reported in his statement, he may also have difficulty determining whether he has earned a profit or sustained a loss. In certain cases, even the customer's registered representative has been unable to calculate the customer's profit or loss on the basis of the account statement.

Moreover, most firms do not provide account statements which state clearly the individual commissions charged on each transaction or summarize the commission charges for the period covered. Nor do these account statements show the customer the current equity in his account after valuing all the customer's positions at current "marked-to-market" prices, although a few firms have begun recently to calculate this figure for their customers. To add to these omissions, account statements do not indicate the amount of certain other expenses. Such information is essential for the customer when he attempts to evaluate the financial consequences of his options transactions.

Accordingly, the Options Study recommends:

THE SELF-REGULATORY ORGANIZATIONS SHOULD ADOPT RULES REQUIRING THE OPTIONS CUSTOMER'S ACCOUNT STATEMENT TO SHOW THE EQUITY IN THE CUSTOMER'S ACCOUNT WITH ALL OPTIONS AND SECURITIES POSITIONS MARKED-TO-MARKET AND THE YEAR TO DATE PROFIT OR LOSS IN THE ACCOUNT CLEARLY SHOWN. THE OPTIONS CUSTOMER'S ACCOUNT STATEMENT SHOULD ALSO SHOW THE AMOUNT OF MARGIN LOANS OUTSTANDING AS WELL AS COMMISSION CHARGES APPLICABLE TO EACH TRANSACTION AND OTHER EXPENSES PAID OR PAYABLE FOR THE PERIOD COVERED BY THE ACCOUNT STATEMENT AND YEAR TO DATE.
b. Responsibilities of Broker-Dealer Firms

Brokerage firms are responsible for dealing with customers in a fair, ethical and professional manner. To fulfill these responsibilities to the greatest extent practicable, the Options Study believes that firms must:

— assure that their registered representatives are properly trained;
— establish and implement appropriate supervisory controls over their registered representatives, including establishing and implementing adequate programs for reviewing customer accounts;
— compile and maintain adequate information and records about the sophistication, needs and resources of each customer; and
— assure that communications with the public - through advertising or other means - are truthful and accurate.

1) Qualification of Registered Representatives

A primary obligation of a broker-dealer firm to its customers should be the assurance that its registered representatives - the people who have the most frequent and significant contact with public customers - are properly trained and understand their business and responsibilities. Inadequate or inconsistent professional qualification standards adopted and applied by the self-regulatory organizations and broker-dealers, however, permit untrained registered representatives to recommend options transactions to customers.
Options exchange rules require that all sales personnel be "options qualified" before they can service customer options accounts, but these qualifying standards appear to be ineffective. In the first place, the examinations now used to qualify both new and experienced registered representatives to sell options are of questionable utility. The qualifying examination given to a new registered representative can be passed by him -- at which point he may begin selling stocks and options -- even if he missed every question relating to options. The options qualifying examination, given to an experienced registered representative who wishes to begin to sell options, is not administered under controlled test conditions to assure that the person does in fact know the answers he is giving on the examination. In addition, although options exchanges impose minimum training requirements for options qualification, these requirements are largely unenforced. Because of these inadequacies, many registered representatives now servicing the accounts of options customers may lack the necessary knowledge and skill to perform their functions professionally and to fulfill their legal obligations.

Accordingly, the Options Study recommends:

THE SELF-REGULATORY ORGANIZATIONS SHOULD ADOPT RULES TO REQUIRE THAT: (A) THE REGISTERED REPRESENTATIVE "OPTIONS QUALIFYING" EXAMINATIONS SHOULD BE REVISED TO REQUIRE A THOROUGH KNOWLEDGE OF OPTIONS AND THE OPTIONS EXCHANGE RULES DESIGNED TO PROTECT CUSTOMERS. THESE EXAMINATIONS SHOULD BE READMINISTERED TO ALL OPTIONS SALESPERSONS, AND ALL EXAMINATIONS SHOULD BE GIVEN UNDER CONTROLLED SURROUNDINGS BY INDEPENDENT EXAMINERS; AND (B) THE TRAINING
OF REGISTERED REPRESENTATIVES WHO RECOMMEND OPTIONS TRANSACTIONS TO CUSTOMERS SHOULD BE FORMALIZED TO INCLUDE A MINIMUM NUMBER OF HOURS OF APPROVED CLASSROOM AND ON-THE-JOB INSTRUCTION.

2) **Supervision of Registered Representatives and of Customer Accounts**

The problems caused by an untrained sales force may be exacerbated by unqualified supervisors and by inadequate supervision. According to the existing rules of the options exchanges, new customer accounts must be approved for options trading by an officer of the firm who has passed an advanced test—the registered options principal ("ROP") examination. But these same rules do not require that each sales office be supervised by a person who is qualified as an ROP although these sales offices may be recommending and effecting options trades. In many firms, in fact, the supervisor of a sales office is not so qualified. The ROP qualification examination is deficient in that it concentrates on the mechanics of listed options rather than the responsibilities of supervisors. Furthermore, some ROPs have never passed a qualifying examination controlled by independent examiners. As a consequence, the day-to-day conduct of the options business at the branch level of many firms is supervised by individuals who may have little, if any, understanding of options trading.

The Options Study also found substantial inadequacies in the systems that broker-dealer firms use to oversee the activity in customer accounts. In numerous instances, firm employees themselves have circum-
vented these systems. For example, options exchange rules require, as a means of control, the initialing of discretionary orders by a branch manager. This responsibility, however, is sometimes delegated to a particular registered representative who himself needs to be controlled. Supervisory problems can multiply when a salesman is considered "special." For example, where a firm's computer identifies potential problems in an account, branch managers and other supervisors too often fail to take action because the registered representative involved is a "big producer" of commission revenue.

Another flaw in supervision can occur because many firms are sometimes unable or unwilling to compile current, accurate information about the status of their individual customer accounts. Deprived of this information, a supervisor's ability to focus quickly on critical problems in his own office is significantly curtailed.

Accordingly, the Options Study recommends:

THE SELF-REGULATORY ORGANIZATIONS SHOULD ADOPT RULES TO REQUIRE THAT: (A) THE ROP QUALIFICATION TEST BE REVISED AND ALL ROPS BE REQUIRED TO TAKE THE REVISED TEST UNDER CONTROLLED CONDITIONS; (B) THE PRINCIPAL SUPERVISOR OF ANY BRANCH OR OTHER OFFICE ACCEPTING CUSTOMER OPTIONS TRANSACTIONS SHOULD BE QUALIFIED AS AN ROP; (C) EACH FIRM DESIGNATE A POLICY LEVEL OFFICIAL WHO, ABSENT A CLEAR SHOWING OF COMPELLING CIRCUMSTANCES, HAS NO SELLING FUNCTION TO OVERSEE THE FIRM'S OPTIONS COMPLIANCE PROGRAM; (D) THE SELF-REGULATORY ORGANIZATIONS DEVISE A UNIFORM SYSTEM OF SUPERVISORY PROCEDURES FOR FIRMS OFFERING OPTIONS TO PUBLIC CUSTOMERS; (E) THE HEADQUARTERS OFFICE OF EACH BROKER-DEALER ACCEPTING OPTIONS TRANSACTIONS BY CUSTOMERS SHOULD BE IN A POSITION TO REVIEW EACH CUSTOMER OPTIONS ACCOUNT ON A TIMELY BASIS TO DETERMINE:
COMMISSIONS AS A PERCENTAGE OF EQUITY IN A CUSTOMER'S ACCOUNT;

UNUSUAL CREDIT EXTENSIONS;

REALIZED AND UNREALIZED LOSSES IN EXCESS OF AN ESTABLISHED PERCENTAGE OF THE CUSTOMER'S EQUITY;

UNUSUAL RISKS OR UNUSUAL TRADING PATTERNS IN A CUSTOMER'S ACCOUNT;

3) Recordkeeping and Communications with Customers

Additional problems in the area of customer accounts arise because many firms fail to maintain adequate records concerning their customers and their communications with customers. These records should include materials relating to: information about the customer's general background, financial needs, and investment objectives; any complaints the customer may have expressed orally or in writing; the method of allocating exercise notices to customers; and copies of worksheets and performance reports which registered representatives send to their customers in conjunction with options recommendations.

Customer complaints are frequently not available to the management at a firm's headquarters because some firms keep them on file only at the branch office which originally gave rise to the complaint. As a result, it is difficult for the headquarters office to ascertain developing branch office problems. On the other hand, some firms maintain customer suitability information only at the headquarters office and do not maintain copies at the branch office for use by local supervisors.
The quality and accuracy of other forms of broker-dealer communications with the public often fall below acceptable standards. For example, the quality of options advertising and sales literature vary significantly from firm to firm and these materials too often contain misleading or inaccurate statements. Several options seminar scripts, prepared by the brokerage firms themselves, were found to be similarly flawed.

Lacking sufficient supervision, registered representatives are often at liberty to send worksheets to their customers which detail promising returns on recommended options transactions. Worksheets are frequently included as part of a promotional package, along with performance reports of the particular firm's options program. The Options Study has found that these worksheets and reports are frequently inaccurate and that worksheets sometimes contain only overly optimistic projections of return which mislead customers. Copies of these documents, which can be useful in detecting improper selling practices, are often not maintained for review by the firm.

Accordingly, the Options Study recommends:

THE SELF-REGULATORY ORGANIZATIONS SHOULD ADOPT RECORDKEEPING RULES WHICH REQUIRE THAT MEMBER FIRMS: (A) KEEP COPIES OF CUSTOMER COMPLAINTS, CUSTOMER SUITABILITY INFORMATION AND CUSTOMER ACCOUNT STATEMENTS AT BOTH BRANCH OFFICES AND THE HEADQUARTERS OFFICE; (B) KEEP COPIES OF ALL WORKSHEETS, PERFORMANCE REPORTS AND OTHER COMMUNICATIONS BETWEEN REGISTERED REPRESENTATIVES AND THEIR CUSTOMERS, AND IMPROVE SUPERVISION OVER THE USE OF THESE SELLING DOCUMENTS; AND (C) KEEP RECORDS CONCERNING RATES OF RETURN ON INVESTMENT QUOTED TO OPTIONS CUSTOMERS AND IMPROVE SUPERVISION OF AND DISCLOSURE CONCERNING OPTIONS PROGRAMS AND SEMINAR PRESENTATIONS.
4) Exercise Allocations

Finally, the Options Study observed several instances of misallocation of exercise notices by broker-dealers, including situations in which firm practices concerning customers' exercise allocations have resulted in injury to public customers. Some firms did not have, or could not provide, records which disclosed the method by which exercise notices were assigned. For this reason, it was sometimes impossible to determine satisfactorily whether all firms have been following options exchange rules regarding the allocation of exercise notices. A uniform allocation system, coupled with consistent recordkeeping requirements, would prevent unfairness in the allocation process and make the detection of irregularities in the exercise practice of broker-dealers easier.

Accordingly, the Options Study recommends:

THE SELF-REGULATORY ORGANIZATIONS SHOULD
ESTABLISH A UNIFORM EXERCISE ALLOCATION
PROCEDURE AND SHOULD REQUIRE THAT MEMBER
FIRMS KEEP RECORDS WHICH ARE ADEQUATE
TO PERMIT REVIEW OF EXERCISE ALLOCATION
PRACTICES.

4. Financial Structure

The Options Study examined the financial structure of the options market to determine whether sufficient safeguards and controls exist to protect the market place and, ultimately, the public from being harmed by the financial failure of either broker-dealers
carrying public customer or other broker-dealer accounts or broker-dealers on the floor of an exchange with market making responsibilities. These safeguards and controls include: (1) the Commission's net capital and customer protection rules; (2) the Commission's and SRO's financial reporting and early warning requirements; (3) the Federal Reserve Board ("FRB") initial margin requirements and self-regulatory maintenance margin requirements; (4) the Securities Investor Protection Corporation ("SIPC") protections; and (5) the OCC financial requirements and margin requirements. After reviewing these safeguards and controls, the Options Study has concluded that numerous steps should be taken to make these safeguards more responsive to the risks associated with options positions without imposing substantial additional net capital requirements on market participants.

a. The Commission's Net Capital Rule

The Commission's net capital rule requires that broker-dealers maintain a sufficient cushion of liquid assets to satisfy all customers' claims. It establishes minimum net capital requirements ranging from $2,500 to $100,000, depending on the nature of the firm's business, with broker-dealers that carry customer accounts subject to a minimum $25,000 requirement. In very general terms, net capital equals net worth less (1) non-liquid assets and (2) a deduction (called a "haircut") which reflects the general market risk for securities, ranging from 1/8 percent for commercial paper to 30% of the market
value for common stock. This rule also contains provisions limiting
a broker-dealer's volume of business in relationship to its net
capital. With respect to options, the net capital rule limits the
amount of business an OCC member can finance and guarantee for specialists,
competitive marketmakers or registered options traders who trade
on the floor of an options exchange ("market makers"). More specifically,
the rule limits the gross deductions for positions in marketmaker
accounts to ten times the OCC member's net capital.

1) Increase of Deductions in Computing Net Capital

Based on computer analysis and impact studies of data requested,
the Options Study found that existing financial safeguards provide
sufficient capital to protect both the market and public investors
in periods of normal volume and price movements. The Options
Study is concerned, however, that these financial safeguards with
respect to OCC member clearing firms that carry the accounts of options
marketmakers may be inadequate during times of abnormal volume
and price surges. The amount of deductions currently required
in computing a clearing firm's net capital appears inadequate in
three areas: (1) deductions for options exercisable at prices
near or at the current market price of the underlying security
("near" or "at-the-money" options) which are subject to volatile
percentage price movements; (2) gross deductions for marketmaker
positions carried by a clearing firm in relation to its net capital
to limit the volume of clearing business that can be done; and
(3) lack of deductions to recognize the additional risks of market-
maker accounts carried by an OCC member clearing firm holding
in the aggregate in excess of 10 percent of the outstanding open
interest in any one options class ("concentrated positions").

Accordingly, the Options Study recommends:

THE COMMISSION SHOULD CONSIDER REVISING ITS
NET CAPITAL RULE TO:

— INCREASE THE DEDUCTION IN COMPUTING NET CAPITAL
FOR NEAR OR AT-THE-MONEY OPTIONS BY PROVIDING
THAT THE DEDUCTIONS FOR SHORT OPTIONS POSITIONS
IN MARKETMAKER ACCOUNTS BE EQUAL TO THE
GREATER OF (i) 75 PERCENT OF THE PREMIUM VALUE,
(ii) $75, OR (iii) 5 PERCENT OF THE MARKET
VALUE OF THE UNDERLYING STOCK REDUCED BY
THE AMOUNT BY WHICH THE EXERCISE PRICE OF THE
OPTION VARIES FROM THE CURRENT MARKET PRICE
FOR THE STOCK.

— REDUCE THE PERMISSIBLE AMOUNTS OF GROSS DEDUCTIONS
TO NET CAPITAL, RESULTING FROM THE OPTIONS AND
STOCK POSITIONS CARRIED BY A CLEARING FIRM FOR
MARKETMAKERS.

— REQUIRE AN ADDITIONAL CHARGE IN AN OCC MEMBER’S
COMPUTATION OF ITS NET CAPITAL FOR ANY NET LONG
OR NET SHORT OPTIONS POSITIONS IN ALL MARKET-
MAKER ACCOUNTS GUARANTEED BY THE OCC MEMBER
WHICH ARE IN EXCESS OF 10 PERCENT OF THE OPEN
INTEREST IN THE OPTIONS CLASS. THIS DEDUCTION
SHOULD BE EQUAL TO AN ADDITIONAL 50 PERCENT
OF THE CHARGE OTHERWISE REQUIRED FOR EACH
SERIES IN THAT OPTIONS CLASS.
2) Net Capital Deductions for Marketmaker Clearing Business

The net capital deductions that result from transactions in market-maker accounts carried by a clearing firm must be made on the same day the transactions occur, although these transactions do not clear until the next day. Although this requirement was adopted with an understanding that options transactions clear the next business day, it results in a clearing firm having to maintain a net capital position in anticipation of these charges. Typically, the net capital deduction for other securities transactions by broker-dealers, however, is not made until the day the transaction normally clears (settlement date). For example, no charge is made to net capital on the purchase of stock by a broker-dealer until settlement date, generally five business days after the purchase. The Options Study has concluded that the clearing firms should have until the next business day after their marketmaker charges arise to make the required net capital deduction and, if necessary, to put additional capital into the firm or to obtain additional capital from their marketmakers. This change in the net capital rule would not relieve a non-clearing marketmaker of his responsibility to have equity in his account at the end of each day.

While this recommended change may have the effect of reducing the amount of net capital clearing firms must maintain on a regular basis, other recommendations of the Options Study will increase
their net capital requirements and affect the timing of net capital deductions to make them more sensitive to particular options risks.

Accordingly, the Options Study recommends:

THE COMMISSION SHOULD CONSIDER REVISIGN ITS NET CAPITAL RULE TO PERMIT A CLEARING FIRM ONE BUSINESS DAY TO OBTAIN ADDITIONAL CAPITAL OR MARKETMAKER EQUITY BEFORE MEETING THE NET CAPITAL DEDUCTIONS ARISING OUT OF ITS MARKET-MAKER CLEARING BUSINESS.

3) Marketmaker Minimum Net Capital

The 1975 amendments to the Exchange Act required that all broker-dealers, including marketmakers not carrying public customer accounts, be subject to financial responsibility requirements. Options marketmakers which do not clear their own transactions and do not carry public customer accounts currently are subject to financial responsibility rules adopted by the options exchanges but are exempt from the Commission's net capital rule.

In September 1977, the Commission's Division of Market Regulation recommended to the Commission that it propose for public comment a requirement that these currently exempt marketmakers have a minimum equity of $25,000. Although this proposed rule was not published for comment, the Options Study has since found that on March 31, 1978 (prior to marketmaker losses during the April 1978 market surge), 498 of the 865 marketmakers on all options exchanges did not have $25,000 equity in their account. Of these, 279 had less than $5,000 equity in their accounts.
The Options Study's data does not indicate that a $25,000 minimum financial responsibility test need be required. An analysis was made by the CBOE and Options Study staffs of data from two OCC member firms clearing marketmaker accounts which failed to comply with the Commission's net capital rule for one day during the April 1978 market surge. This analysis showed that less than 1 percent of the decline in net capital at one firm resulted from marketmakers with equity of less than $25,000 while at the second, these accounts were the cause of only 30 percent of the OCC member's net capital decline. From this analysis it was concluded that the difficulties encountered by the two OCC members were not caused by marketmaker accounts which had only a small equity.

In view of the directives contained in the 1975 amendments to the Exchange Act, the Options Study believes that the marketmakers should be required to have a minimum equity similar to that required under the net capital rule for other broker-dealers not carrying public customer accounts, currently $5,000. The Options Study believes this requirement will add financial responsibility to the marketmaker system without unnecessarily impeding entry into the business.

Accordingly, the Options Study recommends:

THE COMMISSION SHOULD CONSIDER REVISING ITS NET CAPITAL RULE TO REQUIRE MARKETMAKERS THAT DO NOT CARRY CUSTOMER ACCOUNTS OR CLEAR TRANSACTIONS TO MAINTAIN A MINIMUM EQUITY OF $5,000.

4) Financial Requirements of Upstairs Dealer Firms

The financial requirements applicable to the options business of broker-dealer firms that trade off the floor of an exchange ("upstairs
dealers") are substantially different from those established for a clearing firm carrying marketmaker accounts. The requirements for clearing firms' short options positions recognize that a liquid market exists where listed options are bought and sold at regularly quoted prices. The parallel requirements for upstairs dealers, on the other hand, are based on the assumption that no secondary market for the options exists and that the options will inevitably be exercised. In addition, the net capital rule requires upstairs dealers to treat certain options positions separately even though these options positions offset the risks of other options positions held at the same time. This risk limiting feature of certain options strategies, however, has been recognized to some extent in the net capital rule for clearing firms carrying marketmaker accounts.

While the net capital approach to upstairs dealers may have been appropriate when adopted because the development of the listed options market was still uncertain, it places unnecessary financial restrictions on the ability of the upstairs dealers to participate in the listed options market today. The Options Study believes that the Commission's net capital rule should be revised to take into account the marketability of listed options and the risk limiting feature of certain options strategies in establishing the financial requirements for upstairs dealers. These upstairs dealers would still be subject to more stringent
financial requirements overall than marketmakers and this revision would not adversely impact on the protections afforded by the net capital rule.

Accordingly, the Options Study recommends:

THE COMMISSION SHOULD CONSIDER REVISIING ITS NET CAPITAL RULE TO ESTABLISH REQUIREMENTS FOR UPSTAIRS DEALERS THAT TAKE INTO CONSIDERATION THE EFFECTS ON RISK OF SPREADING STRATEGIES IN LISTED OPTIONS AND THE EXISTENCE OF A SECONDARY MARKET IN OPTIONS.

5) Marketmakers that are OCC Members

In June 1977, the Commission's net capital rule was amended as it applied to an OCC member which limited its business to acting as a marketmaker for its own account and to carrying the accounts of other marketmakers. The rule as modified permitted these firms to apply the same limited "haircut" deductions to their options and stock positions under the net capital rule as those required for marketmaker accounts being cleared through an independent clearing firm.

Prior to this amendment, such OCC members having an equity interest in a marketmaker account were subject to the more onerous "haircuts" applicable to upstairs dealers. The effect of the change was substantial. For example, the net capital deduction required of an upstairs dealer on selling an uncovered call option is 30 percent of the value of the stock underlying the option with a minimum charge
of $250 for each options contract. If the same position is held by a marketmaker, the deduction is 75 percent of the market value of the option with a minimum charge of $75 for each options contract.

The options and stock positions of the marketmaker carried by an independent firm are subject to arm's-length negotiated review by that independent firm as part of the latter's effort to protect its financial interest as a creditor of the marketmaker accounts it carries. This safeguard, however, is lacking when a clearing firm is trading in options on the floor of an exchange for its own account or is clearing an account in which an affiliated person has an ownership interest.

Accordingly, the Options Study recommends:

**THE COMMISSION SHOULD CONSIDER REVISING ITS NET CAPITAL RULE SO THAT THE CAPITAL REQUIRED FOR ALL OF THE POSITIONS IN AN ACCOUNT IN WHICH A CLEARING FIRM, ITS OFFICERS, PARTNERS, DIRECTORS OR EMPLOYEES MAINTAIN A FINANCIAL INTEREST ARE INCREASED. THIS MAY BE ACCOMPLISHED BY REQUIRING THAT SUCH ACCOUNTS MEET THE SAME FINANCIAL REQUIREMENTS THAT ARE APPLICABLE TO UPSTAIRS DEALERS.**

**b. Options Specialist Stock Credit**

Federal Reserve Board ("FRB") margin requirements effectively limit the credit that may be extended by a clearing firm to a marketmaker to 75 percent of the value of stock underlying options positions, provided that the exercise price of the option is not more than 5 percent greater than the current market price
of the stock in the case of calls, or 5 percent less in the case of puts ("out-of-the-money" options). The remaining 25 percent must be deposited by the marketmaker with his clearing firm if the stock position is carried for more than five business days after purchase. If an underlying stock position is sold within five days, the marketmaker, unlike public customers, is not required to make any margin deposit on the stock with his clearing firm. Certain marketmakers have made a practice of selling their stock within this five-day period and then immediately repurchasing the stock to retain their position without the necessity of putting up a margin deposit. The Options Study does not believe this type of activity contributes to an orderly market or to the financial integrity of the options market.

1) Stock Hedge

Marketmakers frequently need to hedge the risks of their options positions with stock, particularly when the market in a suitable offsetting call or put is not sufficiently liquid or if puts are not available. The Options Study believes that credit provisions should be revised to permit the options marketmaker to finance his bona fide hedging stock transactions through his clearing firm without making a margin deposit ("good faith credit basis") even if the option is out-of-the-money. This type of financing is herein called "Specialist Stock Credit." The amount of Specialist Stock Credit that should be available to the marketmaker through his
clearing firm, however, should be carefully defined to avoid Specialist Stock Credit being used to finance stock speculation.

Two steps need to be taken. First, Specialist Stock Credit available to the options marketmaker through his clearing firm should be strictly limited to finance no more than that number of shares for which any increase or decrease in the price of the underlying stock would be offset by an equivalent or greater decrease or increase in the market value of the hedged options position. In this way, the marketmaker will be unable to use this Specialist Stock Credit to speculate in stocks underlying listed options because any gain or loss on the stock most probably would be offset by the loss or gain on his options positions.

To determine whether a stock position represents a bona fide hedge of the risks of an options position, the ratio of expected stock to options price movements can be calculated using a mathematical formula based upon: (1) the current risk free interest rates (United States government securities); (2) the exercise price of the options; (3) the market price of the stock; (4) the time to maturity of the options; and (5) the volatility of the stock computed from past stock price movements. This formula can be used to predict the number of shares of stock necessary to offset price movements in related options and is called an options pricing formula. Various pricing formulas are currently used by most marketmakers, and by clearing firms granting
them credit, to determine the equivalent share risk exposure of an options, or options and stock, position; however, a uniform rule should be adopted for determining the Specialist Stock Credit hedge ratio.

Any position in an underlying stock obtained or retained in a market-maker account in excess of that necessary to hedge an options position, or any stock position that did not underly a qualified options position, should be immediately subject to full initial and maintenance margin requirements.

A position in an underlying stock may be a bona fide hedge at the time the stock is acquired but, due to a change in the delta hedge ratio resulting from stock price movements, the underlying stock position may exceed the amount permitted to be carried on a good faith credit basis. In this event the options marketmaker should be permitted to promptly liquidate his excess stock position or adjust his options position to a hedge position, rather than being required to make a margin deposit.

Accordingly, the Options Study recommends:

THE COMMISSION SHOULD CONSIDER RECOMMENDING
TO THE FRB THAT CLEARING FIRMS FOR MARKETMAKERS
BE PERMITTED TO FINANCE POSITIONS IN A STOCK
UNDERLYING A MARKETMAKER OPTIONS POSITION
ON A GOOD FAITH CREDIT BASIS PROVIDED THE
SPECIALIST MARKETMAKER'S SPECIALIST ACCOUNT
CONTAINS ONLY THOSE SHARES NECESSARY TO HEDGE AN
OPTIONS POSITION, AS DETERMINED IN ACCORDANCE
WITH AN APPROPRIATE OPTIONS PRICING FORMULA.
2) **Limit on Stock Qualifying for Specialist Stock Credit**

The second step that should be taken to control Specialist Stock Credit is to limit the Specialist Stock Credit available through clearing firms to a stock underlying a limited number of options classes in which a marketmaker can reasonably be expected to use his capital actively. All marketmakers are currently subject to the same credit rules with respect to stock underlying any class of options listed on the exchange where they are floor participants.

The Options Study recognizes that the competitive marketmaker system was designed to allow flexibility in order to permit competing marketmakers to move their activities into different classes of options as changing market conditions required and for that reason the Options Study is not recommending any change in the margin rules applicable to marketmakers for options transactions. Nevertheless, based on a review of the number of classes of options in which the most active CBOE marketmakers had stock positions, the Options Study has concluded that Specialist Stock Credit should be limited to stock underlying no more than 20 classes of options at any one time plus such additional classes of options as a marketmaker has been asked to maintain a market by exchange officials to meet unusual options activity. This number, however, should be periodically reviewed to assure that Specialist Stock Credit
is being used properly and that this limit does not unduly interfere with the market making process. The marketmaker should be required to register in advance in those options in which he expects to be eligible for Specialist Stock Credit except in cases of specific exchange approval.

Accordingly, the Options Study recommends:

THE OPTIONS EXCHANGES SHOULD REVISE THEIR RULES TO RESTRICT THE ABILITY OF MARKETMAKERS TO OBTAIN SPECIALIST STOCK CREDIT TO STOCK UNDERLYING NO MORE THAN 20 OPTIONS CLASSES, WITHOUT SPECIFIC EXCHANGE APPROVAL.

5. Market Structure

The Options Study also examined some of the major issues of market structure in the standardized options markets. These issues include (i) the multiple trading of standardized options, (ii) the integration of trading of standardized options and their underlying securities, (iii) whether, and under what circumstances, standardized options should be traded in the over-the-counter markets, (iv) whether, and under what circumstances, the trading of standardized options should be permitted on the New York Stock Exchange, and (v) steps that the Commission should consider at this time to assure that the standardized options markets evolve in a manner that is consistent with the establishment of a national market system.

The Options Study Report discusses these issues with a view toward developing an analytical framework within which they may be evaluated. The Options Study does not present specific recommendations with respect to whether the Commission should approve or disapprove any particular rulemaking proposal.