beyond its agricultural origins. In 1975, agricultural commodities accounted for nearly 80 percent of the total U.S. exchange trading volume. In 1998, financial instruments and currencies accounted for nearly 70 percent of the total U.S. exchange trading volume, with agricultural commodities accounting for about 15 percent of the trading volume and other commodities, such as energy and metals, accounting for the remaining volume. According to futures exchanges and others, the participants in the exchange-traded futures market have changed as the market evolved. They have noted that the participants are largely institutions and market professionals, with retail customers representing about 5 percent of the total market participants. However, some of these sources have said that advances in electronic trading could bring new retail customers into this market.

The growth of the foreign futures markets has provided competition for the U.S. markets, although the extent of competition varies by type of product, transaction costs, and other factors. U.S. and foreign exchanges compete directly with each other when they trade futures based on the same or similar underlying commodities. For example, the Coffee, Sugar, and Cocoa Exchange competes directly with foreign exchanges that trade

¹ Due to differences in the methodology used, the estimates of notional amounts are not directly comparable.

coffee, sugar, and cocoa futures. According to market observers, the continued expansion of electronic trading systems has increased competition between U.S. and foreign exchanges. (See app. VII on electronic trading systems.)

In addition, the U.S. exchange-traded futures and OTC derivatives markets compete with and complement each other. Although exchange-traded and OTC derivatives serve similar economic functions and can, thus, compete with each other, they differ by, among other things, their contract terms, liquidity, transparency, transaction costs, and regulation. In addition, the markets complement each other to the extent that OTC derivatives activity generates hedging demand in the futures markets. For example, swaps dealers use exchange-traded futures to hedge the residual risk resulting from unmatched positions in their swaps portfolios.

CFTC Exemptive Authority

The Futures Trading Practices Act of 1992 gave CFTC authority to exempt both exchange-traded and OTC derivative contracts from all but one provision of the CEA, including the exchange-trading requirement. (See app. I on CFTC exemptive authority for OTC derivatives and app. III on the Shad-Johnson Jurisdictional Accord.) The act stipulated, among other things, that exemptions must be consistent with the public interest. According to the act's legislative history, the public interest was to include protecting the futures market's price discovery and risk-shifting functions from market abuses, such as excessive speculation and manipulation; preventing fraud; preserving the financial integrity of the markets; and promoting innovation and fair competition. The legislative history directed CFTC to be fair and even-handed in providing regulatory relief for both exchanges and nonexchanges. However, it also cautioned CFTC to use its exemptive authority sparingly and not to prompt a wide-scale deregulation of markets falling under the CEA.

CFTC and Congressional Efforts to Provide Regulatory Relief

Although the competitiveness of the U.S. futures market is affected by a number of factors, U.S. futures exchanges have asserted that regulations imposed by CFTC have stunted their growth and impeded their ability to compete fairly with the less regulated foreign futures and OTC derivatives markets. According to the exchanges, regulatory costs—not the quality of their services and products—have handicapped their industry and crippled their growth and innovation. As discussed below, in 1993, two exchanges separately requested that CFTC exempt from most CEA provisions exchange-traded futures traded solely by institutional and other sophisticated market participants. In addition, exchanges and other market participants have expressed concerns that certain aspects of the regulatory structure make U.S. exchanges less competitive than their

foreign and OTC market counterparts. These concerns relate to audit trail requirements, restrictions on certain trade execution procedures, risk disclosure requirements, approval of new contracts, speculative position limits, and capital requirements.

In response to the exchange requests, CFTC issued an exemption in November 1995, which is to be implemented under a 3-year pilot program that begins when the first contract trades under the exemption. The exemption does not provide the exchanges with regulatory relief that is as broad as they requested, and it applies only to proposals to trade new contracts. The exemption would allow for the creation of a two-tier market differentiated by the sophistication of market participants. CFTC considered the exclusion of nonsophisticated market participants as the most important factor supporting its exemption. Nonetheless, it noted that a centralized market limited to sophisticated market participants did not obviate the need to ensure market integrity and adequate protections against fraud and other trading abuses. To date, no exchange has applied for an exemption because, according to the exchanges, the rules provide insufficient regulatory relief. The exchanges have indicated that they expected to receive the same level of relief that CFTC provided under the swaps exemption, because the 1992 act's legislative history directed CFTC to be fair and even-handed in using its exemptive authority.

According to CFTC, the agency has taken other actions that are responsive to the competitive challenges faced by the U.S. futures industry and its customers, while at the same time preserving important customer protections and market safeguards that make U.S. markets attractive. CFTC describes its regulatory reform efforts as intending to update, modernize, and streamline regulations to improve market integrity and protect market participants. These efforts include approving new procedures for expediting approval of contract market designations and exchange rules, piloting a program to permit trading of agricultural trade options (see app. VI on the agricultural trade option pilot program), improving the fairness and efficiency of the administrative process, and permitting the use of electronic technology to reduce paperwork. Market participants and others have supported these efforts but do not believe that they go far enough.

The 1997 Senate (S. 257) and House (H.R. 467) bills to amend the CEA included numerous provisions that were intended to provide regulatory relief to the U.S. exchanges. First, both bills would have provided futures exchanges with professional market exemptions that would largely exempt from regulation under the act certain exchange-traded futures that

were limited to institutional and sophisticated market participants. Second, both bills would have allowed exchanges previously designated by CFTC as contract markets to trade new contracts without CFTC approval. Third, both bills would have expedited CFTC approval of exchange rules. Fourth, the House bill would have required CFTC to issue an objective standard or methodology for testing exchange audit trails, and both bills stated that no particular technology was needed to meet the audit trail requirements. Finally, both bills would have required CFTC to consider the costs and benefits of its proposed actions before adopting rules, regulations, and orders. The House bill, however, would have prohibited CFTC from taking regulatory action if the benefits did not exceed costs.

The exchanges were supportive of the regulatory relief that the bills would have provided. According to the exchanges, they were particularly supportive of the bills' professional market exemptions, because they would have moved the exchanges a long way toward achieving a regulatory balance with the OTC derivatives market. The exchanges noted that the exempted market would have relied on market discipline and self-regulation, with the exchanges having a business incentive to operate a fair, financially sound, and competitive market.

In contrast, CFTC and SEC expressed concerns about the bills because of the increased risks to the market and its participants that could have resulted from them. CFTC stated that it opposed the professional market exemptions, because they would eliminate federal power to protect against manipulation, fraud, financial instability and other dangers. SEC expressed concern about the House bill's professional market exemption, because it would have eliminated the applicability of the Shad-Johnson Jurisdictional Accord to these markets. (See app. III on the accord.)

Proposals for Revising Market Oversight

Participants at the CFTC reauthorization roundtable discussion recommended various ways that federal oversight could be revised for the benefit of the markets. These recommendations were similar in that they focused on (1) providing regulatory parity between the exchange and OTC markets and (2) differentiating regulation on the basis of the sophistication of market participants. In addition, a former CFTC chairperson has supported considerable deregulation of exchange-traded financial futures.

One recommendation made during the roundtable discussion was to base the level of regulation—regardless of what agency provided it—on the sophistication of the market participant, not on the market in which the transaction occurred. Under this approach, unsophisticated market participants would be subject to greater regulatory protections than

sophisticated market participants; however, regulation within each group would be consistent, regardless of whether trading occurred on or off of an exchange.

A second recommendation was for CFTC to assume a supervisory role similar to that of the U.S. banking regulators or the U.K. single financial services regulator, FSA. U.S. banking regulators focus on safety and soundness issues—rather than regulations. Under this approach, CFTC would rely more on the SROs to regulate the markets. The U.K.'s FSA, created in 1997, plans to adopt a flexible, risk-based approach to regulation that distinguishes between the varying levels of consumer expertise. It is to use cost-benefit analysis to ensure that the burdens imposed are proportionate to their intended benefits. Also, FSA is to recognize the desirability of maintaining the U.K.'s competitive position in an international market.

A third recommendation was for regulation to be based on the activity rather than on the institution or product. Activities would be categorized according to the three basic goals of market regulation—protecting financial system integrity, market integrity, and customers. Under this proposal, the sophistication of the market participant would dictate the regulatory approach. Sophisticated market participants would be subject to the U.S. supervisory approach for banks, and unsophisticated market participants would be subject to more traditional market regulation.

A fourth recommendation was to replace the existing financial market regulatory structure with a set of meaningful and verifiable best practices whose guiding principle would be transparency. These best practices would be applicable to all significant market participants worldwide, including institutional end-users, such as hedge funds, and would be designed to reduce risks to participants and the financial system. They would address internal controls, including risk management and credit assessments; sales practices; documentation; information availability; senior management accountability; and audit and compliance. Rather than acting as a regulator, the federal government would monitor systemic risk. Although existing financial laws and regulations would be abandoned, best practices would remain subject to antifraud and contract law. The participant who made this recommendation was critical of the U.S. regulatory system, in which different rules exist to address the same risks in products that are indistinguishable. That is, to the extent that the products are indistinguishable and the risks are the same, he said that the rules addressing the risks should be the same.

Additionally, a former CFTC chairperson testified in December 1998 that differences between physical and financial futures justify different regulatory approaches. First, she asserted that financial futures, unlike futures on physical commodities, generally do not serve a price discovery function. Second, she noted that although exchanges facilitate the actual delivery of physical commodities, this function is less necessary for cash settled financial futures and requires less federal oversight. Third, she said that financial futures are much less susceptible to manipulation or supply distortions. Fourth, she noted that participants in the financial futures market are often supervised by bank or securities regulators. In a 1999 journal article, she reiterated these views and noted that given the rapid improvement in trading technology, the globalization of markets, and increasingly open avenues of international trade, care must be taken to ensure that a domestic regulatory structure does not chase business offshore. Similarly, the Chairman of the Federal Reserve Board observed that the OTC derivatives market functions effectively without the benefits of CEA regulation, providing a strong argument for less regulation of exchange-traded financial derivatives.

Costs and Benefits of Futures Market Regulation Are Difficult to Measure

Federal regulations applicable to U.S. futures exchanges and other regulated market participants are identifiable and impose costs. However, our previous work has shown that difficulties exist in measuring the incremental costs of regulation. One measurement difficulty is distinguishing actual compliance costs from those costs that would have been incurred as a normal business expense in the absence of federal regulation. Futures exchanges have noted that certain regulations provide benefits and would be retained in exchange rules regardless of whether they were required by CFTC. The exchanges, however, have not specified which regulations would be maintained in the absence of CFTC requirements, making it difficult to measure actual compliance costs. Similar measurement difficulties exist for other regulated market participants. For example, in the absence of CFTC regulation, futures commission merchants (FCM) could still be subject to regulations imposed on them by exchanges and, if registered as broker-dealers, by SEC. Additionally, measuring indirect costs, such as lost productivity or income resulting from regulations, is more difficult than measuring direct costs.

Even if the incremental costs of regulation could be accurately measured, such information would be of limited usefulness without corresponding information on the benefits of regulation. Measuring the benefits of regulation can be more difficult than measuring costs—particularly for regulatory agencies like CFTC whose regulations are intended to prevent or deter violations, such as manipulation and fraud. Moreover, although

costs are typically measured in dollars, benefits cannot always be measured quantitatively. For example, futures industry representatives and other market participants have indicated that federal regulation enhances market integrity and customer protection and promotes the perception that the market and the financial intermediaries through which users gain access are fair.

CFTC has noted that it considers the costs and benefits that may result from the rules that it adopts relying, in part, on public comments. The futures exchanges have supported the use of cost-benefit analysis, noting that excessive regulation jeopardizes their competitiveness relative to foreign futures and OTC derivatives markets. Other market participants and observers have stressed the importance of ensuring that regulatory costs do not exceed benefits, citing CFTC's contract approval requirement and federal audit trail standards, both required by statute, as examples of regulations whose costs appear to outweigh benefits.

At the CFTC reauthorization roundtable discussion, one participant commented that it is extremely difficult to analyze the costs and benefits of futures regulation. He said that costs are measured in dollars and benefits are measured qualitatively, making the comparison between them subjective. Another participant agreed that measuring regulatory costs and benefits is difficult, but he also said that attempts should be made to do so. He indicated that cost-benefit analysis should be used to task CFTC with proving that regulatory benefits exceed costs. Also, as discussed above, one participant recommended that CFTC assume a supervisory role similar to that of the U.S. banking regulators or the U.K. single regulator. The latter plans to use cost-benefit analysis in deciding whether to issue new regulations.

Finally, roundtable participants warned that overly burdensome regulations could be avoided by moving transactions to other markets. For example, OTC derivatives could be used instead of exchange-traded futures to avoid triggering CFTC's registration or large trader reporting requirements. Also, market participants that seek access to markets closed to U.S. citizens could transact through offshore foreign entities. One roundtable participant indicated that entities seeking such access were typically large, sophisticated institutions that did not need the protections offered by the CEA.

**Public Policy
Questions Raised by
Regulatory Reform
Efforts for Exchange-
Traded Derivatives**

Financial Integrity/Systemic Risk:

1. How do the financial integrity/systemic risk issues posed by the exchange-traded derivatives markets differ from those of the OTC derivatives markets, and what are the regulatory implications?

Market Integrity/Efficiency:

2. How are the risks posed by financial futures and options different from those of physical commodities (e.g., as they relate to price discovery and market manipulation); and what are the regulatory implications?
3. What are the implications of a regulated and unregulated exchange market operating side-by-side for the same or different contracts?
4. What are the major risks, if any, that threaten the integrity and efficiency of a futures market limited to sophisticated market participants, and what are the regulatory implications of any such risks?
5. To what extent can the costs and benefits of futures market regulations be measured in an objective, consistent, and reliable manner that allows for a meaningful comparison between them?
6. How should the terms futures contract and board-of-trade be defined, if at all, in the CEA?
7. What is the appropriate role for CFTC in approving new contracts proposed for trading by a futures exchange?

Customer Protection:

8. How do the customer protection issues posed by the exchange-traded derivatives markets differ from those of the OTC derivatives markets, and what are the regulatory implications?
9. How do the customer protection issues differ between tiers in a market differentiated by the sophistication of market participants, and what are the regulatory implications?
10. Absent CFTC regulations, what protections exist or should exist for OTC market participants?

The Shad-Johnson Jurisdictional Accord

Rationale for the Accord

The Shad-Johnson Jurisdictional Accord is an agreement reached between the Chairmen of SEC and CFTC in 1981 to resolve a dispute concerning jurisdiction over securities-based derivatives. The dispute was precipitated by CFTC's 1975 approval of a Chicago Board of Trade (CBT) futures contract on Government National Mortgage Association pass-through mortgage-backed certificates. SEC challenged CFTC's decision, asserting that the contracts for future delivery of these certificates were securities falling within its regulatory jurisdiction. SEC later approved an option on the certificates for trading on a securities exchange. CBT subsequently prevailed in a court challenge of SEC's approval, arguing that the option was subject to CFTC's exclusive jurisdiction. In 1981, the SEC and CFTC Chairmen entered into an agreement to clarify each agency's jurisdiction. This agreement was codified in the Securities Acts Amendments of 1982 and in the Futures Trading Practices Act of 1982 that amended the CEA by, among other things, adding section 2(a)(1)(B). (See the glossary at the end of the report for definitions.)

Under the accord, CFTC retained exclusive jurisdiction over all futures contracts, including futures on securities-based indexes and options on futures and physical commodities. CFTC was also given jurisdiction over options on foreign currencies not traded on a national securities exchange (subject to the limitations imposed by the Treasury Amendment). (See app. IV on the Treasury Amendment.) Futures and options on futures on securities indexes were allowed only for contracts settled in cash, not readily susceptible to manipulation, and derived from a substantial segment of a publicly traded group or index of equity or debt securities, called broad-based indexes. Such contracts were also subject to initial SEC review for compliance with these requirements. If SEC determined that a proposal did not meet these requirements, CFTC could not approve the contract for trading.¹ Under the accord, SEC retained jurisdiction over securities, including options on securities, options on certificates of deposit, options on securities indexes, and options on foreign currency traded on a national securities exchange.

Futures contracts on individual securities, other than exempted securities (such as U.S. Treasuries), were prohibited by the accord. The CFTC chairman who negotiated the accord stated at the CFTC reauthorization roundtable that the accord was intended to ban certain stock-based futures until issues of concern to SEC could be addressed. According to the legislative history, SEC was concerned that the regulatory scheme

¹ Under the accord, SEC authority applied only to contracts proposed on or after December 9, 1982. The accord provided that CFTC was to consult with SEC on proposals made before that date.

governing futures trading did not mirror securities regulation in important areas such as insider trading prohibitions, customer protections, floor trading rules, and margin requirements. The former CFTC chairman said that at the time the accord was negotiated, CFTC had been willing to address these concerns but the two agencies could not reach agreement on jurisdiction over the prohibited products.

Evidence of Continued Uncertainty

Questions have remained about how to regulate products covered by the accord. In 1987, after the stock market crash, SEC and the New York Stock Exchange cited trading in stock index futures for exacerbating stock volatility during the crash and threatening the future stability of the stock market. As a result, SEC requested that Congress shift oversight responsibility for stock index futures from CFTC to SEC. No action was taken on this request; however, Congress granted oversight authority for setting margins on stock index futures to the Federal Reserve under the Futures Trading Practices Act of 1992.

In 1989, several stock exchanges introduced contracts, called index participations, to provide investors with a relatively low-cost way to obtain an index-equivalent portfolio. The courts subsequently ruled, in response to a suit by Chicago futures exchanges, that the index participations were futures contracts and thus could be offered only on CFTC-regulated futures exchanges. As a result, these contracts ceased trading. The American Stock Exchange subsequently developed a securities product that offered investors a benefit similar to these contracts by providing them an interest in the holdings of a trust.

The Futures Trading Practices Act of 1992 gave CFTC broad authority to exempt swaps and other OTC derivatives from all CEA provisions except section 2(a)(1)(B), which codified the accord. Because of their similarities to exchange-traded futures, certain OTC derivatives faced the possibility of falling within the judicially crafted definition of a futures contract. This possibility posed a legal risk for such contracts because of the CEA requirement that futures be traded on an exchange to be legal and, thus, enforceable. CFTC's 1993 swaps exemption eliminated this legal risk for qualifying contracts. However, the exemption did not eliminate the legal risk for securities-based swaps, contracts whose returns are based on the prices of securities or securities indexes, because these contracts might be prohibited by or subject to CEA section 2(a)(1)(B).

According to market observers, if securities-based swaps were found to be futures contracts, they could be in violation of section 2(a)(1)(B) and, thus, be illegal and unenforceable. First, swaps on individual securities

that were deemed futures would violate section 2(a)(1)(B), which prohibits futures on individual securities. Second, swaps on securities indexes that were deemed futures would violate the CEA requirement that futures trade on an exchange. However, swaps counterparties can still rely on CFTC's swaps policy statement, which sets forth the conditions under which CFTC would not regulate certain swaps as futures, to address their legal concerns under section 2(a)(1)(B). Provisions of a 1997 Senate bill to amend the CEA (S. 257) were intended to provide greater legal certainty for all swaps by codifying the existing swaps exemption and, for securities-based swaps, by extending the scope of the exemption to include section 2(a)(1)(B). (See app. I on CFTC's exemptive authority for OTC derivatives.)

In July 1998, SEC exercised its authority under section 2(a)(1)(B) and objected to a CBT application to trade futures based on the Dow Jones utility and transportation indexes. According to SEC's written decision, this was the first time SEC had objected to a proposed stock-index futures contract since 1984. Under the securities laws, SEC had approved options on these same indexes for trading on the Chicago Board Options Exchange in 1997. SEC determined that the CBT-proposed contracts on the Dow Jones utility and transportation indexes did not satisfy the substantial segment requirement of the accord. In July 1998, CBT challenged SEC's determination in federal court. In November 1998, CFTC filed a brief in support of CBT, asserting that SEC had not accurately interpreted the provisions of the accord. In January 1999, the New York Stock Exchange and Chicago Board Options Exchange filed a brief in support of SEC, asserting SEC's determination was necessary to protect against injury to the securities markets. The case is pending.

Finally, although the accord generally divided jurisdiction between CFTC and SEC, the accord allowed options on foreign currency to be traded on exchanges under either jurisdiction. Currently, foreign currency options exist on both futures and securities exchanges, but the futures exchange options are dormant.

Addressing the Prohibition on Stock-Based Futures

The 1997 House bill (H.R. 467) to amend the CEA would have established unregulated professional markets exempt from CEA section 2(a)(1)(B). One result would have been to legalize exchange-trading of futures on individual stocks or on narrowly based stock indexes. In testifying on the House bill, SEC expressed concern that by stripping it of its oversight authority under the accord, the bill would eliminate an important tool for overseeing the markets for equities and equity derivatives. SEC was also concerned that because the futures and securities markets were linked,

undetected fraud and manipulation in futures markets caused by a lack of audit trails, books and records, and trade reporting requirements would inevitably spill over into the securities markets.

At the CFTC reauthorization roundtable discussion, several participants questioned the rationale for banning futures on individual stocks. They stated that concerns about the risks associated with allowing exchange-trading of these contracts ignore the fact that equivalent products are already being traded in the United States. Currently, market participants can create the equivalents to futures on individual stocks, called synthetic instruments, by taking positions in the options and stock markets. Also, swaps based on stocks are traded in the OTC market. Although not discussed at the roundtable, futures based on stocks are traded on some foreign futures exchanges. For example, exchanges in Australia and Hong Kong trade futures on individual domestic stocks and have considered trading futures on major U.S. stocks.

A roundtable participant who worked at SEC when the accord was negotiated identified several issues that he believed should be addressed before futures on individual stocks and narrowly based stock indexes are allowed to trade on exchanges and before a regulator for these products is determined. These issues are similar to those that were of concern to SEC when the accord was negotiated and relate to insider trading, customer protection, market manipulation, and leverage limits. Additionally, one participant said that rules limiting the sale of borrowed stocks when the stock is declining in price, called short-sale rules, would also need to be examined. The current CFTC chairperson stated at a March 1999 futures conference that if Congress excluded equity swaps from the CEA it should also consider permitting futures on equities to be traded on futures exchanges, subject to an appropriate regulatory framework.

In a joint statement submitted to the Senate and House Agriculture Committees on March 19, 1999, the U.S. Securities Market Coalition expressed its opposition to lifting the ban. Citing the issues that were of concern when the accord was negotiated, the statement concluded that lifting the ban could disrupt the securities markets and undermine investor confidence in these markets. An SEC official also expressed these views to us, emphasizing the agency's concern that if the ban were lifted, the futures markets could become the pricing mechanism for securities. The official said the agency was concerned that if price discovery for securities occurred on the futures markets, the goals of the federal securities law could be undermined, regulatory disparities could be exploited to the

detriment of securities investors, and liquidity in the securities markets could be dissipated.

**Public Policy
Questions Raised by
the Accord**

Financial Integrity/Systemic Risk and Market Integrity/Efficiency:

1. To what extent do futures on individual stocks and narrowly based stock indexes raise financial integrity/systemic risk or market integrity risks that are different from those raised by options on such stocks and stock indexes?
2. What are the implications, if any, to the efficiency and integrity of the U.S. securities markets of separating the regulation of stock and stock index futures from the regulation of the underlying stocks?
3. What are the implications should foreign exchanges trade futures on individual U.S. stocks and narrowly based U.S. stock indexes?

The Treasury Amendment

Rationale for the Treasury Amendment

Before 1974, the CEA provided for CFTC's predecessor to regulate futures trading in those commodities specifically listed in the act. Futures trading in other commodities was not subject to the act, including its exchange-trading requirement. In 1974, Congress proposed amending the CEA to expand the list of commodities covered by the act to include not only physical commodities but also intangibles, such as interest and foreign exchange rates. The proposed amendments would have significantly broadened the transactions that would be subject to regulation under the act. Under the CEA, any contracts that were defined as futures but traded off-exchange, or OTC, would be illegal. (See the glossary at the end of the report for definitions.)

The Department of the Treasury expressed concern that the proposed expansion of the CEA's commodity definition, when coupled with the act's exchange-trading and other provisions, would prohibit banks and other financial institutions from trading among themselves in foreign currencies and certain financial instruments, including government securities. According to Treasury, virtually all U.S. futures trading in foreign currencies was conducted off-exchange through an informal network of banks and dealers (called the interbank market), which served the needs of international business to hedge risk stemming from foreign exchange rate movements. Treasury asserted that unlike some participants in the exchange-traded markets who might need the protection provided by government regulation, foreign exchange market participants were sophisticated and informed institutions not requiring such protection. In response to Treasury's concern, Congress adopted the Treasury Amendment to exclude from CFTC regulation certain transactions in, among other things, foreign currency and government securities, unless conducted on a board of trade. As part of the legislative history accompanying the 1974 amendments to the CEA, which included the Treasury Amendment, Congress noted that the interbank market was more properly supervised by bank regulators and, thus, regulation by CFTC under the CEA was unnecessary.

Problems Interpreting the Treasury Amendment

The Treasury Amendment has been difficult to interpret because its language is ambiguous. Although the amendment was motivated primarily by concern that the interbank foreign currency market should be excluded from regulation under the act, its language is not limited to the interbank market. Rather, it excludes any transaction in, among other things, foreign currencies and government securities, unless the transaction involves a sale for future delivery conducted on a board of trade. Before the February 1997 U.S. Supreme Court decision in Dunn v. CFTC, considerable debate occurred over the meaning of the phrase "transactions in," which partly

defines the scope of the exclusion. In Dunn, the U.S. Supreme Court interpreted the phrase “transactions in” to include futures and options contracts, but it did not address the meaning of the term board of trade as used in the “unless” clause. The CEA defines the term board of trade to “mean any exchange or association, whether incorporated or unincorporated, of persons who shall be engaged in the business of buying or selling any commodity.” This clause could be interpreted to save from the exclusion virtually any futures or option contract sold by a dealer, a construction that would render the amendment meaningless. The ambiguity of the statutory language has led to disagreements among regulators and courts over how the amendment ought to be interpreted.

CFTC and the Treasury Department Have Interpreted the Treasury Amendment Differently

Because of its significant market impact, the activity that the Treasury Amendment excludes from regulation under the CEA has been the subject of considerable debate among federal regulators. Since at least 1985, CFTC has interpreted the Treasury Amendment to exclude from the act’s regulation certain OTC transactions between banks and other sophisticated institutions, drawing a distinction between sophisticated market participants and unsophisticated market participants who may need to be protected by government regulation. An OTC foreign currency transaction sold to a financial institution would be excluded from the act’s regulation; a similar contract sold to the general public would not be excluded. CFTC drew this distinction to preserve its ability to protect the general public from, among other things, bucket shops engaging in fraudulent futures transactions—one of its missions under the CEA. Consistent with this philosophy, CFTC brought 33 cases involving the illegal sale of foreign currency futures or option contracts to the general public since its inception through 1998. These cases involved more than 3,800 customers who invested over \$260 million. According to CFTC, if the amendment were interpreted to cover contracts sold to the general public, the agency’s ability to prohibit the fraudulent activities of bucket shops dealing in foreign currency contracts would be effectively eliminated, creating a regulatory gap. According to some market observers, other federal agencies, such as the Federal Trade Commission, and state agencies can also protect retail customers from investment fraud.

In contrast to CFTC, Treasury has advocated the reading of the Treasury Amendment adopted by the U.S. Supreme Court in Dunn—that is, the amendment excludes from CFTC jurisdiction any transaction in which foreign currency is the subject matter, including foreign currency options, unless conducted on a board of trade. It has objected to CFTC’s approach to the Treasury Amendment, noting that it lacks a foundation in the language of the statute. According to Treasury, CFTC enforcement actions

involving OTC foreign currency derivative transactions have raised significant issues about the scope of the amendment. Although CFTC actions have been aimed at protecting unsophisticated market participants from fraud, Treasury noted that such actions have created uncertainty over which OTC transactions the amendment excludes from CEA coverage and, in turn, have generated legal uncertainty in the financial markets. Nevertheless, it has expressed sympathy with CFTC's concerns over fraudulent foreign currency contracts marketed to the general public. Treasury has agreed that CFTC may be able to interpret the term "board of trade" in a carefully circumscribed manner that would allow appropriate enforcement action against fraud without raising questions about the validity of established market practices.

The Foreign Exchange Committee—which represents major U.S. and foreign banks and brokers—and other market participants have expressed concerns similar to those of Treasury. Market participants have noted that uncertainty regarding the amendment's scope raises questions about the legal enforceability of OTC foreign currency contracts involving U.S. parties. They believe that such uncertainty needs to be addressed, given the foreign currency market's size and significance to the U.S. economy. According to CFTC staff, the agency has been taking enforcement actions involving OTC foreign currency derivatives since at least 1985, and available evidence does not indicate that these actions have resulted in legal uncertainty.

Market participants have noted that larger scale participants in OTC foreign currency transactions could respond to legal uncertainty by shifting trading to their overseas offices. These market participants have argued that if a sufficiently large shift in trading were to occur, liquidity in the U.S. foreign currency markets would be reduced to the detriment of U.S. businesses engaged in foreign trade. According to a BIS survey, the average daily turnover in the traditional foreign exchange market was about \$1.49 trillion as of April 1998. The U.S. share of this market was 18 percent, ranking it second behind the United Kingdom, whose share was 32 percent.

Federal Court Interpretations of the Treasury Amendment Have Differed

The federal courts have differed in their interpretation of what activity the Treasury Amendment excludes from regulation under the CEA. In spite of these differences, the courts have recognized congressional intent to exclude the inter-dealer foreign currency market from regulation. However, past court cases have highlighted the difficulty in interpreting the meaning of a board of trade as used in the Treasury Amendment and the legal confusion over whether the amendment excludes from the act's

regulation transactions in foreign currencies that involve the general public.¹

The Second Circuit Court of Appeals held in Dunn that option contracts are not covered by the Treasury Amendment and, therefore, are subject to CFTC jurisdiction. In doing so, it followed a precedent that it had established in a case involving the sale of currency options to private individuals. In that case, it reasoned that an option contract does not become a transaction in foreign currency that is excluded under the Treasury Amendment until the option holder exercises the contract.

In February 1997, the U.S. Supreme Court reversed the Second Circuit's decision in Dunn. The Court interpreted the "transactions in" language of the Treasury Amendment to exclude from CFTC regulation all transactions relating to foreign currency, including foreign currency options, unless conducted on a board of trade. The Supreme Court, however, did not address the definition of a board of trade.

The Fourth Circuit Court, in Salomon Forex, Inc. v. Tauber, held that off-exchange sales of currency futures and options to a wealthy individual were transactions in foreign currency that the Treasury Amendment excludes from regulation. The buyer of the contracts brought the action to avoid payment on transactions in which he had lost money. The court interpreted the amendment to exclude from the CEA individually negotiated foreign currency option and futures transactions between sophisticated, large-scale currency traders. The court observed that the case did not involve mass marketing of contracts to small investors and stated that its holding did not imply that such marketing was exempt from the CEA.

The Ninth Circuit Court, in CFTC v. Frankwell Bullion Ltd., affirmed a lower court holding that the Treasury Amendment excludes the sale of off-exchange foreign currency futures and options from the CEA without regard to whom the contracts are sold. CFTC brought an action to stop the seller of the contracts from allegedly selling illegal, off-exchange futures contracts to the general public. The Ninth Circuit Court's review focused on the meaning of the clause "unless . . . conducted on a board of trade."

¹ While we refer in the text to decisions by federal circuit courts of appeal, two decisions by the federal district court in New York (CFTC v. Standard Forex, Inc. (1993) and CFTC v. Rosner (1998)) interpreted "board of trade" in the context of the Treasury Amendment to include sales to the general public of futures based on foreign currency by firms not otherwise subject to government regulation. The Standard Forex interpretation was expressly rejected by the Ninth Circuit in the Frankwell Bullion decision (1996) discussed in the text.

The court interpreted the clause to carve out of the exclusion only contracts sold on an organized exchange. The court acknowledged that the plain meaning of a board of trade as defined by the act would include more than exchanges. But the court rejected this interpretation in the context of the Treasury Amendment because it would cause the “unless” clause to encompass the entire exclusion and thereby render the amendment meaningless. Turning to congressional reports accompanying the 1974 legislation to explain the purpose of the Treasury Amendment, the court concluded that Congress intended to exclude from the CEA all transactions in the listed commodities except those conducted on an organized exchange. In December 1996, CFTC filed a petition with the Ninth Circuit Court requesting a rehearing, which was denied.

Proposals to Clarify the Scope of the Treasury Amendment

The 1997 Senate bill (S. 257) to amend the CEA included a provision to clarify the scope of the Treasury Amendment. According to an accompanying discussion document, the bill reflected the view that a federal role is needed in the market to protect retail investors from abusive or fraudulent activity in connection with the sale of foreign currency futures and options by unregulated entities. The document further noted that the bill intended that CFTC would have no jurisdiction over nonretail transactions conducted off-exchange or retail transactions that were subject to oversight by other federal regulators. CFTC stated that it opposed the provision because it would have (1) extended the amendment’s exemption to certain exchange-traded futures and (2) eliminated CEA protections afforded to retail investors in OTC transactions. Treasury did not take a position on the provision. However, the agency supported providing CFTC with authority to prosecute unregulated firms defrauding retail customers but without burdening successful, efficient markets. The Foreign Exchange Committee supported the provision’s intent of providing legal certainty to OTC transactions but suggested modifying it to limit CFTC’s jurisdiction to policing fraud. The futures exchanges supported the provision because it would have clarified that CFTC has jurisdiction over unregulated entities offering foreign currency futures to retail investors but not over markets that exclude the general public.

The 1997 House bill (H.R. 467) to amend the CEA proposed, among other things, to amend the Treasury Amendment to clarify that CFTC has regulatory authority only over standardized contracts sold to the general public and conducted on a board of trade. The bill would have defined board of trade in the context of the Treasury Amendment as “any facility whereby standardized contracts are systematically marketed to retail investors.” CFTC opposed the provision, in part, because it would have

permitted exchanges to trade certain futures free from CFTC regulation. Treasury did not take a position on the provision but supported providing CFTC with authority over unregulated entities that defraud retail investors. The Foreign Exchange Committee supported the provision but suggested modifying it to limit CFTC's jurisdiction to unregulated entities and to preserve federal oversight of the futures exchanges.

Participants in the CFTC reauthorization roundtable discussion noted the importance of the Treasury Amendment in providing legal certainty to OTC foreign currency and other covered transactions. At the same time, however, some recognized the need to protect unsophisticated retail investors from unregulated firms fraudulently marketing OTC foreign currency derivatives. Although one participant advocated abolishing the Treasury Amendment, his goal was to provide equal regulatory treatment to exchange-traded and OTC derivatives. He objected to market participants being excluded from regulation under the CEA when transacting in OTC instruments covered by the amendment, but being regulated when trading similar instruments on an exchange. He supported regulation based on the sophistication of the market participant. (See app. II on regulatory reform efforts for exchange-traded derivatives.)

Public Policy Questions Raised by the Treasury Amendment

Market Integrity/Efficiency:

1. To what extent does the legal uncertainty faced by market participants under the Treasury Amendment adversely affect the efficiency of the market?

Customer Protection:

2. How should the Treasury Amendment be changed, if at all, to clarify whether unsophisticated market participants are covered by the CEA when transacting in foreign currency or other enumerated instruments?
3. To what extent should unregulated entities be allowed to engage in OTC transactions with unsophisticated market participants?

The Forward Exclusion

Historical Definition of a Forward Contract

Congress excluded forward contracts from the CEA to facilitate the movement of commodities through the merchandizing chain. Absent a statutory definition of a forward, CFTC and the courts have defined forwards in reference to futures. Consistent with the CEA reference to forwards as involving the sale of cash commodities for deferred delivery, forwards have been distinguished from futures on the basis of whether the contract served primarily as a vehicle for deferred delivery or risk shifting. Because forwards primarily serve a merchandizing purpose, they are expected to entail delivery, but delivery is expected to occur at a later date. In contrast, futures primarily serve a risk-transferring function, and actual delivery is not generally expected to occur. (See the glossary at the end of the report for definitions.)

Problems Differentiating Forwards From Futures

Although the CEA excludes forwards from its regulation because of their merchandizing purpose, the act does not specify what constitutes delivery under the exclusion and, thus, does not clearly differentiate forwards from futures. The evolution of certain contracts in which delivery may not routinely occur has made it increasingly difficult to distinguish unregulated forwards from regulated futures and, as discussed below, can result in legal risk regarding the enforceability of such contracts.

A 1986 lawsuit focused on whether Brent oil contracts—OTC contracts for the future purchase or sale of Brent oil—were forwards or futures. A firm had sued its counterparties to Brent oil contracts for violating the CEA's antimanipulation provisions. The counterparties responded that the contracts were forwards and thus excluded from the CEA because no contractual right existed to avoid delivery. In 1990, a federal district court rejected the claim and found that the contracts were futures. The court concluded that even though the contracts did not include a contractual right of offset to avoid delivery, the opportunity to offset contracts and the common practice of doing so were sufficient to determine that the contracts were futures. Because the court's decision created the possibility that Brent oil contracts could be illegal, off-exchange futures, market participants urged CFTC to issue an interpretation to clarify the status of these contracts under the CEA. According to market observers, as a result of the court decision, many participants in the Brent oil market permanently stopped entering these contracts in the United States.

In a subsequent 1990 statutory interpretation on forwards, CFTC adopted the view that Brent oil contracts were forwards, because they required the commercial parties to make or take delivery, even though they did not routinely do so. CFTC stated that the contracts did not include any provisions that enabled the parties to settle their contractual obligations

through means other than delivery, and the settlement of contracts without delivery was done through subsequent, separately negotiated contracts. In 1993, to provide the market with greater legal certainty, CFTC used its newly granted authority to exempt Brent oil and other OTC energy contracts from virtually all CEA provisions. (See app. I on CFTC exemptive authority for OTC derivatives.) However, this exemption did not address the legal risk faced by OTC derivatives that resembled both forwards and futures but were not based on energy-related commodities, such as agricultural commodities.

Although CFTC's statutory interpretation on forwards was intended to reduce the legal risk surrounding Brent oil contracts and allow that market to evolve, it did not provide a clear basis for distinguishing forwards from futures on the basis of their economic purpose. That is, it did not preclude forwards from being settled routinely without delivery and, in the process, being used primarily for risk-shifting or speculative purposes instead of merchandizing purposes. In dissenting from the agency's interpretation on forwards, a CFTC commissioner stated that it broadened the CEA's forward exclusion to include transactions that were standardized, used for noncommercial purposes, and offset.

In 1995, CFTC took enforcement action against MG Refining and Marketing for selling illegal, off-exchange futures to commercial counterparties. The firm sold contracts that purportedly required delivery of energy commodities in the future at a price established by the parties at initiation. These contracts provided counterparties with a contractual right to settle the contracts in cash without delivery of the underlying commodity. This right could be invoked if the price of the underlying commodity reached a pre-established level. Based largely on this provision, a CFTC settlement order found these contracts to be illegal, off-exchange futures. CFTC's conclusion was consistent with prior court and CFTC decisions; it identified the contractual right to offset as a critical feature distinguishing forwards from futures. Nonetheless, some market participants and observers asserted that CFTC's action broadened the definition of a futures contract and resulted in greater legal risk for forwards and securities-based swaps.

In 1996, CFTC filed a complaint against a grain elevator, alleging that certain of its hedge-to-arrive (HTA) contracts were illegal, off-exchange futures. In 1997, before CFTC's case was heard, a federal district court held in a separate civil case involving the same grain elevator and its producers that the elevator's HTA contracts were forwards and excluded from the CEA. The court found that the contracts were grain marketing

instruments, noting that the parties were in the business of growing and merchandizing grain and had the ability to make or take delivery. Given the court's decision, the grain elevator requested that the court dismiss CFTC's case, but the request was denied. The federal district court also refused to block CFTC's case. In 1998, a CFTC administrative law judge found that the grain elevator's HTA contracts at issue in the case were futures and not forwards. The administrative law judge found that the contractual terms of the elevator's HTA contracts readily allowed producers to unilaterally and unequivocally avoid delivery for any reason.

In January 1999, CFTC filed administrative complaints against two other grain elevators alleging, among other things that their HTA contracts were illegal, off-exchange futures. Although the facts and circumstances differed between the two cases, CFTC found in one case and charged in the other that the contracts were futures, in part, because they could be terminated without delivery. Dissenting against both complaints, a CFTC commissioner maintained that the elevators' HTA contracts were forwards, noting that the contracts were limited to commercial parties and included a contractual obligation to deliver.

**Public Policy
Questions Raised by
the Forward Exclusion**

Market Integrity/Efficiency:

1. What types of OTC transactions should be covered by the CEA's forward exclusion?
2. To what extent should the forward exclusion turn on the nature of the counterparty to a forward contract?

Agricultural Trade Options

History of the Ban on Commodity Options

Under the CEA of 1936, Congress banned exchange-traded and OTC options on regulated commodities because of their suspected role in disrupting the market. Regulated commodities were those commodities specifically listed in the CEA and initially included corn, wheat, oats, barley, rye, flax, and sorghum. As Congress periodically amended the CEA, it added other agricultural commodities to the list, effectively extending the scope of the act's options ban. In aggregate, the regulated agricultural commodities became known as the enumerated commodities; all others became known as the nonenumerated commodities. (See the glossary at the end of the report for definitions.)

In 1974, Congress amended the CEA to create CFTC and bring all nonenumerated commodities under federal regulation. Rather than adding new commodities to the act's list, Congress amended the commodity definition with a catchall phrase to include virtually anything, thereby bringing futures and options trading on all commodities under the CEA. This broadening of the act's scope was meant, in part, to address abusive practices and fraud in the marketing of options on nonenumerated commodities. Under the act's authority, CFTC promulgated a regulatory framework for trading these previously unregulated commodities.

In 1978, responding to continued fraud and abuse, CFTC suspended OTC options trading on the nonenumerated commodities, except for trade options—off-exchange commodity options offered or sold to commercial users of the underlying commodity solely for purposes related to their business. Later in 1978, Congress codified CFTC's ban but provided CFTC with the authority to lift the prohibition on trading options on nonenumerated commodities after notifying Congress. The 1936 statutory ban and CFTC rule prohibiting options on the enumerated commodities remained in effect.

Narrowing of the Commodity Option Trading Ban

Since 1978, CFTC and congressional actions have narrowed the scope of the ban on commodity options to allow for exchange-trading of options. Under a 1981 pilot program, CFTC allowed exchanges to trade options on futures contracts on the nonenumerated commodities. On the basis of the experience of the pilot program, the Futures Trading Act of 1982 lifted the 1936 statutory ban on options on the enumerated commodities. Under a 1983 pilot program, CFTC allowed exchange-trading of options on futures contracts on the enumerated commodities but did not allow exchange-trading of options on the underlying physical commodities. CFTC permitted this limited exchange-trading of options because such trading would be subject to the comprehensive regulation of an exchange.

On numerous occasions since 1984, CFTC has sought public comment or facilitated public discussion on lifting the prohibition on trade options on the enumerated commodities. Until recent changes in U.S. agricultural programs, however, industry opposition impeded a lifting of the ban. Through a 1985 interpretative letter on forwards, CFTC lessened the debate by permitting producers to obtain certain of the benefits associated with the use of agricultural trade options by using bona fide forward contracts containing option-like features. (See app. V on the forward exclusion.)

CFTC Pilot Program on Agricultural Trade Options

On the basis of the results of the pilot programs and a shifting of industry views, CFTC began to consider lifting the ban on trade options on the enumerated commodities. In a 1997 study, CFTC concluded that the elimination of certain U.S. agricultural programs (e.g., elimination of crop deficiency payments) and changes in international markets (resulting in part from changes in trade agreements) increased uncertainty and price volatility in the agricultural markets, warranting new forms of risk-shifting instruments. Accordingly, in April 1998, after two rounds of public comment, CFTC published rules for a 3-year pilot program for trade options on the enumerated commodities. To allow for competition by the exchanges, CFTC also removed the prohibition on exchange-trading of options on the commodities enumerated in the act.

The pilot program is limited to agricultural trade options on the enumerated commodities and requires that the options result in delivery of the commodity. Such options may not be resold, repurchased, or otherwise cancelled, except through the exercise or natural expiration of the contract. Also, the pilot program permits only those entities that handle the commodity in normal cash market channels to solicit, offer to buy or sell, or buy or sell such options. Vendors of such options, usually grain elevators, are required to register as agricultural trade option merchants with NFA, report transactions to CFTC, provide customers with disclosure statements, keep books and records, and safeguard customers' premiums. Certain employees of these merchants are also required to register and meet training requirements. The rules also include an exemption for commercials with not less than \$10 million in net worth. According to CFTC, the program rules were designed to protect program participants and to account for recent experience with agricultural marketing schemes; for example, HTA contracts. CFTC reported that although the pilot program is a 3-year test, it would consider changes to these rules, as experience warrants, before the conclusion of the test.

Status of the Pilot Program

According to CFTC, as of April 20, 1999, no firm had applied to NFA to become an agricultural trade option merchant. Some producers and industry representatives have told CFTC that the rules of the pilot program are too onerous. In particular, they said that the delivery requirement reduced the potential benefit of the options, and the paperwork requirements were too burdensome. Industry representatives compared the proposed regulations to other trade options that are exempt from regulation. They proposed, among other changes, lowering the net worth exemption to \$1 million, consistent with the swap exemption. According to CFTC, the lack of interest in the program may be due to producers (1) not wanting to lock into prevailing low commodity prices and (2) focusing on production rather than marketing strategies at the time the program was introduced. Additionally, CFTC identified a general lack of knowledge about the program. CFTC officials told us that the agency has issued three educational brochures that will also be available on the Internet. A participant at the CFTC reauthorization roundtable discussion commented that CFTC regulations were an overly conservative reaction to the HTA controversy. Another suggested that CFTC grant trade options an exemption from the CEA similar to that provided to swaps. (See app. I on CFTC exemptive authority for OTC derivatives.)

Public Policy Question Raised by Agricultural Trade Options

Market Integrity/Efficiency:

- How can the rules of the agricultural trade options program be changed to better address industry concerns and encourage participation, while also providing sufficient market and customer protections?

Electronic Trading Systems

CFTC Role in Facilitating the Development of Electronic Systems

The Futures Trading Practices Act of 1992 mandated that CFTC (1) facilitate the development and operation of electronic trading as an adjunct to open outcry systems and (2) assess the benefits of U.S. electronic trading systems. Under open outcry systems, futures are traded by floor participants who verbally or through hand signals make bids and offers to each other at centralized exchange locations. In contrast, under electronic trading systems, bids and offers are entered into a host computer through computer terminals and then electronically matched and executed. (See the glossary at the end of the report for definitions.)

CFTC addressed the 1992 act's mandates in a November 1994 report. First, CFTC reported that the agency facilitated the development and operation of electronic trading by reviewing and approving the Chicago Mercantile Exchange (CME) and New York Mercantile Exchange (NYMEX) electronic trading systems. The CME system, called Globex, and the New York system, called NYMEX ACCESS, began operating in 1992 and 1993, respectively. (The CBT electronic system, called Project A, was approved by CFTC and began operating in 1994 but was not sufficiently advanced to be addressed in CFTC's report.) CFTC also reported that it entered into information-sharing arrangements with foreign regulators to assist CBT and NYMEX in placing in foreign countries computer terminals that would provide access to their electronic trading systems. CFTC further reported working through the International Organization of Securities Commissions to develop international principles for regulatory review of electronic trading systems that were published in 1990. According to CFTC, it has adopted these general principles, uses them as part of its process for reviewing electronic trading systems, and is working with foreign regulators to assess the need to update them.

Second, CFTC reported the results of its assessment of the CME and NYMEX electronic trading systems. CFTC found that these systems (1) enhanced market access by extending exchange trading hours and providing direct market access, (2) improved the agency's audit ability by providing precise and unalterable audit trails, and (3) appeared to reduce the opportunity for trading abuse by electronically executing trades and providing precise audit trails. CFTC concluded that it needed to clarify exchange responsibilities for supervising such systems and would consider establishing standards and procedures for technical reviews of electronic trading systems. According to CFTC officials, the agency has not explicitly established such standards or procedures but has implicitly defined them in its review and approval of the Cantor Financial Futures Exchange (CFFE) (discussed below).

Expansion of Electronic Trading Systems

Although CBT, CME, and NYMEX principally rely on open outcry systems to trade futures, they have continued their efforts to expand the use of electronic trading systems. These efforts include introducing new contracts for electronic trading, extending the trading hours of their electronic systems so that certain contracts can be simultaneously traded on the exchange floor and electronically, and increasing the number of computer terminals in domestic and foreign locations. Today, all three electronic systems operate internationally: CBT has terminals in France, Japan, and the United Kingdom; CME has terminals in Bermuda, France, Hong Kong, Japan, and the United Kingdom; and NYMEX has terminals in Australia, Hong Kong, and the United Kingdom. In response to the exchanges' expansion efforts, electronic trading volume at each exchange has grown rapidly. For example, CBT, CME, and NYMEX electronic trading volume in 1998 exceeded the prior year's electronic trading volume by 108, 123, and 51 percent, respectively. Nonetheless, the electronic trading volume at each exchange accounted for less than 5 percent of each exchange's total trading volume in 1998.

Major foreign futures exchanges have expanded their electronic trading systems in the same ways as have U.S. exchanges. However, they are taking an additional step and moving away from open outcry to electronic trading systems as a means of enhancing their competitiveness. Although no single data source on electronic futures trading volume exists, it has been estimated that such volume accounts for about 20 to 30 percent of the total trading volume worldwide, with most of the volume occurring on foreign exchanges. In 1998, in response to growing competition, the Deutsche Terminbourse (DTB) and Swiss Options and Financial Futures Exchange merged to create Eurex, a fully electronic exchange. On the basis of 1998 trading volume, Eurex was the world's fourth largest futures exchange; on the basis of first quarter 1999 trading volume, it had become the world's largest futures exchange. Other foreign exchanges, such as the London Financial Futures and Options Exchange and Sydney Futures Exchange, are also moving toward replacing their open outcry systems with electronic trading systems to reduce trading costs and enhance their competitiveness. The Marche a Terme International de France completed this transition in 1998.

Finally, U.S. and foreign exchanges are increasingly seeking electronic linkages to boost volume and cut costs. For example, CME and the Marche a Terme International de France have an agreement that permits each exchange to trade the contracts of the other under certain circumstances. These exchanges and the Singapore International Monetary Exchange announced on February 8, 1999, that they are taking the additional step of

creating a common electronic trading system that will allow them to trade each other's products in the North American, European, and Asian time zones. The system is expected to be operational by the third quarter of 1999. Also, NYMEX has arrangements with the Sydney Futures Exchange and Hong Kong Futures Exchange that permit the members of these foreign exchanges to trade NYMEX products.

Foreign Futures Exchanges' Placement of Terminals in the United States

According to CFTC, technological advances raise a variety of issues concerning the degree to which a foreign futures exchange's trading activities in the United States are subject to CFTC regulation. These issues arise because electronic trading systems make it possible for U.S. market participants to use computer terminals located in the United States to execute trades on foreign exchanges. Also, electronic order routing systems enable customers to submit orders electronically to FCMs and to have such orders routed to foreign exchanges for execution with little or no human intervention.

Before placing electronic trading terminals in another country, an exchange must generally obtain some form of approval from that country's regulator. In 1989, CFTC staff issued a no-action letter on the trading of foreign futures contracts through CME's Globex electronic trading system. The letter stated that CFTC staff would not recommend enforcement action against a foreign board of trade that listed products on Globex based solely on its failure to become designated as a domestic contract market. In 1996, DTB, which later merged with another foreign exchange to form Eurex, was the first foreign exchange to seek and receive a no-action letter from CFTC allowing placement of DTB trading terminals in the U.S. offices of its member firms for executing trades on its market.¹ CFTC staff concluded that the public interest would not be adversely affected because (1) no customer trading would be allowed unless the DTB member was also registered with CFTC as a FCM and (2) CFTC would have access to books and records either on the DTB member's premises or via information-sharing agreements with DTB's regulator. CFTC's position was also based on the premise that DTB was a "bona fide" foreign futures exchange whose main business activities occur in Germany.

Since 1996, CFTC has received additional no-action requests as well as inquiries regarding CFTC's position on placing foreign trading terminals in the United States. In general, these inquiries sought CFTC's position on

¹ The CFTC no-action letter applies only to the placement of terminals at firms that were either DTB members or had memberships pending at the time of the letter.

whether locating terminals in the United States might subject a foreign exchange to regulation as a domestic contract market. Rather than issue separate no-action letters, CFTC decided to address the subject through its rulemaking process. CFTC issued a concept release in July 1998 to gather information for use in proposing a rule on placing foreign exchanges' computer terminals in the United States.

In March 1999, CFTC issued a proposed rule that would establish a procedure under which foreign exchanges could petition CFTC to permit electronic access from within the United States without being designated as a domestic contract market. The rule would allow U.S. customers to use order routing systems, including Internet-based systems, to enter orders and would establish minimum safety standards for operating these systems. Although all of the four CFTC commissioners voted to release the proposed rule for comment, three of the four have expressed concerns that it is overly complex, imposes unnecessary burdens, could negatively affect the competitiveness of U.S. exchanges, and/or may be illegal. Some participants at a recent industry conference also expressed frustration with the complexity of the rule, the effect of this complexity on the time that will ultimately be required for approval of the rule, and the impact on the competitiveness of foreign exchanges that are currently unable to access U.S. customers in the absence of a rule.

A CFTC representative told us that the agency considered the numerous comments it received on its concept release in formulating its proposed rule and was interested in working with the industry to quickly address remaining concerns. On April 20, 1999, CFTC sponsored a roundtable discussion of the proposed rules that was attended by representatives of U.S. and foreign exchanges, U.S. and foreign brokers, foreign regulators, and technology experts. The comment period on the proposed rule was to expire on April 30, 1999.

Novel Electronic Futures Trading Systems

In September 1998, CFFE was approved by CFTC and began electronically trading U.S. Treasury futures contracts. CFFE is jointly operated by the New York Cotton Exchange, a CFTC-designated exchange, and Cantor Fitzgerald, an interdealer-broker in the U.S. Treasury securities market. The New York Cotton Exchange is responsible for all of CFFE's self-regulatory responsibilities, and Cantor Fitzgerald provides the electronic trading system that CFFE uses to match and execute trades. Certain market participants, including FCMs and their approved customers, have direct keyboard access to the electronic trading system. Others must submit their orders to terminal operators, who are agents of the exchange but employees of Cantor Fitzgerald. Although CFFE is subject to generally

the same CFTC regulations as open-outcry exchanges, as with other CFTC-approved electronic trading systems, a number of regulations do not apply because of the lack of a physical trading floor. For example, CFTC's regulation on collecting physical trading records is not applicable to CFFE, because CFFE trade data are generated and recorded electronically.

In January 1997, FutureCom, a Texas limited partnership, applied to CFTC for designation as an electronic exchange for trading cattle futures and options over the Internet. Subsequently, it applied for designation as a contract market for technology stock index futures and options. If approved, FutureCom will be the first electronic futures exchange available over the Internet. In March 1998, CFTC stayed FutureCom's application, pending the receipt of additional information. CFTC has continued to work with FutureCom to resolve open issues.

Industry Views on Electronic Trading

Participants in the CFTC reauthorization roundtable generally agreed that electronic futures trading systems will likely replace open outcry, because they are potentially less costly, can be expanded more easily, and provide greater market access. Participants commented that U.S. exchanges need to expand their electronic trading systems to remain competitive. One participant noted that foreign futures exchanges have made more progress than U.S. exchanges in moving toward electronic trading and that the trend toward electronic trading has put competitive pressure on U.S. exchanges. One participant said that U.S. exchanges could probably remain competitive using open outcry for a few more years, because their higher costs are allocated among a high volume of trades. Other participants said that U.S. exchanges need to move much more quickly toward electronic trading to remain competitive. Finally, one participant commented that exchange members, not CFTC, have limited the progress of the U.S. exchanges in moving toward electronic trading.

Some roundtable participants opined that the evolution toward electronic trading could raise a number of regulatory issues. A former CFTC chairman said that his review of the CEA revealed 122 requirements—55 percent of which did not apply to electronic trading. Other participants commented that electronic trading could eventually lead to principal-to-principal trades, thereby eliminating the need for intermediaries. Such a possibility raises questions about who would need to be registered and what customer protections would be needed. They added that the elimination of intermediaries could call into question the meaning of an exchange membership and lead to changes in the ownership structure of exchanges.

The former CFTC chairman elaborated in a futures industry publication that without an intermediary, CFTC's principal antifraud provision, which applies only when an agent is used, would no longer protect most traders who deal directly with each other. He questioned the future of CFTC's customer protection programs when traders dealing directly with each other are no longer considered to be customers. Finally, he suggested that without either the traditional exchange structure and intermediaries, it may be feasible to rely on the same consumer protection laws that apply to other types of electronic commerce.

In March 1999, the CFTC chairperson testified that electronic trading systems might diminish certain regulatory concerns relating to trading abuses in open outcry trading. However, she noted that such systems raise other regulatory issues concerning system capacity and security, which are not applicable in an open outcry environment. Moreover, she added that the need for fitness standards for intermediaries and customer protection measures may become less important with the greater direct access associated with electronic trading. Finally, the chairperson said that CFTC has insufficient experience with electronic systems to identify all of the risks they currently pose.

At a March 1999 futures industry conference, participants cited the need for common rules and procedures to facilitate use of electronic systems, including rules related to trading, cross-margining, cross-exchange access, and resolving errors. The importance of preorder entry risk management controls was cited as a means to control traders that exceed trading limits. Establishing separate rules for retail and wholesale market participants transacting electronically was also suggested.

**Public Policy
Questions Raised by
Electronic Futures
Trading Systems**

Financial Integrity/Systemic Risk and Market Integrity/Efficiency:

1. What novel risks or other concerns do electronic trading systems raise; and which, if any, CEA provisions need to be amended to address them?
2. What principles should guide CFTC's regulatory treatment of foreign futures exchanges that operate electronic trading systems in the United States?

Appendix VII
Electronic Trading Systems

Consumer Protection:

3. To what extent have technological advances in electronic trading and related systems altered the nature of the relationship between customers and FCMs, including their rights and responsibilities?

International Regulatory Coordination

Use of CFTC Expanded Authority and Limits to Its Authority

The Futures Trading Practices Act of 1992 provided CFTC authority to protect confidential information received from foreign regulators and to conduct investigations on their behalf. These enhanced powers were intended to facilitate the signing of agreements between CFTC and foreign regulatory authorities. According to the International Organization of Securities Commissions, at the end of 1998, CFTC was a party to 36 of these information-sharing and coordination agreements. Two key agreements resulted from the 1995 collapse of Barings Plc. and the 1996 Sumitomo Corporation copper trading scandal. (See the glossary at the end of the report for definitions.)

The 1995 Barings collapse—precipitated by losses on unauthorized futures trades—led to the Windsor Declaration. The declaration proposed actions that regulators and exchanges should take to address weaknesses in international regulatory coordination and cooperation. In March 1996, 14 international futures regulators implemented the declaration by entering into a multilateral agreement, called the Boca Declaration. A companion memorandum of understanding was signed by 49 international futures exchanges and clearing organizations. Both the declaration and the memorandum of understanding authorized the signatories to share information on common members' or affiliates' financial resources or market exposure after certain triggering events occurred. To date, the declaration has been signed by 25 regulators and the memorandum of understanding by 65 exchanges and clearing organizations.

Trading by a Sumitomo employee in the United Kingdom, disclosed publicly in 1996, disrupted the U.S. and U.K. copper markets. As a result of this episode, in October 1997, CFTC and 16 foreign regulators signed the Tokyo Communiqué. This agreement established international standards for contract design, market surveillance, and information sharing in markets where physical delivery is made. The Sumitomo case also raised questions about the adequacy of CFTC authority to monitor and regulate delivery locations in the United States for contracts listed on foreign exchanges. The 1997 Senate bill (S. 257) to amend the CEA contained a provision that would have required CFTC to consult with foreign jurisdictions to obtain assurances that delivery locations specified in foreign futures contracts would not create the potential for price manipulation or any other disruption in U.S. markets.

CFTC's Additional Focus on International Concerns

In July 1997, CFTC created the Office of International Affairs to serve as the focal point for the agency's global regulatory coordination efforts. According to CFTC, the office was created so that the agency could respond quickly to market crises that have global systemic implications;

remain an effective supervisor in a global marketplace where no one regulator has all of the information or resources to regulate its markets or firms; and eliminate unnecessary impediments to global business, while preserving core protections for markets and customers.

In March 1998, CFTC established the Global Markets Advisory Committee, an industry forum for discussing issues raised by the globalization of the futures markets. Committee members include representatives of U.S. exchanges, futures firms, and market users most directly involved in and affected by global operations.

Industry Observations

Market observers have emphasized the need for CFTC to continue its efforts to coordinate with foreign regulators as the trend towards global electronic trading accelerates. Participants at a March 1999 futures industry conference also emphasized the importance of coordination to harmonize international trading and clearing rules and international bankruptcy laws. In the absence of a global clearinghouse, the need for standardized clearing software to reduce costs was suggested. One industry official expressed the view that a network of information sharing among global regulators was needed to address market abuse. Another industry official suggested that recent events affecting the futures markets suggest that financial integrity, clearing, and systemic risk are the most important international issues. (Also, see app. I on CFTC exemptive authority for OTC derivatives and app. VII on electronic trading systems.)

Public Policy Questions Related to International Regulatory Coordination

Financial Integrity/Systemic Risk:

1. What financial integrity/systemic risk issues, if any, are raised by differences in international regulations, and what steps are being taken to address them?
2. What changes, if any, are needed in CFTC's authority over U.S. delivery points for contracts listed on foreign futures exchanges?

Customer Protection:

3. What customer protection issues, if any, do differences in international regulations raise for U.S. market participants, and what steps are being taken to address them?

Legislative History of the Commodity Exchange Act

Grain Futures Act of 1922 (42 Stat. 998)

The Grain Futures Act of 1922 was enacted in response to speculative excesses and price manipulation on the grain exchanges during a period of declining commodity prices and a farming depression.¹ The regulatory framework established by the act relied primarily on exchange self-governance, subject to the Secretary of Agriculture's oversight. Among its major provisions, the 1922 act

- prohibited off-exchange trading of futures on an enumerated commodity (corn, wheat, oats, barley, rye, flax, and sorghum) if a futures contract on that enumerated commodity is traded on a board of trade designated as a contract market by the Secretary of Agriculture;
- imposed conditions for designation as a contract market, including requiring boards of trade to adopt rules for (1) disseminating market information, (2) preventing dissemination of false information, (3) preventing manipulations, and (4) maintaining records and providing reports;
- excluded contracts for deferred shipment or delivery—forwards—from regulation under the act;
- authorized the Secretary of Agriculture to investigate the operations of boards of trade;
- established a commission composed of the Secretary of Agriculture, Secretary of Commerce, and the Attorney General to (1) suspend a board of trade's designation as a contract market if the board failed to comply with or enforce conditions of designation; (2) review a denial of designation by the Secretary of Agriculture; and (3) suspend any person's trading privileges on the basis of evidence presented by the Secretary of Agriculture that the person violated the act, attempted a manipulation, or violated antimanipulation rules; and
- imposed criminal (misdemeanor) sanctions for off-exchange trading in the enumerated commodities and the dissemination of false information that could affect grain prices.

Commodity Exchange Act of 1936 (49 Stat. 1491)

The Commodity Exchange Act (CEA) of 1936 was passed after the grain price collapse of 1933—believed to be a result of continued market manipulation and the failure of a large brokerage house. The act provided for more extensive regulation of the markets and their participants. Among its major provisions, the 1936 act

¹ In 1921 Congress enacted the Futures Trading Act, which imposed a tax on grain futures transactions that were not consummated on an exchange designated as a contract market by the Secretary of Agriculture. The statute was held unconstitutional as an improper exercise of the taxing power provided in the Constitution. The Grain Futures Act of 1922 reenacted the statute's regulatory provisions, but omitted its unlawful taxing power provisions.

- added cotton, rice, mill feeds, butter, eggs, and Irish potatoes to the enumerated commodities subject to the act;
- expanded the prohibition against off-exchange trading to any futures contract on an enumerated commodity;
- prohibited options on the enumerated commodities;
- provided for the Secretary of Agriculture to (1) impose limits on speculative trading in futures or in the underlying commodity (speculative position limits) and (2) specify thresholds for the mandatory reporting of large positions in futures or in the underlying commodity (large trader reporting);
- specifically outlawed fraudulent conduct in connection with futures trades by members of contract markets and certain affiliated persons; prohibited specific forms of sham trading and any transaction used to cause an artificial price; and required registration of futures commission merchants (FCM) and floor brokers;
- authorized the Secretary of Agriculture to suspend the trading privileges of any person who violated the act or related regulations and to suspend or revoke the registrations of FCMs and floor brokers;
- expanded the activities subject to criminal (misdemeanor) sanctions to include fraud, manipulation, off-exchange trading, and violations of speculative trading limits and registration requirements;
- designated the commission established under the Grain Futures Act as the Commodity Exchange Commission and authorized it to (1) establish and enforce the speculative trading limits and (2) issue a cease and desist order (rather than withdrawal of designation) to contract markets that violated the act or related rules and regulations; and
- changed the name of the Grain Futures Act of 1922 to the “Commodity Exchange Act.”

Amendments to the CEA Between 1936 and 1968

In 1938, wool tops were added to the commodities subject to the act; and in 1940, fats and oils, cottonseed, cottonseed meal, peanuts, soybeans, and soybean meal were added. Wool (as distinguished from wool tops) was added in 1954, and the act was made applicable to onions in 1955. In 1958, the act was amended to prohibit futures trading in onions but did not remove onions from the list of commodities covered by the act.

1968 Amendments to the CEA (Pub. L. No. 90-258)

As the futures markets grew, additional measures were considered necessary to protect the public interest and enhance regulatory effectiveness. Among their major provisions, the 1968 amendments

- expanded the prohibition against fraudulent conduct to apply to any person acting in connection with an exchange-traded futures contract;

-
- required FCMs to satisfy minimum net financial requirements pursuant to regulations of the Secretary of Agriculture or rules of a designated contract market;
 - enhanced enforcement under the act by (1) requiring registrants (FCMs and floor brokers) to make required reports and maintain and grant access to books and records, (2) requiring designated contract markets to enforce their bylaws and rules related to the terms and conditions of futures contracts and member FCM minimum financial standards, (3) authorizing the Commodity Exchange Commission to suspend the designation of a board of trade that failed to enforce its rules, (4) authorizing the Secretary of Agriculture to use cease and desist orders, and (5) increasing criminal penalties (from misdemeanor to felony) for defalcation of customer funds and manipulation and distribution of false information to affect commodity prices; and
 - added livestock, livestock products, and frozen concentrated orange juice to the commodities enumerated for regulation under the act.

Commodity Futures Trading Commission Act of 1974 (Pub. L. No. 93-463)

After the enactment of the 1968 amendments to the CEA, the federal government stopped using stockpiles of commodities to stabilize prices, thereby allowing prices to fluctuate freely on the basis of market supply and demand factors. The greater price volatility brought commercials into the market who sought to protect themselves from the risks associated with wide price swings as well as the general public, including speculators, who hoped to profit from them. As a result, the futures market began to play an increasingly important role in the pricing of the nation's commodities. In passing the Commodity Futures Trading Commission (CFTC) Act of 1974, Congress concluded that the economic significance of futures trading had reached a level that warranted expanding the scope of regulation to cover unregulated commodities as well as creating an independent agency to regulate the market. Among its major provisions, the 1974 act

- expanded CEA coverage from the statutory list of enumerated physical commodities to include futures contracts on all goods, articles (except onions), services, and rights and interests, thereby defining the term commodity to include anything on which a contract is traded (except onions);
- created an independent regulatory agency, CFTC, and provided it with, among other things,

- exclusive jurisdiction over all transactions involving futures contracts, options,² and leverage transactions on gold and silver bullions and coins;
- enhanced enforcement and oversight powers, including authority to impose civil money penalties for certain violations;
- reparations authority; and
- authority to order exchanges to act in a market emergency;
- included the Treasury Amendment, which excluded certain transactions from coverage under the act, including transactions involving foreign currencies and U.S. government securities;³
- created three new classes of registrants—(1) commodity trading advisors, (2) commodity pool operators, and (3) associated persons of FCMs;
- provided for the creation and registration of registered futures associations to enhance industry self-regulation and facilitate increased public and commercial participation in the futures markets;
- increased criminal penalties for violations of the antifraud, antimanipulation, and certain other provisions of the act; and
- authorized appropriations for fiscal years 1975 through 1978.

Futures Trading Act of 1978 (Pub. L. No. 95-405)

During hearings on the Futures Trading Act of 1978, CFTC was criticized for ineffective management and failure to fully implement the 1974 act. Transferring some or all of CFTC's functions to the U.S. Department of Agriculture, Department of the Treasury, the Securities and Exchange Commission (SEC), or any combination of these agencies was discussed, but related action was not taken. Among its major provisions, the 1978 act

- required CFTC to consult with the Department of the Treasury, the Board of Governors of the Federal Reserve System, and SEC about (1) CFTC activities that relate to the responsibilities of these agencies; and (2) the relationships among futures trading, securities, and other financial instruments;
- provided CFTC authority to develop a user-fee system to offset the costs of regulation;
- authorized states to bring judicial actions against persons other than contract markets, clearinghouses, and floor brokers to enforce the CEA or CFTC regulations;
- increased criminal penalties for certain violations;
- imposed restrictions on options trading until CFTC reported to Congress on its ability to regulate such trading;

² The 1974 amendments preserved the prohibition on options on commodities listed in the act before the 1974 amendments—the enumerated commodities.

³ The amendment clarified that the CEA did not prohibit off-exchange trading in foreign currencies and certain other financial instruments.

-
- authorized CFTC to prohibit or regulate leverage transactions in non-agricultural commodities; and
 - authorized appropriations for fiscal years 1979 through 1982.

Futures Trading Act of 1982 (Pub. L. No. 97-444)

The Futures Trading Act of 1982 addressed issues arising from the continued expansion of the financial futures markets and increased commercial and public participation in the futures markets, including the silver market crisis of 1979 and 1980. Among its major provisions, the 1982 act

- codified the Shad-Johnson Jurisdictional Accord, a 1981 agreement between CFTC and SEC that clarified their jurisdictions with respect to securities-related instruments by
 - granting CFTC exclusive jurisdiction over futures on a group or an index of securities as well as options on such futures, subject to certain conditions, including (1) cash settlement or some other means of settlement not calling for transfer of a covered security, (2) adequate antimanipulation safeguards, and (3) a general prohibition on over concentration of a covered index or group of securities;⁴
 - excluding from CFTC jurisdiction options on any security or group or index of securities;⁵ and
 - prohibiting futures contracts on individual securities that are subject to SEC regulatory oversight;
- removed the ban on options on the enumerated commodities and authorized CFTC to establish a pilot program for trading such options;
- established a 1 year time limit for CFTC decisions on applications for contract market designation;
- provided for judicial review of a CFTC determination that a market emergency exists;
- required CFTC to regulate leverage transactions in nonagricultural commodities, subject to a public interest consideration;
- enhanced CFTC registration authority and provided for statutory disqualification;
- authorized registered futures associations to perform CFTC registration functions and required them to establish CFTC-approved member standards for training, solicitations, and financial integrity;
- authorized the states to enforce CEA antifraud provisions in state courts against all registrants, except floor brokers and registered futures

⁴ These contracts were also subject to initial SEC review for compliance with the three requirements listed in the text.

⁵ Separate legislation granted SEC jurisdiction over these instruments.

associations, and provided for state regulation of off-exchange instruments;

- ordered federal financial regulators (the Federal Reserve, CFTC, and SEC, with assistance from the Department of the Treasury) to study the effects of trading futures and options on the U.S. economy;
- authorized private rights of action against most registrants for violation of the act; and
- authorized CFTC appropriations through fiscal year 1986.

Futures Trading Act of 1986 (Pub. L. No. 99-641)

Among its major provisions, the Futures Trading Act of 1986

- enhanced CFTC enforcement powers by (1) clarifying that CEA antifraud provisions apply to off-exchange instruments and not just exchange-traded instruments and (2) authorizing extraterritorial service of administrative subpoenas;
- removed pilot status from exchange-traded agricultural options and authorized permanent, general regulation of such options by CFTC;
- prohibited leverage transactions in commodities other than silver, gold, and platinum and required CFTC to coordinate a study of leverage transactions; and
- authorized appropriations through fiscal year 1989.

Futures Trading Practices Act of 1992 (Pub. L. No. 102-546)

By authorizing CFTC to grant exemptions from most provisions of the CEA, the Futures Trading Act of 1992 provided a means of alleviating (1) the legal uncertainty for the multitrillion-dollar over-the-counter derivatives market and (2) the regulatory burden on futures exchanges. The act also addressed trade practice, recordkeeping, and corporate governance issues that surfaced in 1989 as a result of (1) Federal Bureau of Investigation undercover sting operations at selected futures exchanges and (2) the declaration of an emergency in the soybean market. In addition, the act addressed concerns that surfaced during the market crash of 1987 about the need for greater international cooperation and coordination and for more information on material affiliated persons—those entities with a relationship to an FCM such that their business activities were reasonably likely to have a material impact on the financial and operational condition of the FCM. Among its major provisions, the 1992 act

- authorized CFTC to exempt any contract from almost all provisions of the CEA, including the exchange-trading requirement;
- established stringent exchange audit trail requirements;
- established trading restrictions and disclosure requirements for associated floor brokers;

- required registered futures associations and boards of trade to provide for fair representation of interests in self-governance and disciplinary proceedings and public disclosure of major violations of pertinent rules;
- required exchanges to adopt conflict-of-interest rules;
- required registered futures associations to establish supervisory guidelines to curb telemarketing fraud;
- granted oversight authority for setting margins on stock-index futures and options thereon to the Federal Reserve;
- enhanced registration fitness and disqualification criteria, strengthened enforcement powers and sanctions, increased criminal penalties for certain violations of the act, and added criminal sanctions for insider trading;
- directed CFTC to facilitate the development and operation of computerized trading as an adjunct to open outcry;
- required ethics training for registrants;
- required CFTC to study the effects of CFTC-imposed penalties, the competitiveness of domestic boards of trade with foreign boards of trade, and the potential for computerized trading;
- encouraged CFTC cooperation with and participation in actions by foreign futures authorities;
- authorized CFTC to collect information from FCMs about the activities and financial condition of material affiliated persons for use in assessing the risks that they pose to the FCM;
- prohibited insider trading by self-regulatory organization employees or officials; and
- authorized appropriations through fiscal year 1994.

CFTC Reauthorization Act of 1995 (Pub. L. No. 104-9)

The CFTC Reauthorization Act of 1995 authorized appropriations through fiscal year 2000.

Omnibus Appropriations Act of 1998 (Pub. No. 105-277)

In response to concerns of Congress, federal financial market regulators, and market participants that CFTC intended to propose or issue new regulations covering swaps and hybrid financial instruments, the Omnibus Appropriations Act of 1998 prohibited CFTC from taking such action until March 31, 1999.

Participants at CFTC Reauthorization Roundtable Discussion Held in Washington, D.C., on February 25 and 26, 1999

Moderators

Philip McBride Johnson—Skadden, Arps, Slate, Meagher & Flom LLP

Robert K. Wilmouth—National Futures Association

Panelists

John C. Coffee, Jr.—Columbia University School of Law

George E. Crapple—Millburn Ridgefield Corp.

David G. Downey—Timber Hill LLC

Gerald Gulke—Strategic Marketing Services, Inc.

Robert W. Kohlmeier—World Perspectives, Inc.

Howard Kramer—Schiff, Hardin & Waite

Robert J. Mackay—National Economic Research Associates, Inc.

Leo Melamed—Sakura Dellsher, Inc.

Merton H. Miller—University of Chicago

Ernest Patrikis—American International Group

Todd E. Petzel—The Common Fund

David M. Pryde—J.P. Morgan Futures, Inc.

Thomas A. Russo—Lehman Brothers Inc.

Richard L. Sandor—Environmental Financial Products

Charles W. Smithson—CIBC World Markets

Steven Spence—Merrill Lynch & Company

John A. Wing—Illinois Institute of Technology

Note: The roundtable is also referred to as the “House and Senate Agriculture Committees’ Futures, Derivatives, and Public Policy Roundtable.”

Major Contributors to This Report

General Government Division, Washington, D.C.	Richard J. Hillman, Associate Director
---	--

Chicago Field Office	Cecile O. Trop, Assistant Director Roger E. Kolar, Senior Evaluator Richard S. Tshara, Senior Evaluator Angela Pun, Evaluator
----------------------	--

Office of the General Counsel	Paul G. Thompson, Senior Attorney
----------------------------------	-----------------------------------

Glossary

Agricultural trade option merchants	Agricultural trade option merchants are eligible vendors under the Commodity Futures Trading Commission (CFTC) agricultural trade option pilot program for off-exchange trade options on commodities enumerated in the Commodity Exchange Act (CEA). Eligible vendors are entities that handle the commodity in normal cash market channels. They are required to register with the National Futures Association, report transactions to CFTC, provide customers with disclosure statements, keep books and records, and safeguard customers' premiums.
Associated person	An associated person is a person associated with any futures commission merchant, introducing broker, commodity trading advisor, commodity pool operator, or leverage transaction merchant as a partner, officer, employee, consultant, or agent, or any person occupying a similar status or performing similar functions, in any capacity that involves (1) the solicitation or acceptance of customer orders, discretionary accounts, or participation in a commodity pool (other than in a clerical capacity); or (2) the supervision of any person or persons so engaged.
Audit trails	Audit trails are the records of the price and time of each trade; they generally consist of customer order tickets and timestamps, trading cards, trade execution times, and exchange records of price changes.
Bank for International Settlements	The Bank for International Settlements was established in 1930 in Basle, Switzerland, by six Western European central banks and a U.S. financial institution. One of its functions is to provide a forum for cooperative efforts by the central banks of major industrial countries.
Basis	Basis is the difference between the current cash price of a commodity and the futures price of the same commodity.
Board of trade	A board of trade is any exchange or association, whether incorporated or unincorporated, of persons who are engaged in the business of buying or selling any commodity or receiving the same for sale on consignment.
Brent oil energy contracts	Brent oil energy contracts are over-the-counter (OTC) transactions for the future purchase or sale of Brent crude oil, which is a blend of oils produced in various fields in the North Sea and delivered through pipelines for loading on cargo ships at Sullem Voe in Scotland.
Call option	Call option (See option.)

Glossary

Cantor Financial Futures Exchange	Cantor Financial Futures Exchange is an electronic exchange jointly operated by the New York Cotton Exchange, a CFTC-designated exchange, and Cantor Fitzgerald, an interdealer-broker in the U.S. Treasury securities market. The New York Cotton Exchange is responsible for self-regulatory responsibilities, and Cantor Fitzgerald provides the electronic trading system that the Cantor Financial Futures Exchange uses to match and execute trades.
Capital requirements	Capital requirements are requirements, regulatory or self-imposed, to hold a specific amount of capital to cushion against potential losses.
Clearance	Clearance is the process of capturing the trade data, comparing buyer and seller versions of the data, and—in traditional exchange-style clearing—guaranteeing that the trade will settle once the data are matched.
Clearinghouse	A clearinghouse is responsible for the daily clearance and settlement of trades.
Commercials	Commercials (buyers/sellers) are entities involved in the production, processing, or merchandising of a commodity.
Commodities	Commodities, as defined in the CEA, are all agricultural goods listed in the act; and all other goods and articles, except onions; and all services, rights, and interests in which contracts for future delivery are presently or in the future dealt in.
Commodity pool operators	Commodity pool operators are individuals or firms in businesses similar to investment trusts or syndicates that solicit or accept funds, securities, or property for the purpose of trading futures or commodity options.
Commodity trading advisors	Commodity trading advisors are individuals or firms that, for pay, issue analyses or reports concerning commodities, including the advisability of trading futures or commodity options.
Contract markets	Contract markets are boards of trade or exchanges designated by CFTC to trade specified futures or options under the CEA.
Credit risk	Credit risk is the risk of counterparty default.
Dealers	Dealers are typically banks and other financial institutions that stand ready to buy and sell OTC derivatives, providing both a bid and offer price to the market.

Glossary

Derivatives	Derivatives are contracts that have a market value determined by the value of an underlying asset, reference rate, or index (called the underlying). Underlyings include stocks, bonds, agricultural and other physical commodities, interest rates, foreign currency rates, and stock indexes.
Enumerated commodities	Enumerated commodities are specifically identified in the CEA as being regulated under the act. These include wheat, cotton, rice, corn, oats, barley, rye, flaxseed, grain sorghums, mill feeds, butter, and eggs.
Equity swap	A swap whose return is based on the price of a stock or stock index. (See securities-based swap.)
Exercise of an option	Exercise of an option is to elect, if a call option, to purchase the underlying commodity or financial asset at the option exercise (strike) price or, if a put option, to sell the underlying commodity or financial asset at the option exercise (strike) price.
Exercise (strike) price	Exercise (strike) price is the price specified in the option contract at which the buyer of a call option can purchase the underlying commodity or financial asset during the life of the option, and the price specified in the option contract at which the buyer of a put option can sell the underlying commodity or financial asset during the life of the option.
Federal Housing Administration	The Federal Housing Administration is a wholly owned government corporation, established under the National Housing Act of 1934, to improve housing standards and conditions; to provide an adequate home financing system through insurance of mortgages; and to stabilize the mortgage market. The Federal Housing Administration was consolidated into the newly established Department of Housing and Urban Development in 1965.
Floor brokers	Floor brokers execute trades for customers and may also execute trades for their personal or employer accounts in any pit, ring, post, or other place provided by a contract market for the meeting of persons similarly engaged.
Floor traders	Floor traders (also called locals) execute trades for their own accounts in any pit, ring, post, or other place provided by a contract market for the meeting of persons similarly engaged.
Forward contracts	Forward contracts, according to CFTC, are privately negotiated cash transactions in which commercial buyers and sellers agree upon the delivery of a specified quantity and quality of goods at a specified future

Glossary

	date. A price may be agreed upon in advance or determined at the time of delivery. Delivery is typically expected, although it may not occur.
Futures commission merchants	Futures commission merchants are individuals, corporations, associations, partnerships, and trusts that solicit or accept orders to buy or sell futures contracts and accept payment from or extend credit to those whose orders are accepted.
Futures contracts	Futures contracts are agreements that obligate the holder to buy or sell a specific amount or value of an underlying asset, reference rate, or index at a specified price on a specified date. These contracts may be satisfied by delivery or offset.
Globex	Globex is an electronic trading system developed by the Chicago Mercantile Exchange that allows exchange members to trade futures and options products.
Government National Mortgage Association	The Government National Mortgage Association (also known as GNMA or Ginnie Mae) is a government agency within the Department of Housing and Urban Development that, among other things, guarantees payment on mortgage-backed certificates.
Government National Mortgage Association pass-through mortgage-backed certificates	Government National Mortgage Association pass-through mortgage-backed certificates are backed by pools of Federal Housing Administration-insured and/or Veterans Administration-guaranteed residential mortgages, with the mortgage and note held in safekeeping by a custodial financial institution. The certificates are guaranteed by the Government National Mortgage Association (also known as GNMA or Ginnie Mae).
Hedge	Hedge is to protect against adverse changes in the value of assets or liabilities.
Hedge fund	Hedge fund is a term that is commonly used to describe private investment vehicles that engage in active trading of various types of securities and commodities, employing investment techniques, such as arbitrage, leveraging, and hedging.
Hedge-to-arrive contracts	Hedge-to-arrive contracts are OTC transactions in agricultural commodities in which the basis, which makes up part of the contract price, is not set at the time that the parties enter into the contract.

Glossary

Hybrids	Hybrids are financial instruments that possess, in varying combinations, characteristics of forwards, futures, options, securities, and/or bank deposits.
Interbank market	The interbank market is an informal network of banks and dealers that serves the needs of international business to hedge risk stemming from foreign exchange rate movements. It includes not only banks but also other financial institutions and industrial corporations.
Index participations	Index participations were contracts introduced by certain securities exchanges in 1989 to allow investors to buy a portfolio position in an index of stocks without buying the individual stocks. The contracts stopped trading when a federal court ruled that these were futures contracts and thus could be offered only on CFTC-regulated futures exchanges.
International Organization of Securities Commissions	The International Organization of Securities Commissions includes securities administrators from over 60 countries and facilitates efforts to coordinate international securities regulation.
International Swaps and Derivatives Association	The International Swaps and Derivatives Association is a trade association that represents more than 150 financial institutions worldwide. Its members include investment, commercial, and merchant banks that deal in OTC derivatives contracts.
Introducing broker	An introducing broker is any person (other than a person registered as an associated person of a futures commission merchant) who is engaged in soliciting or accepting orders for the purchase or sale of any commodity for future delivery on an exchange who does not accept any money, securities, or property to margin, guarantee, or secure any trades or contracts that result therefrom.
Large trader reporting	Large trader reporting is required when a trader holds or controls a position in any one future or in any one option expiration series of a commodity on any one contract market equaling or exceeding the exchange or CFTC-specified reporting level.
Legal risk	Legal risk is the possibility of financial loss resulting from an action by a court, regulatory authority, or legislative body that invalidates a contract.
Leverage contract or transaction	A leverage contract or transaction is a standardized OTC agreement for the delivery of a commodity with payments on the contract spread out over a period of time.

Glossary

Leverage transaction merchant	A leverage transaction merchant is any individual, association, partnership, corporation, or trust that is engaged in the business of offering to enter into, entering into, or confirming the execution of leverage contracts, or soliciting or accepting orders for leverage contracts, and who accepts leverage customer funds or extends credit in lieu of those funds.
Liquidity	Liquidity is the extent to which market participants can buy and sell contracts in a timely manner without changing the market price.
Locals	Locals (See floor traders.)
Long	Long is one who has bought a futures contract to establish a market position; a market position that obligates the holder to take delivery; or one who owns an inventory of commodities. (See short.)
Margins	Margins, in the futures markets, are the cash or collateral deposited by market participants with their futures commission merchants for the purpose of protecting the futures commission merchants and, ultimately, clearinghouses against loss on open exchange-traded futures contracts.
Market risk	Market risk, also called price risk, is the exposure to the possibility of financial loss caused by adverse changes in the value of assets or liabilities.
Manipulation	Manipulation is the distortion of market prices for economic gain. The distortion typically involves creating artificial prices that do not reflect supply and demand conditions, or creating a false picture of supply and demand conditions to cause a desired price movement and/or reaction by other market participants.
Material affiliated persons	Material affiliated persons have a relationship to another entity such that their business activities are reasonably likely to have a material impact on the financial and operational condition of that entity.
Multilateral transaction execution facility	A multilateral execution facility is a physical or electronic facility in which all market participants that are members simultaneously have the ability to execute transactions and bind both parties by accepting offers, which are made by one member and open to all members of the facility.
National Futures Association	The National Futures Association is a self-regulatory organization that is responsible, under CFTC oversight, for qualifying commodity futures professionals and for regulating the sales practices, business conduct, and financial condition of its member firms.

Glossary

No-action letters	No-action letters are issued by CFTC staff to indicate that they will not recommend enforcement action for violation of law or regulation if certain conditions are met. These letters do not reflect official Commission views.
Nonenumerated commodities	Nonenumerated commodities are all commodities meeting the definition of a commodity under the CEA but not specifically listed in the act.
Notional amount	The notional amount is the amount upon which payments between parties to certain types of derivatives contracts are based. When this amount is not exchanged, it is not a measure of the amount at risk in a transaction.
NYMEX ACCESS	NYMEX ACCESS is an electronic trading system developed by the New York Mercantile Exchange that allows market participants to trade the exchange's futures and options products.
Offset for exchange-traded futures contracts	Offset for exchange-traded futures contracts is the liquidation of a long (short) futures position through the sale (purchase) of an equal number of contracts of the same delivery month.
Offset for OTC derivatives contracts	Offset for OTC derivatives contracts occurs when a market participant enters into another contract with equal but opposite terms.
Open outcry	Open outcry is a method of public auction under which futures are traded by floor participants who verbally or through hand signals make bids and offers to each other at centralized exchange locations.
Option contracts	Option contracts (American style) give the purchaser the right, but not the obligation, to buy (call option) or sell (put option) a specified quantity of the underlying commodity or financial asset at a specified price (the exercise or strike price) on or before a specified future date. For this right, the purchaser pays the seller (writer) an amount called the option premium. The seller of the option has the obligation to sell (call) or buy (put) the commodity or financial asset at the exercise price if the option is exercised. A European-style option can be exercised only on its expiration date.
Option premium	Option premium (See option.)
Over-the-counter contracts	Over-the-counter contracts are privately negotiated, off of an exchange.
Position	Position is an interest in the market, either long or short, in the form of one or more open contracts.

Glossary

Position limit	A position limit is the maximum position, either net long or net short, in one commodity future (or option) or in all futures (or options) of one commodity combined that may be held or controlled by one person as prescribed by an exchange and/or by CFTC.
President's Working Group on the Financial Markets	The President's Working Group on the Financial Markets was created following the October 1987 market crash to address issues concerning the competitiveness, integrity, and efficiency of the financial markets. The Secretary of the Treasury chairs the Working Group, and other members include the chairs of CFTC, the Federal Reserve System, and SEC.
Price discovery	Price discovery is the process of determining price on the basis of supply and demand factors.
Price risk	Price risk (See market risk.)
Project A	Project A is an electronic trading system developed by the Chicago Board of Trade that allows market participants to trade the exchange's financial futures and options products.
Put option	Put option (See option.)
Reparations	Reparations is compensation payable to a wronged party in a futures or options transaction under CFTC's customer claims procedure for recovery of civil damages.
Risk shifting	Risk shifting is the transference of risk arising from price or rate movements from entities less willing or able to manage it to those more willing or able to do so.
Securities-based swap	A swap whose return is based on the price of a security or securities index. (See swap.)
Segregation of customer funds	Segregation of customer funds is to separate customer assets from those of the broker or firm (including the futures commission merchant and clearing organization) and is required by the CEA.
Self-regulatory organizations	Self-regulatory organizations are private membership organizations given the power and responsibility under federal law and regulations to adopt and enforce rules of member conduct. They play an extensive role in the regulation of the U.S. futures and securities industries and include all of the U.S. futures and securities exchanges, the National Futures

Glossary

	Association, the National Association of Securities Dealers, and the Municipal Securities Rulemaking Board.
Settlement	Settlement is the process of fulfilling contractual requirements through cash payment or delivery.
Short	Short is the selling side of an open futures contract, or a trader whose net position in the futures market shows an excess of open sales over open purchases. (See long.)
Speculation	Speculation is to assume risk in attempting to profit from anticipating changes in market rates or prices.
Speculative position limits	Speculative position limits (See position limits.)
Stock indexes	Stock indexes are used to measure and report value changes in representative stock groupings.
Strike price	Strike price (See exercise price.)
Swaps	Swaps are privately negotiated contracts that typically require counterparties to make periodic payments to each other for a specified period. The calculation of these payments is based on an agreed-upon amount, called the notional amount, that is typically not exchanged.
Systemic risk	Systemic risk is the risk that a disruption—at a firm, in a market, or from another source—will cause difficulties at other firms, in other market segments, or in the financial system as a whole.
Trade options	Trade options are off-exchange commodity options offered or sold to commercial users of the underlying commodity solely for purposes related to their business.
Transparency	Transparency is the extent to which information about prices, trading volume, and trades is available to the public.
Underlyings	Underlyings (See derivatives.)
U.S. Securities Market Coalition	The U.S. Securities Market Coalition includes the American Stock Exchange, Boston Stock Exchange, Chicago Board Options Exchange, Chicago Stock Exchange, Cincinnati Stock Exchange, NASDAQ Stock Market, National Securities Clearing Corporation, New York Stock

Glossary

Exchange, Pacific Exchange, Philadelphia Stock Exchange, and Options Clearing Corporation.

Volatility

Volatility is a characteristic of a security, commodity, or market to rise and/or fall sharply in price within a short time period.

Related GAO Products

OTC Derivatives: Additional Oversight Could Reduce Costly Sales Practice Disputes (GAO/GGD-98-5, Oct. 2, 1997).

The Commodity Exchange Act: Legal and Regulatory Issues Remain (GAO/GGD-97-50, Apr. 7, 1997).

Regulatory Burden: Measurement Challenges and Concerns Raised by Selected Companies (GAO/GGD-92-2, Nov. 18, 1996).

Financial Derivatives: Actions Taken or Proposed Since May 1994 (GAO/GGD/AIMD-97-8, Nov. 1, 1996).

Financial Market Regulation: Benefits and Risks of Merging SEC and CFTC (GAO/GGD-95-153, May 3, 1995).

Financial Derivatives: Actions Needed to Protect the Financial System (GAO/GGD-94-133, May 18, 1994).

Regulatory Burden: Recent Studies, Industry Issues, and Agency Initiatives (GAO/GGD-94-28, Dec. 13, 1993).

Ordering Information

The first copy of each GAO report and testimony is free. Additional copies are \$2 each. Orders should be sent to the following address, accompanied by a check or money order made out to the Superintendent of Documents, when necessary. VISA and MasterCard credit cards are accepted, also. Orders for 100 or more copies to be mailed to a single address are discounted 25 percent.

Order by mail:

**U.S. General Accounting Office
P.O. Box 37050
Washington, DC 20013**

or visit:

**Room 1100
700 4th St. NW (corner of 4th and G Sts. NW)
U.S. General Accounting Office
Washington, DC**

Orders may also be placed by calling (202) 512-6000 or by using fax number (202) 512-6061, or TDD (202) 512-2537.

Each day, GAO issues a list of newly available reports and testimony. To receive facsimile copies of the daily list or any list from the past 30 days, please call (202) 512-6000 using a touch-tone phone. A recorded menu will provide information on how to obtain these lists.

For information on how to access GAO reports on the INTERNET, send e-mail message with "info" in the body to:

info@www.gao.gov

or visit GAO's World Wide Web Home Page at:

<http://www.gao.gov>

**United States
General Accounting Office
Washington, D.C. 20548-0001**

**Bulk Rate
Postage & Fees Paid
GAO
Permit No. G100**

**Official Business
Penalty for Private Use \$300**

Address Correction Requested

