Chicago-Kent Law Review

Volume 71
Issue 4 Symposium on Derivative Financial Products

Article 4

June 1996

The CFTC Net Capital Rule - Should a More Risk-Based Approach Be Adopted

Jerry W. Markham

Follow this and additional works at: https://scholarship.kentlaw.iit.edu/cklawreview

Part of the Law Commons

Recommended Citation

Jerry W. Markham, The CFTC Net Capital Rule - Should a More Risk-Based Approach Be Adopted, 71 Chi.-Kent L. Rev. 1091 (1996).
Available at: https://scholarship.kentlaw.iit.edu/cklawreview/vol71/iss4/4

This Article is brought to you for free and open access by Scholarly Commons @ IIT Chicago-Kent College of Law. It has been accepted for inclusion in Chicago-Kent Law Review by an authorized editor of Scholarly Commons @ IIT Chicago-Kent College of Law. For more information, please contact dginsberg@kentlaw.iit.edu.
THE CFTC NET CAPITAL RULE—SHOULD A MORE RISK-BASED APPROACH BE ADOPTED?

JERRY W. MARKHAM*

The leverage available from futures contracts and the price volatility of the commodities underlying such contracts may cause large losses and quickly threaten the financial viability of a futures commission merchant. The insolvency of a futures commission merchant in turn raises a concern that customer funds may be endangered. That concern is heightened by the fact that there is no federal insurance available to protect the customers of a futures commission merchant.

In lieu of such protection, the futures industry uses margin requirements to limit the accumulation of trading losses. The Commodity Futures Trading Commission ("CFTC") also imposes certain regulatory requirements that are designed to protect customer funds held by futures commission merchants. One part of the CFTC's regulatory structure is a requirement that futures commission merchants maintain a minimum amount of net capital in order to remain in business. The CFTC's net capital rule is, however, only indirectly related to the market risks encountered by futures commission merchants.

* Professor of Law, University of North Carolina at Chapel Hill.

1. A futures commission merchant is a broker that solicits customer orders and accepts customer funds or monies in connection with the purchase and sale of commodity futures contracts. See Commodity Exchange Act, 7 U.S.C. § 1a(12) (1994). These entities are the futures industry analogue to the broker-dealer in the securities industry. A futures commission merchant must register with the Commodity Futures Trading Commission ("CFTC") under the Commodity Exchange Act. See id. § 6d.


In 1974, Congress directed the CFTC to study whether federal account insurance was needed for customer accounts held with futures commission merchants. The CFTC concluded that such insurance was not needed because the failure rate for futures commission merchants was very low. See Report to the Congress Concerning Commodity Futures Account Insurance, [1975-1977 Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶ 20,235 (Nov. 1, 1976).

3. See 17 C.F.R. § 1.17(a)(1)(i)(A) (1996). Introducing brokers are also subject to net capital requirements, albeit lesser ones than those imposed on futures commission merchants. See id. § 1.17(a)(1)(ii)(A). For ease of reference, this Article will focus on the net capital requirements imposed on futures commission merchants. The discussion, nevertheless, remains equally applicable to introducing brokers.
The CFTC's net capital rule is also flawed in several respects, and may actually reduce customer protection in some circumstances.\(^4\)

The large losses experienced by firms dealing in over-the-counter derivatives has further focused attention on the need for a more risk-based net capital rule when a firm is exposed to large market risks by leveraged instruments.\(^5\) This Article will examine the CFTC's present net capital rule, discuss its deficiencies, and propose an alternative risk-based methodology.

**Margin Requirements**

The foremost protection against defaults, and for maintaining the financial integrity of the futures markets, is the margin system established by the futures exchanges. Under this system, a futures commission merchant is liable to the exchange's clearinghouse in the event of a customer default.\(^6\) To guard against the failure of the futures commission merchant, the exchanges require a good faith deposit of money at the time a futures transaction is initiated ("initial margin") and recognition of daily losses through "variation" margin calls.\(^7\)

The initial margin requirement assures a cushion of liquid funds to assure performance and to cover the losses that the exchanges predict may occur from the position in a given period of time. This is a risk-based analysis of the funds needed initially to secure the position. Even more importantly, variation margin calls require prompt loss recognition and the commitment of additional liquid funds to assure that losses are recognized immediately. There is very little delay in this loss recognition—additional funds can be demanded under exchange rules on as little as one hour's notice.

---

4. See discussion infra pp. 1103-04.
6. This liability runs first to futures commission merchants that are "clearing" members of an exchange. Other futures commission merchants clear through a clearing member and are liable to their clearing member for defaults by their customers. See generally, Peltz v. SHB Commodities, Inc., [1987-1990 Transfer Binder] Comm. Fut. L. Rep (CCH) ¶ 24,810 (S.D.N.Y. April 10, 1990).
7. Unlike margin requirements imposed in the securities industry, margin for futures contracts is not a limitation on credit. Margin for futures contracts is designed simply to assure payment of the obligations that may result from trading futures. See Jerry W. Markham, Federal Regulation of Margin in the Commodity Futures Industry—History and Theory, 64 TEMP. L. REV. 59, 63 (1991).

Initial market requirements for futures contracts are often only a small percentage of the notional value of the futures contracts. Nevertheless, customers must supply additional "variation" margin promptly when futures prices move adversely. See THOMAS A. HIERONYMUS, ECONOMICS OF FUTURES TRADING 64-65 (2d ed. 1977).
Exchange margin requirements guard against the danger that a futures commission merchant will allow customers to avoid recognition of their losses in the hope that the market will recover. This system is remarkably effective. Although low margins required by the futures industry have been criticized as encouraging speculation and price volatility, the failure rate for futures commission merchants is very low. Customer losses have only infrequently endangered the futures markets. In fact, since the 1970s, no member of a major commodity futures exchange has experienced a failure that resulted in a loss of customer funds.

The CFTC does not directly regulate exchange-set margin requirements. Rather, the CFTC has several back-up tiers of regulatory protection. One such tier is the CFTC's requirement that customer funds be maintained in segregated accounts. This means that customer funds must be segregated from the funds of the futures customer merchant. These segregated accounts are then treated in a manner similar to trust accounts. Customers are given priority with respect to funds in the segregated accounts in the event of bankruptcy.

The imposition of margin requirements and the segregation of customer funds should, in theory, provide full protection to customers.


9. See Report to the Congress, supra note 2.

10. This is not to suggest that their have not been any threats to the system. The so-called "Hunt Silver Crisis" in 1980 threatened the existence of one large brokerage firm and threatened others with large losses. See Report of the Staff of the Securities and Exchange Commission, The Silver Crisis of 1980 (1982). The Stock Market Crash of 1987 also caused grave concerns when billions of dollars of margin calls had to be met on short notice. See S. Rep. No. 300, at 27-28 (1990).

11. See Chicago Board of Trade, Discussion of Risk-Based Capital (Sept. 13, 1995) (on file with author). Nevertheless, there have been losses by smaller futures commission merchants. See infra p. 1102 and note 53.

12. The CFTC does not have the authority to change most exchange-set margins, except in an emergency. See Commodity Exchange Act, 7 U.S.C. § 7a(12) (1994). After the Stock Market Crash of 1987, the Federal Reserve Board was given supervisory authority over exchange margins for index futures. The Federal Reserve Board delegated that authority to the CFTC. The CFTC has continued to defer to the exchanges in setting such margins. See generally, Fed Delegates Authority to Set Margins on Stock Index Futures, 25 Sec. Reg. & L. Rep. (BNA) 545, 563 (Apr. 16, 1993).


14. The comparison to a trust account is not perfect. Among other things, a futures commission merchant may keep the interest earned on funds held in customer segregated accounts. See Craig v. Refco, Inc., 816 F.2d 347, 348 (7th Cir. 1987).

A customer failing to meet a margin call will have its account liqui-
dated. Hopefully, the funds of the customer on hand, or subject to a
variation margin call, will meet any shortfall. If not, the futures com-
misson merchant is liable for the difference. Other customers should
not be endangered because their segregated funds may not be used by
the futures commission merchant to margin or secure the obligation of
a defaulting customer.16

Unfortunately, there have been occasions when a futures com-
mission merchant did use the funds of other customers to meet the
margin requirements of a defaulting customer. Shortfalls were in-
curred, for example, in the bankruptcies of Incomco and Chicago Dis-
count Commodity Brokers.17 Nevertheless, the assets involved in the
bankruptcies of futures commission merchants totaled less than $10
million between 1938 and 1985.18

To assure even further protection, the CFTC has imposed an-
other level of regulatory protection in the form of its net capital rule.19
The net capital requirement seeks to assure that futures commission
merchants will have excess net capital committed to the business that
will be available in the event of a customer default. That capital must
be liquid and can be used to meet shortfalls where a customer has
defaulted.

The exchanges have a broader view of net capital. The Chicago
Board of Trade has noted that capital is the basis for business expan-
sion and firm equity.20 The Chicago Mercantile Exchange has as-
serted that net capital requirements assure that futures commission
merchants have on hand funds sufficient to meet their day-to-day fi-
nancing needs. Particularly, futures commission merchants must have
funds on hand to meet clearinghouse obligations. This liquidity is
needed because there is a timing difference between the time that
those obligations must be met and the time when funds are actually

17. See Markham & Hazen, supra note 13, § 2.07, at 2-89.
19. See 17 C.F.R. § 1.17 (1996). Segregation requirements are the “primary safeguard” for commodity futures customers. Futures Commission Merchants: Minimum Financial Require-
(C.F.T.C. May 26, 1977). Net capital requirements are simply an additional layer of protection
from the risk that a single customer may default and adversely affect other customer accounts.
The CFTC thus views its net capital rule to be a “backup” to the requirements for a segregation
of customer funds and margin requirements. See Remarks of Paul H. Bjarnason, Jr., Chief Ac-
countant, Division of Trading and Markets, Commodity Futures Trading Commission, Net Capit-
tal Round Table, at 1 (Sept. 18, 1995) (on file with author).
20. See Chicago Board of Trade, supra note 11, at 4.
collected from customers. That is, the futures commission merchant may be required to post funds at the clearinghouse before they can be collected from customers.\textsuperscript{21} Net capital also helps assure that a futures commission merchant has sufficient funds to meet its proprietary trading obligations.\textsuperscript{22}

The net capital rule further helps to assure that a futures commission merchant has made a sufficient financial commitment to doing business and that it has an adequate inclination to operate its business in a responsible manner. The net capital requirement promotes a firm’s financial integrity.\textsuperscript{23} Liquid net capital also facilitates transfers of customer positions in the event of the liquidation of a futures commission merchant.\textsuperscript{24}

**Background of the CFTC Net Capital Requirement**

Legislation enacted by Congress in 1968 authorized the CFTC’s predecessor, the Secretary of Agriculture, to impose financial responsibility requirements on futures commission merchants.\textsuperscript{25} The Secretary had sought this legislative authority because there were “instances of persons being registered with no capital whatsoever.”\textsuperscript{26} The Secretary noted that “underfinanced brokerage firms have been found to be most likely to dip into customers’ funds or resort to sharp trading practices to bolster their money needs.”\textsuperscript{27} Under this legislation, futures commission merchants could meet their financial responsibility requirements by complying with the net capital rules of contract markets where they were members. A futures commission merchant that was not a member of a contract market was required to have minimum capital of ten thousand dollars or an amount based on

\textsuperscript{22} See id.
\textsuperscript{24} The CFTC’s Chairman stated at a “roundtable” conference on net capital that “[m]inimum capital requirements are designed to protect customers and to ensure the financial integrity of the markets. As such they support the capacity to transfer or liquidate positions in market emergencies such as that experienced as a result of the Barings Collapse.” Remarks of Mary L. Schapiro, Chairman, Commodity Futures Trading Commission, Net Capital Roundtable: The Pros and Cons of the Commission’s Existing Rule 1 (Sept. 18, 1995) (on file with author).
\textsuperscript{26} S. Rep. No. 947, at 1 (1968).
\textsuperscript{27} Id.
the size of the proprietary and customer positions held by the firm plus five percent of the firm’s aggregate indebtedness.28

The creation of the CFTC in 1974 led to a renewed interest in net capital requirements.29 The CFTC soon commenced efforts to strengthen the financial responsibility requirements imposed on futures commission merchants.30 The CFTC believed that the broad expansion of the futures industry occurring during the 1970s required additional capital commitments on the part of futures commission merchants.31

The CFTC adopted changes in its net capital rule that require futures commission merchants to maintain adjusted net capital in the greater of fifty thousand dollars or four percent of customer funds required to be segregated under the Commodity Exchange Act.32 A futures commission merchant could, alternatively, meet the net capital requirements of a contract market or those imposed by the National Futures Association (“NFA”).33

Since all futures commission merchants are contract market members or members of the NFA, the rules of those self-regulatory

29. The CFTC was created through the enactment of the Commodity Futures Trading Commission Act of 1974, Pub. L. No. 93-463, 88 Stat. 1389, 1389-90 (1974). The CFTC assumed the powers previously exercised by the Secretary of Agriculture and was given increased regulatory authority. See id.
30. Prior to the adoption of the CFTC’s net capital rule in 1978, the Chicago Board of Trade and the Chicago Mercantile Exchange used a net capital rule based on working capital adjusted by a safety factor charge. Firms that were members of those exchanges were assessed capital charges equal to one half of one percent of the greater of the long and short market value of customer positions and ten percent of the firm’s proprietary positions. See Chicago Board of Trade, supra note 11, at 2.
33. A futures commission merchant that is dually registered with the Securities and Exchange Commission (“SEC”) may use the net capital requirements of the agency imposing the higher requirement. See id. § 1.17(a)(1)(i)(B).
34. The NFA is the futures industry analogue of the National Association of Securities Dealers, Inc. The NFA and the exchanges are required to adopt minimum financial responsibility requirements. See id. § 1.52. The approach taken by the CFTC stands in sharp contrast to the net capital approach taken by the SEC in imposing net capital requirements on broker-dealers. The SEC had found that the securities exchanges had failed to enforce their net capital rules during the “paper work” crisis of the late 1960s. The SEC adopted a “uniform” net capital rule that most broker-dealers were subject to and which facilitated uniform interpretation. See Markham & Hazen, supra note 13, § 2.07[2], at 2-77. Cf. Proposed Adoption and Monitoring of Minimum Financial Requirements by Self-Regulatory Organizations, [1977-1980 Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶ 20,456, at 21,875-78 (C.F.T.C. Aug. 1, 1977).
bodies control the net capital requirements of futures commission merchants. The NFA and the major exchanges require a futures commission merchant to maintain net capital of two hundred fifty thousand dollars or four percent of segregated funds of customers (exclusive of customer long options positions).\textsuperscript{34}

These net capital rules are, to some degree, risk-based measures.\textsuperscript{35} As the CFTC staff has noted, the amount of segregated funds to which the four percent requirement applies is generally related to margin requirements, which are in turn based upon exchanges risk-based evaluation systems for margin.\textsuperscript{36} Nevertheless, funds held in segregation are not always related to exchange margin requirements, and the four percent requirement is not based on any risk-based formula; it is simply an arbitrary figure.\textsuperscript{37}

\textbf{Net Capital Requirements in Other Industries}

The concept of net capital and the concern with risk-based formulas are not peculiar to the futures industry. Securities firms, insurance companies, and banking institutions are all subject to net capital standards to ensure their financial integrity. Each of those industries is using, or experimenting with, risk-based net capital requirements.

The net capital concept in the banking industry appears to be a spin-off of the requirement that banks keep cash or other liquid asset reserves to meet customer demands.\textsuperscript{38} In recent years, the Basle Committee on Banking Supervision has acted to adopt uniform inter-

\textsuperscript{34} See CFTC Net Capital Round Table, A History of Capital Proposals Concerning Position Risk 1 (Sept. 18, 1995) (unpublished work, on file with author). The net capital rules of the NFA and the exchanges are subject to approval by the CFTC, as are amendments to those rules. See 7 U.S.C. § 7a(12)(A) (1994). The CFTC has also proposed to increase its net capital rule to reflect the requirements of the NFA rule, including a requirement of a minimum of two hundred thousand dollars for futures commission merchants. See Minimum Financial Requirements, Prepayment of Subordinated Debt and Gross Collection of Exchange-Set Margin for Omnibus Accounts, 60 Fed. Reg. 63,995 (1995) (proposed Dec. 13, 1995).

\textsuperscript{35} The CFTC staff has also pointed out that most futures commission merchants have excess net capital on hand, which means that regulatory requirements are not dictating the amount of capital required in their business. See Bjarnason, supra note 19, at 1.

\textsuperscript{36} See id. at 2.


\textsuperscript{38} See SHERMAN J. MAISEL, RISK AND CAPITAL ADEQUACY IN COMMERCIAL BANKS 19 (1981).
national capital adequacy standards for banks. More recently, the Basle Committee advanced standards to permit risk-based capital requirements that consider both on- and off-balance sheet risks in measuring capital adequacy.

On July 14, 1995, the Federal Reserve Board also proposed amendments to its risk-based capital requirements to incorporate market risks from foreign exchange, commodity trading activities, and the trading of debt and equity securities. The proposal allows banks and bank holding companies with large proprietary trading operations to calculate their capital charges for market risk using their own internal value-at-risk models or to use risk management techniques developed by bank supervisors. This proposal was based on the proposal by the Basle Committee on Banking Supervision. If adopted, these changes will be implemented in 1997.

The insurance industry also uses a risk-based capital approach to better assure that insurance companies are able to meet their customer obligations. The insurance industry's risk-based method seeks to measure asset quality, default risk, adverse risk experience, interest rate risk, and general business risks from assets held by insurance companies. This methodology requires more capital for companies holding assets that present higher investment risks.

The securities industry has long been exposed to net capital requirements. Since 1975, the Securities and Exchange Commission ("SEC") has also sought to impose uniform net capital requirements


40. See id. at 219. A 1988 Basle Accord sought to protect banks against credit risk. The present proposals are concerned with market risk. See A Brush with Basle, Economist, Sept. 16, 1995, at 89-90. The Basle Committee wants the banks to multiply their own value-at-risk determinations times three, plus some because the banks' risk models may contain unrealistic assumptions about market movement. See id. The banks, however, are concerned that this will require excess capital and that there is now an incentive to understate the value at risk. See id.

41. See Federal Reserve Board, Federal Reserve Press Release (1995) (to be codified at 12 C.F.R. pt. 3, 208, 225) (proposed July 14, 1995). An alternative to the risk-based proposals now being considered by the Federal Reserve Board is a pre-commitment approach under which banks would set aside the amount of capital that they were prepared to lose. See id. See also Paul H. Kupiec & James M. O'Brien, A Pre-Commitment Approach to Capital Requirements for Market Risk (June, 1995) (unpublished work, on file with author); Bettering Basle, Economist, Dec. 9, 1995, at 76.


on broker-dealers.\textsuperscript{44} Securities industry net capital requirements have, however, traditionally been directed at assuring that firms have sufficient excess liquid assets on hand to meet customer obligations.\textsuperscript{45} Using an extremely complex calculation, the SEC rules seek to "haircut" illiquid assets (\textit{i.e.} reducing their value for net worth purposes) and excluding from net worth other assets whose values are difficult to measure or which may not be available to meet customers' obligations.\textsuperscript{46}

The SEC has recently begun to examine risk-based measures for its net capital requirements.\textsuperscript{47} In 1993, the SEC issued a concepts release seeking public comment on the adoption of a net capital standard that would be risk-based for firms dealing in derivative contracts such as option futures swaps and forward contracts.\textsuperscript{48}

Subsequently, the SEC proposed an amendment to its net capital rule that would allow broker-dealers to use theoretically priced position risks when calculating net capital charges for list options.\textsuperscript{49} The proposal was based on a Theoretical Intermarket Margining System ("TIMS") developed by the Options Clearing Corporation, which clears exchange-listed options in the United States.\textsuperscript{50}

\textsuperscript{44} The uniform net capital rule allowed computation of net capital under alternate formulas. See \textsc{Markham \& Hazen, supra} note 13, §§ 5.04–5.05, at 5–26 to –61. The "basic" method limits the permissible amount of aggregate indebtedness of broker-dealers. See \textit{id}. Aggregate indebtedness is the total liabilities of a broker-dealer. See \textit{id}. Certain liabilities were excluded such as those that were adequately collateralized by assets owned by the broker-dealer. See \textit{id}.

The "alternative" method required the maintenance of net capital in amount equal to a specific amount (now two hundred fifty thousand dollars) or two percent (previously four percent) of aggregate debit items. See Adoption of Amendments to Rule 15c3 1 and Adoption of an Alternative Net Capital Requirement for Certain Brokers and Dealers, Securities Exchange Act Exchange Release No. 34-11497, 7 SEC Docket 241, 242 (June 26, 1975).

\textsuperscript{45} See \textit{In re} Guy D. Marianette, 11 S.E.C. 967, 970-71 (1942).

\textsuperscript{46} The SEC net capital rule does not seek to require the maintenance of excess capital only in cash. Rather, the rule seeks liquid assets. See \textit{id}.

\textsuperscript{47} The SEC had earlier asserted that its segregation rule could supplant net capital rules for broker-dealers: "It is contemplated that, with operational experience, the rules regarding customer funds and securities will eventually supplement and then eliminate the complex structure of the net capital requirements and, with that, the corresponding intricacies of interpretation." \textit{U.S. SEC. \& EXCH. COMM'N, THE FINANCING AND REGULATORY CAPITAL NEEDS OF THE SECURITIES INDUSTRY} 7 n.17 (1985).


\textsuperscript{50} See \textit{Capital Requirements for Brokers or Dealers Under the Securities Exchange Act of 1934}, Securities Exchange Act Release No. 34-33761, 56 SEC Docket 771, 772 (Mar. 15, 1994). The TIMS system is a binomial pricing model that was developed by John Cox, Stephen Ross, and Mark Rubinstein. See \textit{id}.
Risk Based Capital in the Futures Industry

The commodity futures industry has changed dramatically since the adoption of the CFTC's net capital rule in 1978: trading volume has increased enormously; the customer base is now dominated by large financial institutions; and the futures markets have become globalized and intertwined with other financial markets, particularly the securities markets.51 These changes have given rise to concern that the CFTC's present capital rule does not reflect the effect of those changes on the industry.

The use of risk-based capital methodologies in other industries has also given impetus to consideration of such an approach in the futures industry. The use of risk-based methodologies in other industries, however, does not translate automatically into a need for such an approach in the futures industry. Net capital requirements in the securities, banking, and insurance industries are designed to assure that the firms operating in those industries are able to meet their customer obligations. These obligations include, among other things, the return of deposits by banks, the payment of insurance proceeds from the general accounts of insurance companies, and the return of customer funds and securities held by a broker-dealer in the securities industry.

There is less of a conceptual need for net capital for such purposes in the futures industry. Futures commission merchants do not act as principals in transactions with their customers. Rather, a futures commission merchant acts solely as an agent in transmitting orders and executing customers' orders on the exchanges. The counterparty to all parties in exchange-traded futures contracts is the exchange clearinghouse. The clearinghouse is interceded between the buyers and sellers of futures contracts and exchange-traded options. In the event of a default, the clearinghouse is responsible for performance of the opposing party's obligations.

Futures commission merchants must, of course, handle customer funds that are used to margin or secure trades on the futures exchanges. A futures commission merchant may also be holding excess funds for their customers at any given time. This depository arrangement is secured by the requirement that customer funds be held in segregated accounts. Only if margin calls are not met or if segregation is breached should there be a real need for net capital requirements.

51. See Chicago Board of Trade, supra note 11, at 3.
The danger with which the CFTC net capital requirement should be most directly concerned is the possibility of a shortfall of customers' funds held in segregation. A shortfall is most likely to occur where the futures commission merchant uses the funds of one customer to meet the margin obligations of another customer. Futures commission merchants have an incentive to convert other customers' funds for such a purpose because the futures commission merchant is liable to the clearinghouse or to a clearing member for the failure of a customer to pay margin calls. Thus, if a customer defaults and the customer does not have funds on hand with the futures commission merchant, the futures commission merchant must pay the shortfall from its own funds. This presents a temptation to the futures commission merchant to "borrow" the funds of other customers, particularly if the futures commission merchant's capital is inadequate to meet the shortfall. Such conduct constitutes a conversion of customers' funds and is a serious criminal offense.

Net capital adds little to customer protection if segregation rules are strictly followed. Should a customer default, the futures commission merchant would be liable for the shortfall, and any capital that it had would be lost. If the futures commission merchant is not a clearing member, the clearing member that cleared the futures commission merchant's positions would have to satisfy the loss. If the clearing member is unable to do so, the clearinghouse and other clearing members would have to absorb the loss. This would impose a systemic risk, but it is rather doubtful whether net capital requirements for a single firm would reduce systemic risk to any great degree, particularly since the clearinghouse will be imposing its own capital requirements for clearing members.

The real problem has been that, where failure occurs, the futures commission merchant had met the margin deficiency of one customer with other customers' funds. This constitutes conversion—that is, stealing. It is questionable, however, whether net capital requirements have anything more than a marginal deterrent effect for such conversions and whether net capital requirements prevent firms from using other customers' monies. Excess capital does mean, at least, that the failing futures commission merchant should have assets on

52. A more perfect segregated system could perhaps be created using advanced computer technology. This would require sub-accounts to be maintained by futures commission merchants, depositories of customer funds, and the clearinghouses. The improper transfer of monies from one account to margin trades of another account could then be monitored. The cost of such a system would, however, appear to outweigh its advantages.
hand that will reduce some deficiencies in the segregated account. Net capital also provides a screening mechanism that keeps out fly-by-night firms. The net capital rule requires firms to commit capital to the risks of the business; that is, to the risk of a customer default. This gives the futures commission merchant an incentive to screen its customers’ creditworthiness carefully so as to avoid default and loss of capital. In the event of a customer default, the futures commission merchant will have assets to lose. This gives the futures commission merchant a stake in assuring that customers perform on their margin obligations.

Concentrated Positions

A related danger to customer segregated funds is that of concentrated positions in customer accounts. In the event of a large market move, the concentrated (and leveraged) position may quickly generate enormous margin calls that the customer is unable to meet. Once again, the futures commission merchant will be tempted to use other customers’ funds. The insolvency of a futures commission merchant can also result in a loss of market confidence.

The danger of concentrated positions is not merely theoretical. The CFTC’s confidence in its net capital system was shaken in 1985 by the default of a firm called Volume Investors Corporation (“Volume Investors”), a clearing member of the Commodities Exchange in New York. Volume Investors’ default was occasioned by concentrated positions held by three customers in uncovered short gold options.53 There was a concern that customer losses would be experienced because the firm’s capital was inadequate to cover losses from this trading. In response to the Volume Investors default, the CFTC proposed amendments to its net capital rule that would have increased net capital requirements for a firm holding concentrated customer positions.54 This proposed “concentration charge”55 was the subject of a great deal of comment and industry programs such as Chicago-Kent College of

53. See CFTC Net Capital Round Table, supra note 34, at 1-2. First LaSalle Services, another futures commission merchant, failed at about the same time as the result of unrelated losses in government securities transactions. See id. at 1.
54. See Chicago Board of Trade, supra note 11, at 2.
Law's Securities Industry Association and Practicing Law Institute programs, as well as the target of much industry criticism.\textsuperscript{56}

The CFTC did not adopt the concentration charge. Instead, it asserted that it would await industry proposals on a more risk-based net capital approach.\textsuperscript{57} Thereafter, the Chicago Board of Trade formed a committee that recommended that CFTC net capital requirements should be based on a percentage of risk associated with individual customer accounts, rather than on funds held for customers.\textsuperscript{58} Later, in 1993, the CFTC's Regulatory Coordination Advisory Committee proposed a risk-based capital approach.\textsuperscript{59}

\textbf{SOME FLAWS IN THE CFTC NET CAPITAL RULE}

The CFTC's net capital rule has suffered criticism that goes beyond a lack of direct risk-based application. The exchanges have noted, for example, that there is an incentive under existing net capital standards for futures commission merchants to return excess funds held for customers. The present net capital rule requires futures commission merchants to have excess liquid capital in an amount equal to four percent of customer funds in segregation.\textsuperscript{60} Accordingly, if a customer has funds in excess of those required by exchange margin requirements, the futures commission merchant has a disincentive to hold the funds because futures commission merchants will be required to increase its own capital by four percent of the excess funds.

To avoid that requirement, the futures commission merchant may return the excess funds to the customer even though the customer is willing to leave the funds on-hand. This reduces the amount of funds on-hand that could be used to guard against failure by those customers.\textsuperscript{61} Futures Commission Merchants often find themselves in the position of returning excess margin to customers in order to reduce what they perceive to be unnecessary capital charges, when prudence might

\textsuperscript{56} See CFTC Net Capital Round Table, \textit{supra} note 34, at 2-3.

\textsuperscript{57} The CFTC has recently stated that it is still considering the need for a concentration charge. See Minimum Financial Requirements, Prepayment of Subordinated Debt and Gross Collection of Exchange-Set Margin for Omnibus Accounts, 60 Fed. Reg. 63,995, 63,999 (Dec. 13, 1995).

\textsuperscript{58} The Chicago Board of Trade proposed to eliminate the four percent of segregated funds requirement and substitute five percent of the "net potential risk" of customer accounts. This net potential risk would be the greater of contract market maintenance margin requirements or a standard volatility factor. See CFTC Net Capital Round Table, \textit{supra} note 34, at 5. Another alternative proposed by the Futures Industry Association following the CFTC's concentration proposal would require an early warning of concentrated risks in customer accounts. See \textit{id.} at 7.

\textsuperscript{59} See Chicago Board of Trade, \textit{supra} note 11, at 3.

\textsuperscript{60} See 17 C.F.R. § 1.17(c)(5)(iii) (1996).

\textsuperscript{61} See Chicago Mercantile Exchange, \textit{supra} note 21, at 1.
otherwise dictate that they should retain excess margin.”62 Thus, the CFTC’s net capital rule penalizes futures commission merchants for holding customer funds in excess of minimum margin requirements—the exact opposite of what a net capital rule should be designed to accomplish.63

There are other criticisms of the present net capital rule.64 An industry position paper has argued that a four percent requirement for short options value is unrelated to the risk in customers’ accounts.65 The Chicago Mercantile Exchange has further charged that the CFTC’s net capital rule does not fully account for the underlying risk of customer accounts carried by a futures commission merchant; that the rule ignores the trading activity of non-customer accounts and foreign domiciled accounts trading on foreign markets; that there is a greater capital requirement on the “winning” side of a customer’s position, rather than on the losing side; and that the rule does not take into account customer accounts which meet margin requirements through letters of credit.66 Further, the rule may also be misleading as to persons evaluating the creditworthiness of a futures commission merchant because they may believe that excess capital is a reflection of the firm’s ability to withstand market risk. It is not.67

A PROPOSAL FOR A MORE RISK-BASED NET CAPITAL RULE

There have been several proposals that have sought to convince the CFTC to take a more risk-based approach to net capital. The

62. Chicago Board of Trade, supra note 11, at 2.
63. The CFTC staff has suggested that this anomaly could be reduced by granting a credit for excess margin funds. See Bjarnason, supra note 19, at 2.
64. The complexity of the net capital rule also gives rise to questions regarding whether the present structure is really necessary.
65. See CFTC Net Capital Round Table, Position Paper—4% Short Option Value Charge (Sept. 18, 1995) (on file with author). The CFTC staff has indicated that the short options value charge may no longer be needed as a result of exchange margin evaluations. See Bjarnason, supra note 19, at 2.
66. The CFTC staff has adopted a no-action position that permits futures commission merchants to reduce their net capital charges for short commodity options positions. See CFTC Net Capital Round Table, Net Capital Issues List, (Sept. 18, 1995) (on file with author). The no-action letter, which was intended for certain market maker firms and professional traders, gave short options net capital charge relief in order to alleviate the disparity engendered under the existing rule. See Memorandum from Andrea M. Corcoran, Director, CFTC Division of Trading and Markets to the CFTC (July 20, 1995), 1995 CFTC Ltr. LEXIS 67 (July 28, 1995) (discussing short option value relief for market maker firms and CFTC interpretative letter 95-65). The CFTC is “considering a rethinking” of the relief granted in this no-action letter. See Minimum Financial Requirements, Prepayment of Subordinated Debt and Gross Collection of Exchange-Set Margin for Omnibus Accounts, 60 Fed. Reg. 63,995, 63,999 (Dec. 13, 1995).
67. See Chicago Mercantile Exchange, supra note 21, at 3-4.
commodity exchanges advocated such an approach in the wake of the Volume Investors failure. The world's two largest futures markets, the Chicago Board of Trade and the Chicago Mercantile Exchange, are also continuing to seek a risk-based capital approach. The Chicago Board of Trade, in particular, has advocated a more "comprehensive risk-based approach for measuring capital adequacy."69

A Regulatory Coordination Advisory Committee of the CFTC has also recommended that a risk-based capital approach be adopted by the CFTC. This proposal was similar to the proposal made by the commodity exchanges in 1987. The Advisory Committee asserted that United States firms were being placed at a competitive disadvantage in international markets by existing net capital requirements. The Committee was also of the view that the present rule is producing results that offer less, rather than more, protection.70

The CFTC has resisted all of these efforts.71 It would appear, however, that the CFTC's goal of customer protection would be more readily satisfied through a more risk-based net capital system. Such a system would require increased capital as market exposure increases and reduced capital at lower levels of exposure.

A risk-based net capital system would seem to be an easy adaptation to the existing regulatory structure. The exchanges are already setting margin requirements using a risk-based measurement system called Standard Portfolio Analysis of Risk Performance Bond System ("SPAN").72 That system has withstood the test of time under actual, sometimes volatile, market conditions. A risk-based capital requirement that is tied to the margin requirements would appear to be administratively convenient. The SPAN system could be applied on a contract-by-contract basis to establish risk parameters. A new risk-

---

68. See notes 58-59 and accompanying text.
69. Chicago Board of Trade, supra note 11, at 5. The Chicago Mercantile Exchange has proposed a net capital requirement that would be based at least in part upon a percentage of a futures commission merchant's customer and non-customer margin requirements. See Chicago Mercantile Exchange, supra note 21, at 5.
72. See Chicago Mercantile Exchange, A New Margining System, Standard Portfolio Analysis of Risk (1989). The Chicago Mercantile Exchange has advocated the use of SPAN, which is a risk-based system used to set domestic and foreign futures exchanges margin requirements, as the basis for computing risk performance for net capital purposes. See Chicago Mercantile Exchange, supra note 21, at 5.
based rule could then set required capital at a risk-based percent of exchange requirements. The computations required under such a formula would not be overly difficult, particularly since margin and segregation requirements are calculated each day for all futures accounts.

This approach is not revolutionary. A working group on international competitiveness at the CFTC has already recommended that the CFTC exchange set initial margin requirements that would be the base under which futures commission merchants would meet the net capital requirement. Initial margin requirements set by the exchanges would be multiplied by four percent under this proposal. However, the working group's proposal is still tied to an arbitrary four percent figure. Nevertheless, this approach would still more directly reflect the actual risk exposure of the futures commission merchant than the existing rule. This proposal also does not discourage future commission merchants from having customers maintain excess funds on hand.

The working group's proposal is a step forward, but it may not accurately state the actual risk of the futures commission merchant from customer positions. An alternate approach would be to require future commission merchants to set aside a percentage of exchange minimum margin requirements as a reserve for meeting customer deficits. The percentage would vary depending on the volatility of specific positions. This reserve requirement would be reduced on an individual account basis by excess customers' funds on hand and increased by a charge for concentrated positions. The concentration charge could also be reduced by excess funds held for a customer with a concentrated position. There would, however, need to be some set minimum amount of net capital that could not be met with excess customer funds. This amount would assure funds on hand for meeting immediate obligations and facilitate transfer of customer positions in the event of default.

74. For another proposal suggesting the use of exchange-based margins as a net capital requirement, see Roger D. Rutz, A Proposal to Implement Risk-Based Minimum Capital Requirements for Futures Brokers in Singapore and FCMs in the United States 4-12 (1995) (on file with author).
75. The reduction would be done on an account-by-account basis. If one account had a large excess, that amount could not be used to reduce the net capital amount required for other accounts not having an excess.
The effect of this proposed system would be to encourage futures commission merchants to charge what would amount to "broker-minimum" margin requirements that would be in excess of exchange minimums. Those funds would be segregated and could be invested in liquid government securities.

This approach would encourage the futures commission merchant to require minimums in excess of those set by the exchange. This would have the effect of assuring that either the customers have excess funds on hand or that the futures commission merchant has capital dedicated to guard against defaults by customers who are posting exchange minimums. Further, capital requirements would be reduced as customers reduce exposure through increased margin or reduced market exposure. The concentration charge would also assure greater capital dedication where a customer's position presents higher levels of risk.

This proposal would have the opposite effect of the present net capital standard. The proposal would encourage customer funds to be kept on hand. Indeed, futures commission merchants could reduce the amount of their dedicated capital by requiring customers to post additional margin funds.

Competition may dictate that futures commission merchants use only exchange-required minimum margins, which would provide heavily capitalized firms with a competitive advantage. That, however, is a cost of any net capital requirement. Small firms will always be at a disadvantage in competing with more heavily capitalized firms. Further, a firm supporting positions with its own capital must pay a price in diverting capital for that purpose. This would appear to be a cost of doing business that must be met either by requiring excess funds from customers or by adding the firm's own net capital, if net capital purposes are to be fulfilled.

**Value at Risk Proposals May be Too Risky**

One method for risk measurement is that of "value at risk" ("VAR"). This risk measurement device seeks to estimate the maximum potential loss from assets or derivative positions held by a firm over a given period of time. VAR is currently a popular device for

---

76. For a discussion of VAR and some alternative approaches to estimating VAR and its use in managing financial risk, see James V. Jordan & Robert J. Mackay, Center for Study of Futures and Options Markets, Assessing Value at Risk for Equity Portfolios: Implementing Alternative Techniques (discussion draft, July 1995) (on file with author).
measuring net capital requirements. The 1988 Basle Capital Accord allows the use of the VAR as the methodology for computing the amount of capital under its risk-based guidelines. A derivatives policy group has also proposed an oversight system for over-the-counter derivative dealers that would use a voluntary system of identifying capital at risk.\(^{77}\) There are dangers to using VAR: risk assessment is not calculated uniformly among firms and the results can vary dramatically based on the data and assumptions used to reach the valued risk figure. A firm using differing assumptions may produce widely different risk assumptions in capital requirements.\(^{78}\)

A better alternative would appear to be the existing SPAN risk measurement system used by the futures exchanges to compute risk levels in setting margin requirements. This system has proved effective in assessing futures trading risks. It also provides a uniform measurement system that will be readily accessible by all futures commission merchants.

**REFORM EFFORTS WILL NEED THE ASSISTANCE OF RISK-BASED TESTING**

The viability of any change in the existing net capital rule will depend in large measure on its acceptance by both regulators and the industry. That acceptance will meet resistance.\(^{79}\) First, the industry will oppose any requirement that increases capital over existing levels. Certainly, there is good reason for such a view since the number of failures in the futures industry have been almost negligible. Second, regulators will oppose any system that reduces net capital. Their view is that the market is becoming more risk-based and that more capital, not less, is needed to reflect that fact.\(^{80}\) Regulators also will need some convincing that a risk-based system will work in stressful market conditions.

---

79. In September of 1995, the CFTC’s Chairman, Mary Schapiro, held a roundtable to discuss changes in the CFTC’s net capital rule and the possible use of risk-based capital requirements. See Schapiro, supra note 24. There was no consensus for dropping the existing system and substituting a risk-based assessment measure. Many participants inclined toward adjusting the CFTC’s existing rule to reduce obvious adverse effects. The CFTC subsequently expressed only mild interest in adopting a more risk-based approach. See Minimum Financial Requirements, Prepayment of Subordinated Debt and Gross Collection of Exchange-Set Margin for Omnibus Accounts, 60 Fed. Reg. 63,995, 63,996 (Dec. 13, 1995).
80. The CFTC staff has advocated “fine-tuning” rather than substantial changes in net capital rule. See Bjarmason, supra note 19, at 2.
Consequently, the "political" obstacles to the creation of a risk-based system are formidable. Only if net capital levels remain the same will there be agreement by the industry and the regulators to change. In that unlikely circumstance, the question must arise whether it is really necessary to go to a new system if the existing system is working.

Movement by either regulators or the industry is unlikely without sufficient testing and data to determine what the actual effects will be on existing net capital requirements. The prudent course for the industry and regulators would be to test market exposures of futures commission merchants under an appropriate risk-based measure. From such a study, a better judgment could be made as to whether the existing system is adequate, or whether a risk-based system would be more appropriate. At the very least, evidence one way or the other would provide guidance on whether existing levels are adequate or whether even lower levels would be "safe."

Should such a study determine that existing capital levels are inadequate for a risk-based system, the question may arise whether there is a need for increased capital or whether some alternative should be established for protecting against failures. In the event that the study determines that less capital is needed, then certainly the regulators should accept that judgment and move toward risk-based net capital requirements so as to make the industry as efficient as possible, while providing customer protection.

Help in this area may be on the way. In February of 1995, the Chicago Mercantile Exchange, the Chicago Board of Trade, the New York Mercantile Exchange, and NFA began a risk-based capital study. Hopefully, that study will provide some data on the effect of a risk-based capital system on the amount of capital that will be needed should such a system be adopted.81

Conclusion

The CFTC's existing net capital rule has significant flaws that are in need of correction. The structure of the rule also needs to be re-examined to determine if a more risk-based approach would be appropriate. The likely candidate for adoption as a risk-based system is

81. See Chicago Mercantile Exchange, supra note 21, at 6-7. The Chicago Board of Trade has also advocated coordination with the SEC on net capital requirements since many futures commission merchants are dually registered with the SEC and CFTC. See Chicago Board of Trade, supra note 11, at 1.
the SPAN system used by the exchanges for setting margin levels. Further study is needed, however, to assess the adequacy of existing capital and to determine how a more risk-based capital system will respond in actual market conditions. Of course, it should be remembered, as the Chicago Mercantile Exchange has noted, "No capital requirement is foolproof." 82 A default may occur even with risk-based capital requirements.

---

82. Chicago Mercantile Exchange, supra note 21, at 6.