will be eliminated for the profit which existed when the position was established. If the calls expire in-the-money, they will be exercised by the holder and the stock will be delivered to that party; if the puts expire in-the-money, they will be exercised by the firm which again will result in the stock being delivered out of the firm. In either case the out-of-the-money options will expire worthless and the long stock will be delivered out of the firm pursuant to the exercise of the in-the-money options.

Since holding the conversion position presents no market risk, the transaction will produce a profit to the firm if the net proceeds 33/ from selling the call and buying the put exceed the cost of carrying the stock until the expiration of the options.

For example, assume XYZ stock is trading at 50, and the XYZ 50 calls one month prior to expiration can be sold at 2-1/2 and the corresponding XYZ 50 puts can be bought at 2. Assume further that the broker-dealers' cost of money is 9 percent. The cost of owning 100 shares of XYZ until expiration of the options (1/12 year) will be $5,000 X 9% X 1/12, or $37.50. The options position (short call + long put) will produce net proceeds of 1/2 point ($50). The profit from a conversion arbitrage transaction can be shown as follows:

33/ In determining the "net proceeds" for this purpose, the intrinsic value (the in-the-money portion) of either the put or call premium must be subtracted.

	Proceeds	less	Cost	=	Profit
Sell call Buy put	+ 2-1/2 - 2		Interest cost of investing $5,000 for one month to buy 100 shares of stock - $37.50		$12.50
	+ 1/2 or $50.				

Therefore, $12.50 can be earned without risk each time the position can be established up to a theoretical maximum of 500 times 34/ or $6,000. To achieve this maximum profit, however, the arbitrage transaction would have to be effected 500 times at the assumed prices. In practice, the arbitrage transactions themselves may bring prices back "into line" fairly quickly, thus limiting the potential profits.

(b) Reverse conversion arbitrage. If a call is undervalued relative to its corresponding put, reverse conversion arbitrage is a riskless method of capturing the amount of this undervaluation. The reverse conversion equation is as follows:

SHORT STOCK + LONG CALL + SHORT PUT = NO MARKET RISK

If the calls are in-the-money at expiration they will be exercised by the firm to acquire stock to cover the short stock position. If the puts are in-the-money they will be exercised by the holder. In either case stock will be acquired by the firm to cover the short stock position and the out-of-the-money options will expire worthless.

Reverse conversion arbitrage will thus be profitable whenever the interest which can be "earned" on the proceeds from the short

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34/ Under the position limit rules of the options exchanges, the combined total of short calls and long puts must not exceed 1,000 contracts since these positions are on the same side of the market.

stock sale exceeds the net cost of the long call, short put position. Normally the interest earnings are expressed in terms of interest expense "saved" since the proceeds of the short stock sale are used to reduce the broker-dealer's outstanding bank borrowings.

Reverse conversion arbitrage can be demonstrated using the following example: Assume that XYZ stock is trading at 50 and that the XYZ calls which expire in one month are undervalued with respect to puts. The calls can be bought at 2-3/8 and the puts can be sold at 2-1/8 for a net cost to the firm of $25 (1/4 x 100) to establish the position. If the firm sells the stock short it can earn $37.50 in interest income for each 100 shares sold ($5000 x 9% x 1/12). This income is offset by the cost to the firm of $25 to establish the options position, which gives the firm a net profit of $12.50 (37.50 - $25) each time the position is established. 35/

Proceeds	less	Cost	=	Profit
Interest on $5,000 for one month derived from selling 100 shares short - $37.50		Buy call + 2-3/8 Sell put - 2-1/8 + 1/4 or $25		$12.50

An additional cost, however, must be considered by a firm evaluating a possible reverse conversion opportunity. This is the

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35/ The examples in this section assume that there are no dividends payable on the underlying stock prior to expiration of the options involved. The cost of carrying the long stock portion of the conversion position would be offset to the extent dividends are received on the stock. The interest generated by the short stock portion of the reverse conversion position will be offset by payment of any dividends, since the short seller is responsible for any dividends paid on the stock which he has borrowed.

cost of borrowing stock to deliver in connection with the short sale. Upstairs firms with a significant retail business, however, hold a substantial amount of customers' margin securities 36/ which the firm can use, at no cost, to satisfy short sale delivery requirements. In fact, these firms employ reverse conversion arbitrage as a means of profiting from the availability of these securities. Firms without access to customers' margin securities are largely precluded from engaging in reverse conversion arbitrage unless they are able to borrow stock at little cost.

Conversion and reversion arbitrage opportunities are only available for those 25 stocks which have both listed put and call options.

(2) Hedged short selling

As a result of their access to customers' margin securities, some upstairs firms engage in an options trading strategy generally referred to as a "hedged short sale," which involves selling stock short and buying deep-in-the-money calls. As described below, this strategy is not technically a hedging or risk limiting strategy, but a riskless arbitrage transaction. 37/ Hedged short sales as an

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36/ From the broker-dealer's perspective, the dollar amount of the securities utilized is limited to 140 percent of customers' margin debits, see 17 CFR 240.15c3-3(a)(4).

37/ The strategy may, however, be employed as a true hedging strategy of a bearish nature in the more usual case where the premium paid for the calls (less any intrinsic value) exceeds the interest on the short sale proceeds to expiration. This excess could be viewed as the cost paid for a position that is the equivalent of owning a put, where a listed put is not available (but at a greater capital cost).

arbitrage strategy are effected by upstairs firms only when the interest on the proceeds of the short sale until the expiration of the options (less any dividends) exceeds the premium on the calls less their intrinsic value. Intrinsic value is that amount by which a stock's price exceeds the exercise price of its call. Near expiration deep-in-the-money calls can frequently be bought at parity (the price at which the short stock sale can be made less the exercise price of the calls) and there will be no cost offset to the interest generated (except dividends where applicable) assuming free access to stock.

For example, in April, an upstairs firm sells short 1,000 shares of stock at 30, receiving proceeds of $30,000 from the sale. The interest receivable on the proceeds (assuming an interest rate of 9% for 1 month) is $225. The firm also buys 10 in-the-money calls (the May 25s) at 5-1/8. The premium on the call in excess of its intrinsic value is 1/8 or $125 for 10 contracts. Thus, the profit from this transaction, if the position is held to expiration, is $225 less $125 or $100.

Because of the need for stock to deliver to the buyer's broker in connection with the short sale, this strategy is not viable for broker-dealers (trading on or off the exchange floor) without access to customers' margin securities. Thus, in the example described above, if a firm had to pay more than $100 to borrow 1,000 shares of stock to deliver in connection with the short sale, the transaction would be unprofitable.

(3) Merger or exchange offer arbitrage

Upstairs firms will commit their capital to arbitrage transactions in mergers, exchange offers, and tender offers when the potential returns exceed the risks that the proposed takeover will not be consummated. In this type of arbitrage, the firm buys the securities of the company being sought (sometimes referred to as the "target" company) and sells short the securities of the bidding company. The firm expects ultimately to exchange the target's securities for the bidders' securities to cover the short position in the bidder's securities. The profit, if any, comes from the spread between the price which the firm paid for the "target's" securities, and the price it received for selling short the bidder's securities. 38/ The firm takes the risk that the merger or exchange offer will not be consummated, in which case it is left with a large long position in the "target's" securities, which must be liquidated, and an equally large short position in the bidding company's securities, which must be covered. There is an additional risk that the transaction will be delayed, in which case the interest cost of carrying the long stock position may exceed the potential profit.

As noted, the firm's profit lies in the spread between the price of the bidder's securities and the price of the "target's" securities as modified by the terms of the exchange offer. For example, if company A offers to exchange its securities, which are trading at $50, on a

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38/ This assumes a one-for-one exchange ratio for the transaction.

one-for-one basis for the securities of company B which are trading at $47 through a merger, an upstairs firm might buy B at $47 and sell A short at $50. Then, if the merger is consummated, he can exchange his B stock for A stock and thereby cover his short position in A at a $3 profit less the interest costs of owning the long position in B stock.

Upstairs firms may use listed options instead of stock to limit their capital commitment in particular merger or exchange offer arbitrage situations. The strategies most frequently used are selling calls of the bidder, purchasing puts of the bidder, and purchasing calls of the "target. The use of listed options in merger or exchange offer arbitrage is merely an alternative to the broker-dealer's use of stock. Since the standards governing the selection and maintenance of underlying securities for listed options generally limit the subject securities to those of the largest, most well-capitalized issuers options are not as yet used very frequently in merger or exchange offer arbitrage. Options are seldom used in such situations because very few companies with listed options are the subject of tender offers or exchange offers.

Options are also used by arbitrageurs in connection with certain tender and exchange offers in which less than all the outstanding stock of the "target" company is sought by the bidder. In such instances, the bidding company may reserve the right to accept tendered shares on a pro rata basis in the event that more shares are tendered than the bidder desires. An arbitrageur may find that less than all of his

tendered shares have been accepted and that he is left holding a long stock position, which, until it is liquidated, will be held at market risk. In order to reduce this risk, arbitrageurs may write call options equal to the number of shares they expect to own in the event that the offer is oversubscribed and not all their shares are accepted. This is designed to provide a hedge against loss on the long stock position equal to the amount of the premium received from the sale of the call and is viewed by the arbitrageur as the disposition of the long stock position through the sale of a "stock equivalent" if the call options are in-the-money.

The Commission has proposed amendments to Rule 10b-4 under the Exchange Act. That Rule, generally speaking, is designed to prevent a person from tendering stock he does not own, referred to as "short tendering." 39/ One proposed amendment to Rule 10b-4 would prevent a person from tendering stock even if he owns listed options to purchase that stock unless he has irrevocably exercised those options. 40/ This amendment would codify the staff's interpretive position that ownership of a listed call does not constitute ownership of the underlying stock and is designed to prevent the same stock from being tendered by the owner of the option and the owner of the stock.

39/ Securities Exchange Act Release No. 14157 (November 9, 1977).

40/ See proposed Rule 10b-4(a)(3) (definition of "equivalent security").

(4) Discount options arbitrage

Occasional obvious pricing inefficiencies arise between the prices of listed options and their underlying securities and present upstairs traders with the opportunity to profit, such as when the bid price for a stock is greater than the exercise price of an in-the-money call on that stock and its premium. 41/ For example, if the market for an underlying stock is 16-1/8 bid, 16-1/4 asked, and an in-the-money call with an exercise price of $15 can be bought for $1, the options could be purchased for the dollar, exercised at a cost of $15 per share of stock (total cost $16), and the stock sold for 16-1/8. The transaction would result in a profit of 1/8, less transaction costs. Because commission costs would eliminate the profit from this type of transaction, only those firms who pay no commission costs can engage in discount options arbitrage. Opportunities for this type of transaction generally arise near the expiration date of an options series, when premiums of the in-the-money series may have been driven below parity due to the heavy selling of such options by public customers. These customers sell, rather than exercise, their options to avoid paying the commission costs involved in exercising the in-the-money options, acquiring the stock and selling it in order to liquidate the position.

41/ In such instances, the call is said to be selling at a "discount from parity."

c. Block trading

One significant impact of increased institutional investor participation in the securities markets has been the growth of the number of transactions involving large quantities or "blocks" of securities. Because the existing markets may be incapable of absorbing transactions involving large amounts of a security without causing significant variations in that security's prevailing market price, some upstairs broker-dealers have developed the ability to facilitate customers' block transactions by engaging in block positioning. The term "block positioner" is generally used to describe a broker-dealer who facilitates the execution of a block transaction in an equity security by commiting its own capital to purchase a part of a customer's block sale order or by effecting a short sale (or a sale from inventory) to fill part of a customer's block purchase order. The definition of "marketmaker" in Section 3(a)(38) of the Exchange Act includes block positioners.

Listed options have afforded block positioners a means of hedging against the risk of loss from the positions they assume when executing a block transaction order. Typically, the holder of a block of stock, usually an institutional investor, "shops" a block by calling certain upstairs firms to see if they have any interest in the block. Before a broker-dealer agrees to bid for a block, it first attempts to dispose of the block by finding the "other side" of the order.

If successful, the broker-dealer may generate brokerage commissions from handling both sides of the transaction on an agency basis with no commitment of capital. If a customer cannot be found for some or all of the other side of a block order, however, some broker-dealers will commit capital in order to purchase, for their own account, some or all of the stock being sold by the customer.

If a broker-dealer does purchase all or part of a block it generally waits to see how the market is affected by the transaction while at the same time continuing to look for a customer or customers for the other side of its position. If the "other side" is found, or if the market reestablishes the price level for the stock which existed prior to the execution of the block, the block positioner can dispose of the position without the need to use listed options. If the block cannot be disposed of satisfactorily, the firm can be subject to significant market risk. It can limit this risk by selling listed call options (or buying puts) to hedge against this loss if it is long the stock, or by buying calls (or selling puts) if it is short the stock. 42/

Since prospective sellers initiate a large majority of NYSE block transactions, 43/ the most common use of options by a block

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42/ Effecting options transactions with knowledge of an impending block sale of the underlying stock, but prior to the execution of and public dissemination of the fact of that transaction, is referred to as "front-running a block." Depending upon the circumstances of a particular transaction, "shopping" a block may raise front-running concerns. See infra at 59-64.

43/ See, e.g., Institutional Investor Study, Vol. 4 at 1507 (1971).

trader is to write calls to hedge the risk of loss from a long stock position acquired from a customer selling a block. Conceptually, writing in-the-money calls against a long stock position can be viewed as analogous to shorting stock against a long stock position to achieve a net 'flat' position. In this hedged position, a decline in the price of the stock (resulting in a potential loss) would be offset by a decline in the call premium (making it cheaper to cover the short call position) and vice-versa. This allows the firm to largely eliminate market risk until the long stock and short call position can be unwound. Using options in block trading carries a cost for the broker-dealer. It creates a short call position which, like the long stock position, is subject to the risk of market movements and which must ultimately be liquidated.

Certain broker-dealers will position options blocks 44/ for customers when they receive options orders too large to be executed on the options floor. Institutional customers using a buy (stock) and write (options) strategy generally give both the stock and options orders to the same broker-dealer because of lower commission costs and the convenience of placing both orders with one firm. These orders are frequently entered by the customer as contingency orders, at a net price, with the execution of the stock order contingent

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44/ The CBOE deems an option transaction involving more than 100 contracts to be an option block transaction, see CBOE Educational Circular No. 23 (October 10, 1978).

on the execution of the options order, and vice versa. For example, if XYZ stock is at 26-5/8 and the XYZ 25 calls are at 3-5/8, a customer might place the order (buy stock, sell calls) for a net cost of 23 and give the broker-dealer discretion to execute the component parts of the transaction at prices which result in a net cost of 23. In order to obtain the entire order, broker-dealers sometimes position the options being sold by the customer and thus find themselves in a hedged position (short stock, long call). Some broker-dealers engaged in a large institutional options business have suggested that, if more listed puts were available, they might set up a reverse conversion position (short stock, long call, short put) from their short stock, long call position to eliminate, rather than simply hedge, their risk.

In addition to being used to shift some of the risks associated with positioning blocks, the listed options market is used by many upstairs firms to generate brokerage commissions arising from the purchase or sale of equity blocks by their institutional customers. A broker-dealer with institutional customers will check the depth of the market for specified options to determine whether a large number of calls can be purchased at or near or at a discount from parity. The firm can offer the underlying stock to the customer knowing that it can, if necessary, acquire the options as a hedge or, if an in-the-money series is available, simply acquire the options for the purpose of exercising and selling the stock to the customer.

For example, a firm might check the market for specified options to determine whether a large number of calls can be purchased at or near parity. If sufficient market depth exists, the firm might indicate on Autex 45/ that it is a seller of the underlying stock. If the notice on Autex results in an expression of buying interest by an institutional customer, the firm can offer to sell the stock short to the customer knowing that it can, if necessary, acquire the options as a hedge against the short position or, if an in-the-money series is available, simply acquire the options for the purpose of exercising and selling the stock to the customer.

d. Creation of Synthetic puts. The limited availability of listed puts has created some demand from certain institutional customers and some retail customers for so called "synthetic puts." To create a syntnetic put, a firm can sell XYZ stock short, buy listed XYZ calls and then sell to a customer an unlisted, non-standardized put on XYZ stock. 46/ In other words, the firm sells to the customer the right to sell XYZ stock to the firm on terms corresponding to those of the listed call purchased by the firm.

45/ Autex is primarily a communications system that supplements the existing communications systems of upstairs broker-dealers. Negotiation and execution of orders are not accomplished through Autex.

46/ This transaction puts the firm in the same riskless position as a reverse conversion transaction (short stock, long call, short put = no market risk), see supra at 27. The synthetic put, however, would not be included in the position reports to the options exchanges and thus may raise concerns with respect to exchange position limit rules. See Chapter IV.

The "right" sold to the customer is called a synthetic put since it is similar to a listed put except that it has been created by the firm through transactions in the related stock and calls. A synthetic put has no general marketability and is usually sold to the firm which created it at a price reflecting the then current prices for the calls and underlying stock. 47/

In addition, broker-dealers who find themselves already in a short stock, long call position as a result of their block positioning activities may have the incentive to solicit orders for synthetic puts, the sale of which will both eliminate the market risk of the firm's position and earn commissions. Unless done pursuant to an exemption from the registration requirements of the Securities Act of 1933, the offer and sale of a synthetic put, like the offer and sale of any unregistered security, violates Section 5 of that Act. 48/

47/ A firm repurchasing a synthetic put does so by "unwinding" the transactions (short stock, long call) which "created" the synthetic put. Thus, it buys stock and sells calls.

48/ In 1973 the Commission proposed Rule 238 under the Securities Act of 1933 to exempt put and call options from registration under that Act, subject to certain conditions. See Securities Act Release No. 5366 (February 8, 1973) and proposed Rule 9b-2 under the Securities Exchange Act of 1934, see Securities Exchange Act Release No. 9994 (February 8, 1973). Neither rule was adopted by the Commission. More recently, in connection with the trading of listed options on the Amsterdam Exchange in Holland, the Commission issued a release stating that "in the absence of [an effective] registration statement or an appropriate exemption, the public offer, distribution or sale of such options in the United States is unlawful." See Securities Act Release No. 5930 (May 11, 1978).

3. INSTITUTIONAL INVESTORS

Institutional money managers increasingly have used options for adjusting portfolio risk/reward parameters. Many institutional investors have facilities and equipment through which they receive financial news and market information in the same manner as market professionals who are members of exchanges. They can obtain real-time last sale and quotation information when it is disseminated through the consolidated transaction reporting system. But, unlike upstairs firms and marketmakers, institutional customers can generally only react to reports of news developments and market transactions by giving an order to a member firm who then transmits the orders to the floor for execution. 49/ Although this time delay may be only a few minutes, it nonetheless can constitute a substantial trading disadvantage vis-a-vis those members, especially in an active market when prices are changing rapidly.

Because institutions are large customers of broker-dealers, they can obtain, indirectly, some of the advantages possessed by member firms. They have sophisticated communications systems which frequently include direct wires to the trading desks of the broker-dealers used to execute their orders. In order to formulate their trading strategies, institutional investors use either their own options

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49/ But see, e.g., CBOE rule 6.70. This rule allows institutions to send their orders directly to the CBOE floor for handling by floor brokers.

pricing models or can obtain such computer generated information from broker-dealers. Institutional investors are also offered research information, ideas regarding trading strategies, and portfolio review and analysis by member firms. They are also able to negotiate relatively low commissions for the execution of their orders. Even with low commissions, however, some trading strategies such as stock and option arbitrage remain generally out of the reach of most institutional customers because the pricing inefficiencies upon which these arbitrage transactions are based are normally smaller than the commissions they pay.

As certain regulatory impediments have been eliminated by the Comptroller of the Currency, state insurance regulators and the Internal Revenue Service, listed options are being used more frequently by regulated institutional investors such as bank trust departments, insurance companies and investment advisors who manage employee benefit and welfare plans subject to the Employee Retirement Income Security Act of 1974 ("ERISA"). 50/

The regulatory environment in which these institutions function, however, has nonetheless substantially affected the way in which institutional investors use options. For example, an opinion of the Comptroller of the Currency permits the banks under its jurisdiction

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50/ See generally Pozen, Robert C., "The Purchase of Protective Puts by Financial Institutions," The Financial Analysts Journal, July/August 1978.

to write calls against assets under management, and has made covered call writing the predominant options strategy of bank managed fiduciary accounts. 51/ The use of options in the management of the stock portfolios of insurance companies is subject to the requirements of state insurance regulators which, to the extent they permit any options transactions, generally permit covered calls to be written and, to a lesser extent, the purchase of calls. 52/

Investment advisors, including investment advisory subsidiaries of banks, are generally under fewer restraints than banks and insurance companies although, in many instances, the nature of the assets under management restrict the use of options. For example, investment advisors who manage pension and welfare fund portfolios subject to the provisions of ERISA generally do not purchase options or write uncovered options, since many ERISA accounts have bank trustees and are therefore subject to the Comptroller of the Currency's limitation to covered writing transactions. While most registered investment companies do not buy or sell put or call options, they are not prohibited from engaging in options transactions by the Investment Company

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51/ Trust Banking Circular No. 2 (July 2, 1974). The Comptroller has not explicitly permitted options purchases or uncovered writing transactions.

52/ For example, the New York State Department of Insurance regulations state that "Insurers may not purchase any...options [other than in closing transactions]." Insurance Department of the State of New York, Regulation No. 72, Section 1744.

Act of 1940. 53/ Authority to engage in options transactions can be obtained by a vote of an investment company's shareholders and some investment companies have begun to use options as part of their investment programs. Shares of most of these funds are being offered to investors seeking income. These funds follow a buy and write program of purchasing option stocks and writing calls on a one-for-one basis against these stocks.

The Options Study found, based on its interviews with regulated institutional investors, that a substantial majority of those institutional investors using options concentrate on writing fully covered options, with only a small minority engaging in the purchase of calls in combination with fixed income securities, or other options strategies. 54/55/

53/ However, the writing of uncovered options (like the purchases of futures or forwards in contracts respecting financial instruments) may raise a question as to whether that activity involves the issuance of "senior securities" by the investment company within the prohibitions of Section 18 of the Investment Company Act of 1940.

54/ This observation is consistent with a survey conducted for the AMEX in 1976. This survey found that 79 percent of institutional investors surveyed concentrated on a covered writing strategy. See, A Summary of Investors In the Listed Options Markets, Louis Harris Associates for the American Stock Exchange, Inc., May, 1976.

55/ Another category of institutional investor is the investment partnership or "hedge fund". Comments of marketmakers on the options exchange floors and broker-dealers who execute stock and options orders from hedge fund customers suggest that a few large hedge funds have had a significant impact on options trading and that their size creates a potential for engaging in questionable trading practices involving the use of options. The Options Study was unsuccessful in attempting to voluntarily obtain trading information from hedge funds. Because they do not report to the Commission and because the Options Study did not use subpoenas, it was unable to evaluate stock and options trading practices by hedge funds.

4. SPECIFIC TRADING ABUSES

The discussion above focused primarily on the legitimate ways in which market professionals use options in connection with their trading strategies. As noted in the introduction, however, certain questionable trading practices have also been identified as being associated with options. These practices, discussed in more detail below, are proscribed by various sections of the Exchange Act, including Sections 9(a)(1), 9(a)(2), 10(a), 10(b), and 11(a).

While the discussion below focuses only on those questionable practices already identified and known to have occurred, variations of presently known manipulative stock/options trading may be identified if the surveillance systems of the self-regulatory organizations are refined, and if information derived from those systems was better shared among those organizations. 56/

a. Fictitious trades

When a bona fide options trade is made, a report of the trade is transmitted to the price reporting system of the exchange on which the trade occurred. In 1976, the AMEX discovered that some of its marketmakers were "reporting" trades even though no transactions had occurred. The reporting of these "non-trades", labelled "fictitious trades," might have been done for a number of reasons, including:

(1) creating a false or misleading impression of trading activity in an options class to induce others to purchase or sell options; or

(2) adjusting or updating the last sale price of an option to conform to the most recent transaction in the underlying stock; or

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56/ See Chapter IV.

(3) altering the closing price of an options position to reduce a trader's financial obligations to its clearing firm. 57/

After discovering the reporting of fictitious options trades on its floor in 1976, the AMEX notified the Commission of the problem. Both the AMEX and the Commission took action against the options specialists involved. The Commission obtained civil injunctions against nineteen persons and initiated administrative proceedings against seventeen persons based on the antifraud (Section 10(b)) and anti-manipulative (Section 9(a)) provisions of the Exchange Act. 58/

b. Prearranged trading

Prearranged options trades may be done for a number of reasons including (i) the wish to create a false or misleading appearance of active trading in the options in order to induce others to purchase or sell the options, (ii) or for tax purposes, or (iii) to create the appearance of an active, liquid market for the options. Pre-arranged trades involve the entry of an order by one person to buy or sell an option with the knowledge that another person will enter

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57/ Clearing firms mark their marketmakers' positions to the market at the close of trading to determine the current market value of the marketmakers' positions in order to compute their capital requirements. See Chapters IV and VII. The Options Study staff is aware of one instance where a marketmaker effected the last reported transaction or entered the closing quotation, for almost an entire month, for the purpose of enhancing the value of his positions which were "marked-to-the-market" by his clearing firm.

58/ Securities Exchange Act Release No. 13453 (April 19, 1977). The administrative proceedings were subsequently settled, Securities Exchange Act Release No. 13797 (July 22, 1977).

an order of substantially the same size, at substantially the same time, and at substantially the same price. A variation of the two-party prearranged trade is the "wash sale," which describes a transaction which involves no change in the beneficial ownership of a security.

In 1978, the Commission ordered administrative proceedings in connection with certain transactions which were effected among marketmakers at the CBOE. 59/ The Commission's staff alleged that these marketmakers had executed spread transactions to create losses for tax purposes. In addition to alleging violations of the antifraud provisions of the Exchange Act, the Commission also charged that these transactions were not executed by the marketmaker while he was acting in the capacity of a bona fide marketmaker as required by Section 11(a)(1) of the Exchange Act.

c. Churning

The introduction of multiply traded options, that is, of options classes listed on more than one exchange, created an environment in

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59/ Securities Exchange Act Release No. 14330 (January 3, 1978). The Commission accepted offers of settlement from all but one of the respondents and issued its findings and order imposing remedial sanctions. See Securities Exchange Act Release Nos. 14432 (January 3, 1978); 14431 (January 3, 1978) and 14479 February 6, 1978). The initial decision of the administrative law judge, which found a violation by the remaining respondent, was issued on August 22, 1978. The administrative law judge found that the respondent assisted in options transactions which he knew or should have known were not bona fide and which operated as a deceit on the public. This decision is presently being appealed to the Commission.

which options exchanges competed for the order flow for those options from broker-dealers. Because many brokerage firms automatically route their small public orders for an option to the options exchange with the greatest volume of trading in that option, marketmakers of options exchanges appear to have engaged in prearranged trades, wash sales and trade reversals among themselves to give the appearance of increased trading volume in the multiply-traded option for the purpose of inducing transactions in such options on their options exchanges.

The Commission has stated that this practice, called "chumming," may violate the antifraud and antimanipulative provisions of the Act. 60/ The Commission issued a release stating its view that options marketmakers who may have been "increasing substantially their proprietary trading in certain dually traded options . . . [in order] to induce the purchase or sale of such dually traded options on their options exchanges instead of other options exchanges on which the same class is traded" may have engaged in conduct which violates Section 9 and 10 of the Exchange Act. In addition, the Commission "cautioned [brokers] against relying solely on aggregate trading volume reported on [options] exchanges" when determining the market "to which to route their customers' orders." 61/ To provide better volume data for use in the future as a measure of "the relative quality of markets," the Commission "arrange[d] for publication of reports obtained from exchanges trading options regarding proprietary options transactions by floor members." 62/

60/ Securities Exchange Act Release No. 13443 (April 5, 1977).

61/ Id.

62/ Id. See also Securities Exchange Act Release No. 13448 (April 15, 1977) and No. 13476 (April 27, 1977).

d. Stock option manipulation

(1) Minimanipulation

A relatively small commitment of capital to an options position can result in substantial percentage gains if a favorable movement in the price of the underlying stock causes a corresponding favorable movement in the price of the option. An attempt to influence the price movement in a stock to benefit a previously established options position is referred to as a stock/option manipulation. If the attempted manipulation is of short duration, and involves a relatively slight price movement in the stock, the effect is often called minimanipulation. The incentive and opportunity for persons to attempt minimanipulations is demonstrated by the following series of stock and options transactions which the Commission staff recently alleged were effected by a marketmaker on the CBOE. 63/

In July, with IBM stock trading at about 260, a marketmaker was short approximately 200 July 260 calls. The value of his short position would be enhanced if, by depressing the price of the stock, the marketmaker could cause a corresponding drop in the price of the July 260 calls. To accomplish this goal, the marketmaker purchased 50 deep-in-the-money calls (the July 240s) and submitted an exercise notice with respect

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63/ See Securities Exchange Act Release No. 15269 (October 24, 1978).

to these contracts. 64/ He then increased his short position in the July 260 call options by selling an additional 100 calls at prices ranging from 2-7/16 down to 2-1/4. Within a few minutes, he sold 3,900 shares of the underlying stock acquired through exercise of the July 240 calls at declining prices ranging from 260-1/2 down to 259-1/2. The options market quickly reacted to the price decline in the underlying stock and the July 260 calls declined in price permitting the marketmaker to profitably cover, within a matter of minutes, a substantial part of his short position in the July 260 calls at prices ranging from 1-7/8 to 2-1/16. While the dollar profit from closing his short options position was relatively small (generally less than 1/2 point), the profit represented a percentage gain of between 20-25 percent on an options position initially valued at slightly over $70,000. The profit was made despite the slight transaction costs incurred by the marketmaker to sell the stock, and the small time premium paid to purchase the deep-in-the-money calls.

Because only a small movement in the price of the underlying stock will result in substantial percentage gains on the related options, stock/option minimanipulation may even be accomplished without the

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64/ The purchase of the deep-in-the-money calls was used by the marketmaker as an alternative (and inexpensive) method of acquiring the stock needed to sell in an attempt to depress the market without subjecting himself to the restrictive provisions of the Commission's short sale rules, e.g., 17 CFR 240.10a-1, or to the risk of being short both the stock and the options. Under options exchange rules (or interpretations of such rules), a holder of an option who submits an irrevocable exercise notice is deemed to be long the underlying stock. See, e.g., Interpretation .02 to CBOE Rule 11; CBOE Educational Circular No. 10 (August, 1975).