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Recommended Citation
Available at: http://ir.lawnet.fordham.edu/flr/vol61/iss6/9
PUPPET MASTERS OR MARIONETTES: IS PROGRAM TRADING MANIPULATIVE AS DEFINED BY THE SECURITIES EXCHANGE ACT OF 1934?

LAWRENCE DAMIAN MCCABE

INTRODUCTION

Gould did it. Fisk did it. Joe Kennedy did it. The Hunt brothers tried to do it. Market manipulation, as well as attempts to limit its deleterious effects, has a long history in the commodities, securities, and futures markets both in the United States and abroad. Historically, as new investment instruments are introduced into the markets, individuals found ways to use those instruments to manipulate the markets. Consequently, when program trading was introduced into the markets in the early 1980s, those acquainted with the securities industry asked: Is program trading manipulative per se or is the practice simply the target of

1. Jay Gould, with Fisk as his partner, participated in one of the "most audacious speculations yet witnessed in Wall Street: an attempt to corner ... entire, the gold supply of the nation." Jerry W. Markham, Manipulation of Commodity Futures Prices—The Unprosecutable Crime, 8 Yale J. Reg. 281, 289 & n.28 (1991) (quoting Maury Klein, The Life and Legend of Jay Gould 99-115 (1986)) (covering a general history of anti-manipulation legislation and the actions leading up to the criminalization of manipulation and the effectiveness of the legislation on commodities futures manipulation).
2. See id. at 289.
3. Before taking the helm of the SEC, Joseph Kennedy was a known "pool operator." Although not illegal when Kennedy participated in the pools, one of the main purposes of the Securities Exchange Act of 1934 was the eradication of pools. See Michael Parrish, Securities Regulation and the New Deal 179-80 (1970) (giving a general history of the '34 Act and the personalities and political and economic philosophies of its authors). For a discussion of "pools," see infra notes 196-202 and accompanying text.
4. See Minpeco, S.A. v. Conticommodity Servs., Inc., 552 F. Supp. 332, 334-36, 340 (S.D.N.Y. 1982) (relating the events of 1979-1980, when silver prices rose from $9 an ounce to $50; on a motion to dismiss a claim, the court requested that an amended claim be entered to show fraud by the trading defendants while dismissing the claim against Commodity Exchange, Inc. and the Chicago Board of Trade); see also Markham, supra note 1, at 343-46 (noting the disastrous attempt of the Hunt brothers to "corner" the silver market in the 1970s and the economic collapse of the silver market when the brothers failed).
5. See 1 John R. Dos Passos, A Treatise on The Law of Stock-Brokers and Stock-Exchanges 615-47 (2d ed. 1905) (tracking the history of anti-manipulative measures from the Lex Romana to the New York Penal Code at the turn of this century); Markham, supra note 1, at 288; M. Van Smith, Preventing the Manipulation of Commodity Futures Markets: To Deliver or Not to Deliver?, 32 Hastings L.J. 1569, 1571-73 (1981) (dating the attempts to control commodity manipulation to the ancient Romans and Greeks).
6. See 1 Dos Passos, supra note 5, at 644-47; Van Smith, supra note 5, at 1571-73.
7. Program trading is defined by the New York Stock Exchange, Inc. as any trading strategy involving the related purchase or sale of a 'Basket' or group of 15 or more stocks having a total market value of $1 million or more.” New York Stock Exchange, Inc., The Official Constitution and Rules of the New York Stock Exchange Inc. ¶ 2080a, Rule 80(A)(C)(l), at 2656 (1990). Part I of this Note will define program trading in more detail as well as the most famous (or perhaps infamous) type: index arbitrage.
8. See Steve Thel, Regulation of Manipulation Under Section 10(b): Security Prices
modern-day Luddites\textsuperscript{9} who fear computers?\textsuperscript{10}

Although program trading has provoked considerable controversy since its introduction in 1982,\textsuperscript{11} the stock market crash of 1987 triggered the most criticism.\textsuperscript{12} On "Black Monday," October 19, 1987, the equities markets suffered their greatest financial setback since the 1929 crash.\textsuperscript{13} The Dow Jones Industrial Average ("DJIA") lost over twenty percent of its value in a single day of trading, dropping 508 points.\textsuperscript{14} The presidential task force assigned to study the causes of the 1987 crash stated that, although not solely to blame for the markets' dysfunction, program trading and its close cousin, portfolio insurance, were significant contributing factors to the 1987 crash.\textsuperscript{15} Since 1987, Congress, the Securities and Exchange Commission ("SEC"), Commodities Futures

\textit{and the Text of the Securities and Exchange Act of 1934,} 1988 Colum. Bus. L. Rev. 359, 429 (program trading "is fairly characterized as manipulative, and accordingly section 10(b) should be understood to forbid its use or employment").

9. A Luddite is any person who fears that new technology will economically harm him and seeks to destroy it. Luddite is derived from the name given to English artisans who, in 1811 and 1812, rioted and destroyed newly introduced machinery that would deprive them of employment and wages. Although dealt with harshly in Great Britain (execution), the movement spread to the Continent and caused major labor upheavals in France and Germany. The term is said to be derived from a mental incompetent named Ned Lud. See 3 Nationalism, Industrialization, and Democracy 1815-1914: A Documentary History of Modern Europe 66-72 (Thomas G. Barnes & Gerald D. Feldman eds., 1981).


11. See infra note 97 and accompanying text.


13. See Presidential Task Force on Market Mechanisms, Report on 1987 Market Crash 1 (1988) [hereinafter Brady Report]. The task force also made a lengthy study comparing the 1929 and 1987 crashes. See id. at VIII-1 to VIII-10. The task force examined the effects of the 1929 crash on the economy and found that it did not cause the Great Depression. It was further noted that the U.S. economy has gone through vast structural changes since 1929 which have made it more stable. See id. at VIII-10. Based on these two findings, the task force believed that the 1987 crash would not lead to an economic contraction comparable to the Great Depression. See id. at VIII-10.

14. See id. at 1.

Trading Commission ("CFTC"), and the relevant Self-Regulatory Organizations\(^{16}\) ("SROs") have all attempted to regulate the effects of program trading.\(^{17}\)

[hereinafter GAO Report] (stating that both the actual and anticipated activities of program traders contributed to the crash).

There are conflicting perceptions of program trading's role in the crash. "One money manager said that arbitrage was responsible for 200 to 250 points of the October 19 stock market decline . . . others . . . believed [program trading] accelerated the speed, or compressed the time frame of the plunge." \(\text{id. at 45. But see SEC Economist Sees No Link On Oct. 19 Between Program Trading, Price Declines, 21 Sec. Reg. & L. Rep. (BNA) 691 (May 12, 1989); Gramm Says SEC Crash Report Selectively Omitted Key Data, 22 Sec. Reg. & L. Rep. (BNA) 1013, 1014 (July 6, 1990) (Commodity Futures Trading Commission ("CFTC") Chairman criticizes the findings that index-related trading added to or was a significant factor in the 1987 crash); Richard Roll, The International Crash of October 1987, in Black Monday and the Future of Financial Markets 35 (Robert W. Kamphuis, Jr. et al. eds., 1989) (arguing that the 1987 Crash was a result of the international markets which started to drop before the U.S. markets and argues that the nations with index arbitrage fared better than those without it). One commentator has characterized the Brady Report as "inane . . . when viewed as a public-interest document . . . [and] blatantly socially harmful . . . if . . . viewed otherwise." David D. Haddock, An Economic Analysis of the Brady Report: Public Interest, Special Interest, or Rent Extraction?, 74 Cornell L. Rev. 841, 864 (1989).

16. The Self-Regulatory Organizations are those bodies that establish the rules for each exchange. The two best known SROs are the New York Stock Exchange, Inc. and the National Association of Securities Dealers ("NASD"). The SROs create rules and regulations that are submitted to the SEC for approval. The exchanges then police their own members for violations of both their own rules and the '34 Act. \(\text{See Securities Exchange Act of 1934, § 6, 15 U.S.C. § 78f (1988).}\)


\[(h) \text{Limitations on practices that affect market volatility}\]

\[
\text{[T]}\text{he Commission may adopt, consistent with the public interest, the protection of investors, and the maintenance of fair and orderly markets—}\]

\[1\text{) to prescribe means reasonably designed to prevent manipulation of price levels of the equity securities market. . . . AND}\]

\[2\text{) to prohibit or constrain, during periods of extraordinary market volatility, any trading practice in connection with the purchase or sale of equity securities that the Commission determines (A) has previously contributed significantly to extraordinary levels of volatility that have threatened the maintenance of fair and orderly markets; and (B) is reasonably certain to engender such levels of volatility if not prohibited or constrained.}\]

15 U.S.C. § 78i(h) (Supp. II 1990); \textit{see also SEC Makes Permanent NYSE Rule Curbing Index Arbitrage When DJIA Moves 50 Pts, 23 Sec. Reg. & L. Rep. (BNA) 1553, 1553-54 (Oct. 25, 1991) (approving Rule 80A of the NYSE, discussed infra); CFTC Staff To Develop Automated Procedure to Identify Arbitrage Trades, 20 Sec. Reg. & L. Rep. (BNA) 854 (June 3, 1988) (coding tickets to be able to gain more information about intra-day trading, aiding in the enforcement of exchange rules, the CEA, and in private party arbitrations); Memorandum From Agnes M. Gautier, Vice President, Market Surveillance Bureau, NYSE, Information Memo, No. 90-1 to All Member Organizations regarding Daily Filing of Program Trading (Jan. 3, 1990) (on file with the Fordham Law Review) (requiring large traders to report their activity to the NYSE on a regular basis); New York Stock Exchange, Inc., The Official Constitution and Rules of the New York Stock Exchange Inc. § 2080a, Rule 80(A)(C)(i), at 2656 (1990) (limiting index trading on days when the market moves 50 points in any direction to only stabilizing purchases and}
This Note examines the issue of market manipulation in regard to program trading. In particular, this Note addresses whether program trading can be considered as manipulative per se under the Securities Exchange Act of 1934 ("’34 Act"). Part I provides the background and definition of the main forms of program trading—index arbitrage and portfolio insurance. Part II examines the definition of manipulation under sections 9(a) and 10(b) of the ’34 Act and Rule 10b-5. Part III addresses whether index arbitrage and portfolio insurance are manipulative per se under the ’34 Act in light of the discussions in Parts I and II. This Note concludes that, although the Supreme Court’s current definition of manipulation eliminates this question, the history and purpose of the ’34 Act supports the conclusion that program trading is manipulative per se and thereby should be prohibited by Congress.

I. BACKGROUND OF PROGRAM TRADING

A. The Origins of Index Futures Trading

When deciding whether program trading is manipulative, one must first understand the origins of program trading. In the late 1970s, the futures exchanges began a search for new products to attract investors. They had begun trading in futures based on debt instruments and foreign currencies earlier in the decade and were seeking new avenues for investment. As a result of this search, the Kansas City Board of Trade ("KCBT"), in October of 1977, sought permission from the CFTC to trade index-based futures con-
tractions. Because of jurisdictional disputes between the SEC and CFTC as well as concomitant litigation, trading in index futures did not start until 1982.

After the CFTC and the SEC entered into a jurisdictional accord, and the litigation problems settled, the KCBT initiated trading in Value Line

price of $15, stock B with a price of $10, and stock C with a price of $5, the DJIA would reflect an average value of $10 \[(15 + 10 + 5)/3 = 30/3 = 10\]. See Weiner, supra note 18, at 37; Ansbacher, supra, at 7. There are no index futures contracts based on the DJIA.

The Standard & Poor's 500 ("S&P 500") is a weighted measure of 500 securities that cover a variety of different sectors (industrials, financial services, public utilities, and transportation companies) on the NYSE, American Stock Exchange, Inc. ("AMEX"), and in the over-the-counter market. See Ansbacher, supra, at 7-8. Each security in the S&P 500 is weighted by its capitalization. See Weiner, supra note 18, at 39-42. An index weighted by capitalization recognizes that some stocks are more widely held than others. Accordingly, the S&P 500 multiplies the shares outstanding for each stock by its price before dividing by the number of stocks that make up the index. See Ansbacher, supra, at 8. Other indices include the NYSE Index (similar to the S&P 500 index except that it uses all the stocks traded on the NYSE), the Major Market Index (AMEX) (a price-weighted index of 20 blue chip stocks), and the CBOE-100 Index (a price-weighted index of 100 stocks that have listed options). See id. at 8-12. The most complex index is the Value Line Composite Average ("VLCA"). See id. at 9. The VLCA weights each of its over 1700 stocks equally. See Weiner, supra note 18, at 44. In contrast to the above arithmetically averaged indices, the VLCA averages its securities geometrically. See id.

"The virtue of geometric averaging is that it preserves the integrity of successive upward and downward percentage changes. 'Arithmetic mean bias' creeps in otherwise." Id. at 45.

22. See Weiner, supra note 18, at 92.

23. An initial regulatory difficulty was deciding whether the SEC or the CFTC had jurisdiction over the index futures. This conflict was solved by an accord between the SEC and the CFTC granting exclusive jurisdiction to the CFTC. See Futures Trading Act of 1982, Pub. L. No. 97-444, 1982 U.S.C.C.A.N. (96 Stat.) 3887 (amending 7 U.S.C. § 2(a) (1988)).


25. An index future is a derivative product. See William E. Nix & Susan W. Nix, The Dow Jones-Irwin Guide to Stock Index Futures and Options 4, 11 (1984). The future creates a binding contract to purchase or sell the underlying commodity at a predetermined price on a predetermined date. See id. at 11. The difference between index futures and other commodities futures is the lack of a cash market in the underlying product. See Brady Report, supra note 13, at VI-18, VI-18 to VI-19. For example, a futures contract based on soybeans has the soybean cash (spot) market from which to buy or sell the soybeans in order to fulfill the contracted future delivery. Conversely, there is no cash market for indexes. Rather, the securities exchanges, such as the NYSE or AMEX, act as cash markets for the equities that make up the index. See id. This raises the question of whether index futures should be called derivative or derivative of a derivative. See id. By law there can be no futures contracts on individual securities. See Commodities Exchange Act, 7 U.S.C. § 2a(v) (1988) ("[n]o person shall offer to enter into, enter into, or confirm the execution of any contract of sale (or option on such contract) for future delivery of any security, or interest therein or based on the value thereof"). Oddly, the only other product from which the futures markets are barred from making contracts is onions. See id. § 13-1.
Composite Index futures on February 16, 1982.26 The Chicago Mercantile Exchange ("CME") quickly followed suit with a futures contract based on the S&P 500 index in April of that year.27 The New York Futures Exchange ("NYFE") introduced its futures contract based on the NYSE Composite Index on May 6, 1982.28

As a result of the debate over the utility of index futures, the SEC formulated three policy reasons for the establishment of index-related trading: (1) faster transmission of macroeconomic information from the more sensitive futures markets to the equities markets (creating a more efficient pricing structure for equities);29 (2) hedging opportunities for large position owners (e.g., portfolio and pension account managers),30 and (3) price discovery31 opportunities.32

The structure of the futures market, as envisioned by the SEC, underpinned the policy reasons. Initially the index futures market was seen as having three tiers of participants. Speculators, hedgers, and arbitrageurs would make up the market.33 The speculators would take extraordinary risks, betting on the stock market's overall performance, and drive the futures market in one direction.34 The hedgers, seeking to preserve their stock portfolios against market shifts, would drive the market in the opposite direction.35 Finally, arbitrageurs would seek to profit from the price gaps that the hedgers and speculators caused between the futures and equities markets.36 With the largest hedgers, portfolio insurers, fleeing the futures market,37 the question arises whether speculators are controlling the futures markets rather than simply constituting an integral part of the three-tiered system. As will be discussed in Part III, due to the flight of the hedgers and the possibly de minimis increase in efficiency

26. See Weiner, supra note 18, at 93.
27. See id.
28. See id.
30. See id.
31. Price discovery is technique that uses the futures market to establish a portfolio, thus making later entry into the equity markets easier. "[L]onger term investors often find it faster and initially cheaper to initiate portfolio position changes through the futures market. Eventually, the futures position is replaced with stocks." Brady Report, supra note 13, at 7.
32. See Stout, supra note 29, at 630-31. Moreover, the second and third leg of the SEC's policy grounds reflect a desire to attract and maintain greater institutional involvement in the equities markets. See SEC Crash Report, supra note 15, at 3-1 to 3-5.
33. See Weiner, supra note 18, at 87-89; see also Cargill, Inc. v. Hardin, 452 F.2d 1154, 1158 (8th Cir. 1971), cert. denied, 406 U.S. 932 (1972).
34. See Weiner, supra note 18, at 87 (discussing the roles of hedgers and speculators); Ansbacher, supra note 21, at 42 (discussing the role of arbitrageurs).
35. See Weiner, supra note 18, at 87.
36. See Ansbacher, supra note 21, at 42.
37. See Stout, supra note 29, at 707.
in the information transfer, these policy reasons may no longer be compelling.

Although policy reasons existed for the creation of index futures contracts and the three-tiered system appeared structurally sound, Congress expressed concern over whether index futures contracts could be manipulated or, alternatively, be used indirectly to manipulate the equities markets. Congress recognized the problematic nature of index futures when it created the Futures Trading Act of 1982 ("FTA") codifying the jurisdictional accord between the SEC and CFTC. Section 2 of the FTA grants the SEC veto authority over any new index contract created on or after December 9, 1982. This grant of authority sought to prevent manipulation of the securities markets, while granting the CFTC day-to-day exclusive jurisdiction over futures trading.

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38. See id. at 631-32, 707 (noting that the use of index futures as a hedge has dramatically shrunk since the crash of 1987; and questioning whether the few minutes or hours that the transfer of information to the securities markets from the futures markets saves is efficient enough to condone the massive shift in pricing).


(6) APPROVAL OF FUTURES CONTRACTS—PUBLIC INTEREST TEST:
The House bill provides that, in determining whether to approve a new futures contract for trading, the Commission [SEC] must consider, among other things, the extent to which trading of the new contract is likely to divert investment capital from capital formation and to cause price manipulation and destabilization in the commodity forming the basis for the new contract.

See also Linda N. Edwards & Franklin R. Edwards, A Legal and Economic Analysis of Manipulation in Futures Markets, 4 J. Futures Markets 332, 361 (1984) (a general background on the regulatory history of index futures contracts).


41. See id. § 2(a)(iv)(I). The effective date foreclosed on the SEC's input or veto of the above discussed futures contracts because their application preceded the jurisdictional accord.

42. In relevant part, § 2(a) states as follows:

(ii) This Chapter shall apply to and the Commission [CFTC] shall have exclusive jurisdiction with respect to . . . contracts of sale (or options on such contracts) for future delivery of a group or index of securities (or any interest therein or based upon the value thereof): Provided, however, That no board of trade shall be designated as a contract market with respect to any such contracts of sale . . . for future delivery the board of trade making such application demonstrates and the Commission [CFTC] expressly finds that the specific contract . . . meets the following minimum requirements:

. . . .

(II) Trading in such contract . . . shall not be readily susceptible to manipulation of the price of such contract . . . nor to causing or being used in the manipulation of the price of any underlying security, option on such security or option on a group or index including such securities; and

. . . .

(iv)(II) . . . The Commission [CFTC] shall not approve any such application if the Securities and Exchange Commission determines that such contract . . . fails to meet the minimum requirements set forth in clause (ii) of this subparagraph.

Id. § 2a.
With Congress's dictate in mind, the SEC took measures to prevent overt manipulative activity in the use of indices, but has yet to define the indices as *per se* manipulative. Rather, it has approached index futures as products that can and should be controlled by regulation.  

Specifically, the SEC has set forth five requirements that every index futures contract must meet in order to escape its veto. The requirements are based on the congressional mandate in section 2(a)(III) of the FTA. First, there must be at least twenty-five issuers in the particular index. The reasoning behind this is that the more stocks present, the more difficult and expensive it would be to manipulate the market. Second, the aggregate capitalization of the underlying stocks must be at least $75 billion. The higher the capitalization of the underlying stocks, the more expensive the stocks' prices are and the more costly they are to manipulate. Third, the depth and liquidity of the stocks that make up the index futures contract must be able to support the index. The greater the market's depth, the less likely the market itself will be moved too greatly by the index traders. Fourth, the contract must fulfill a diversity requirement. Rather than allowing a single industry to bear the brunt of program trading, the risk of index trading is spread among various industries and issuers. Finally, the SEC examines the way that each index that a contract is based on weighs (values) the underlying securities. This "weight test" supposedly protects the index futures contract itself from manipulation by sharp operators using unevenly...
weighted securities to affect the market with minimal investment.  

Adhering to these requirements, the SEC has objected to several index futures contracts. Perhaps the most telling was the SEC’s objection to the Standard & Poor’s Financial Index. The SEC found that, because the index failed to meet any of the foregoing requirements, there was a “substantial risk the index could be used in manipulative schemes.” For instance, the index had a limited capitalization of $65.8 billion dollars, was dominated by five securities, and was made up of only 40 thinly-traded securities. Notwithstanding these requirements, the SEC has approved a number of futures contracts.

For futures contracts to be used successfully, trading strategies had to be created to encompass both the futures and equities markets. Two predominant strategies that appeared were index arbitrage and portfolio insurance. Although both strategies have been lumped together under the heading “program trading,” they each serve different functions. The following section defines each strategy and explains the respective roles of the strategies in the marketplace.

54. See SEC Designation Criteria, supra note 44, at 820; Edwards & Edwards, supra note 39, at 361.

The SEC’s current criteria for protecting the market from manipulation by index futures oddly match the criteria necessary to engage in manipulation propounded by Professor Dice, a commentator on the securities exchanges before the 1929 crash. See Charles A. Dice, The Stock Market 415, 416-18 (1926).

A manipulator, as Professor Dice states in his section on conditions favoring manipulation, is more likely to seek liquid, large capitalized stocks. Dice’s theory has two premises. First, the smaller the float, the more expensive it is to compile a large enough position to profit from a manipulative transaction. See id. The inherent illiquidity of small float stocks means that the prices rise rapidly whenever a large block purchase occurs. See id. Moreover, any attempt to manipulate a small float stock would immediately be noticed by other experienced traders, who would then join in on the manipulation. See id. Second, a stock with a small float is difficult to sell out of position because of its intrinsic illiquidity. See id.

55. See, e.g., Edwards & Edwards, supra note 39, at 362 (outlining several early SEC rejections of future contracts).

56. See id.

57. Id. (quoting Letter from George Fitzsimmons, Secretary, SEC to David Horner, Director, Division of Economics and Education, CFTC, at 9 (Nov. 29, 1983)).

58. See id. The top 10 stocks traded on average about 170,000 shares daily. See id.

59. Because the SEC used different, and easier, standards to approve index options, a type of product over which it has complete jurisdiction, it has been accused of favoritism. See, e.g., Approval of a Proposed Rule Change Relating to the Listing of Options on the CBOE Biotech Index, Exchange Act Release No. 34-31243, 52 S.E.C. Docket 1661 (Sept. 28, 1992) (approving an index-related option where the index’s total market capitalization was $19 billion and consisted of 20 stocks, five of which constituted 50% of the index’s value). But on the other hand, options, being optional, are less likely to impact on the market. How many options will actually be exercised? Even if exercised, only naked calls and puts will require resort to the spot market (and most will be bought out/covered).

B. Two Types of Program Trading: Index Arbitrage and Portfolio Insurance

Since the inception of index futures and index options trading, investors have sought a means to use these derivative instruments to implement trading strategies that encompass both the securities markets and the derivative markets. The best known (and perhaps least understood) of these strategies is program trading. Program trading is not a monolithic strategy, but rather encompasses several distinct trading strategies. The focus of this Note will be on the two predominate program trading strategies: index arbitrage and portfolio insurance.

1. Index Arbitrage

Index arbitrage is a trading strategy that takes advantage of differences in value between the underlying securities (also known as the "basket") and either index-related options or futures to lock in differentials that assure minimum profits. In order to implement the arbitrage, the arbitrageur must initiate either a sell or a buy program. A sell program, based on trigger information, simultaneously sells the underlying securities and buys the index options or futures. A buy program simultaneously buys the underlying securities and sells index options or futures.

Index arbitrage is deemed by some market analysts to make the market more efficient. While the individual arbitrageur profits, the futures markets' inherent sensitivity to economic news creates a more efficient market. Due to the relative inefficiency in the equities market, the arbitrageurs correct the pricing errors of the specialists and market mak-

61. See Ansbacher, supra note 21, at 95-100; Weiner, supra note 18, at 106-34; Pickard & Axe, supra note 20, at 88 (noting that within two years of the creation of index futures, 40 of the top 200 pension fund and portfolio managers (by portfolio size) were participating in the index futures market).
62. See Brady Report, supra note 13, at 6-7.
63. See Ansbacher, supra note 21, at 44-45.
64. See Brady Report, supra note 13, at 6.
65. See id.
66. See, e.g., Dean Furbush & Annette Poulsen, Harmonizing Margins: The Regulation of Margin Levels in Stock Index Futures Markets, 74 Cornell L. Rev. 873, 887-89 (1989) (arguing that the proposed regulations on index futures contracts would have little or no effect on stock market volatility); Jonathan R. Macey et al., Restrictions on Short Sales: An Analysis of the Uptick Rule and Its Role in View of the October 1987 Stock Market Crash, 74 Cornell L. Rev. 799, 825 (1989) (arguing that portfolio insurance and index arbitrage had no impact on the crash).
67. See Furbush & Poulsen, supra note 66, at 889-90; Macey et al., supra note 66, at 831-32.
68. Specialists have three roles on the floor of the NYSE. They act as brokers, dealers, and auctioneers. Specialists act like brokers when members drop "limit orders" at the posts; specialists then execute the orders when their prices are in market range. Specialists act like dealers when they purchase and sell stocks for their own accounts. Specialists act like auctioneers when they set the opening prices which clear the accumulated orders. See Brady Report, supra note 13, at VI-5.
ers\textsuperscript{69} in equities.\textsuperscript{70} Essentially, the arbitrageur levels the discrepancy between prices on the stock exchange and on the futures exchange and speeds the stock exchanges' reaction to economic information and news.\textsuperscript{71}

Although there is little or no argument that index arbitrage decreases reaction time, program trading does have negative side effects. The first noticed, and perhaps unanticipated, effect of index arbitrage is the transfer of selling pressure from the futures exchanges to the stock markets.\textsuperscript{72} For example, if index arbitrageurs notice that stock prices are trading at a premium to a particular index, they will initiate sell programs. The purchase and sale has the effect of lowering the prices of the equities while raising the prices of the index future.\textsuperscript{73} The transfer of selling pressure is often read by individual investors as a lack of confidence in the overall market.\textsuperscript{74} As a result, individual investors join in the selling, causing a downward spike in the market's prices. This, in turn, may trigger further index arbitrages.\textsuperscript{75} One commentator has referred to this spiking effect as the "tail wagging the dog."\textsuperscript{76}

On the other side of the futures market are the hedgers, those portfolio and pension fund managers who seek to protect their equity holdings from sudden market shifts. Before the introduction of index futures and options, hedging usually consisted of asset reallocation.\textsuperscript{77} With index futures introduced to the mix of products available for hedging, new strategies needed to be created. Many fund managers turned to "portfolio insurance" to implement the futures-based hedge.

2. Portfolio Insurance

Portfolio insurance uses computer generated models to compute the optimum stock-to-cash ratios of particular equity holdings. The insurers\textsuperscript{78} use index futures contracts or options to correct and hedge their

\textsuperscript{69} A market maker is a dealer who, with the approval of the National Association Of Securities Dealers, Inc., trades in a specific stock for his own or the firm's account. See id. at VI-12.

\textsuperscript{70} See Furbush & Poulsen, supra note 66, at 889-90; Macey et al., supra note 66, at 831-32.


\textsuperscript{72} See Brady Report, supra note 13, at 42.

\textsuperscript{73} See Solomon & Dicker, supra note 71, at 214.

\textsuperscript{74} See id. Moreover, some commentators blame this spiking effect for the flight of individual investors from the market. See Kathleen Kerwin, Is the Tail Wagging the Dog?: Sizing up the Impact of Stock-Index Futures on the Market, Barron's, Dec. 10, 1984, at 40.

\textsuperscript{75} See Solomon & Dicker, supra note 71, at 214.

\textsuperscript{76} Kerwin, supra note 74, at 11.

\textsuperscript{77} See Pickard & Axe, supra note 20, at 90. Asset allocation is the shifting percentages of the portfolio back and forth from stocks to bonds as the markets shift.

\textsuperscript{78} The use of this hedging device produced a number of firms that specialized in managing the trading for institutional fund managers. See Allan Sloan & Richard L.
in institutional clients' security positions. Similar to index arbitrage, perceived value differentials between stocks and futures trigger the program's activity as the portfolio managers attempt to reallocate assets before they are hit by a stock market decline. Portfolio insurance is a purely reactionary strategy. As the stock portfolio loses value in comparison to the index futures, the insurance mechanism is triggered. At this point, a manager fearing losses will sell index futures or options to avoid taking a bath in the securities market. Portfolio insurance can only achieve its goals if it meets two prerequisites: (i) the disciplined selling (or buying) of futures contracts at trigger points in a declining market; and (ii) the presence of liquid futures markets.

While portfolio insurance appeared attractive as a hedging device, it often fell short of its supporters' predictions of protection. After Black Monday, it became common knowledge on Wall Street that whoever pulls the trigger first may be the only one insured. Subsequently, because the "insurance" proved so inadequate on Black Monday and on the days that followed, many, if not most, of the portfolio managers have left the futures market. Moreover, as in the case of index arbitrage, portfolio insurance led to the transference of selling pressure from the futures to the securities markets. On the Friday before Black Monday, portfolio insurers were responsible for approximately $2.1 billion in transactions on the futures markets which, in turn, transferred nearly $1.7 billion in selling pressure to the stock exchanges.

Both index arbitrage and portfolio insurance rely on particular mathematical formulae and computer programs to determine the timing and profitability of each transaction. A simple model of a formula used by

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Stern, *How V0 = VSN(d1) - E/qftJN(d2) led to Black Monday*, Forbes, Jan. 25, 1988, at 55, 57-58. These firms are often referred to as "insurers." See id. at 58.

79. See Brady Report, supra note 13, at 7; Pickard & Axe, supra note 20, at 92-94.
80. See Brady Report, supra note 13, at 7.
81. See Pickard & Axe, supra note 20, at 92.
83. See Pickard & Axe, supra note 20, at 92.
84. See SEC Crash Report, supra note 15, at 1-3.
85. See Sloan & Stern, supra note 78, at 58 (overview of portfolio insurance's impact during market crash).
86. See Lawrence Harris, *The Dangers of Regulatory Overreaction to the October 1987 Crash*, 74 Cornell L. Rev. 927, 935 (1989) (noting that portfolio insurance has dropped over a third within a year of crash); Pickard & Axe, supra note 20, at 93-94 (same).
87. See Brady Report, supra note 13, at 25.
88. See id.
89. See id. at 7; Weiner, supra note 18, at 148-53. Index arbitrageurs and portfolio insurers also use the NYSE's computerized order entry system to place orders on the NYSE's floor. The system, DOT (Digital Order Turnaround) or Super DOT, accepts pre-opening market orders of 5999 shares or less (OARS or Opening Automated Report Services is the exchange's name for DOT's pre-opening order system), post-opening market orders of 30,999 and limit orders of 99,999. See Brady Report, supra note 13, at VI-11. A pre-opening order is any order entered before 9:30 a.m.; a post-opening order is any order entered after 9:30 a.m. See id. A market order is "an order to buy or sell a stated amount of a security at the most advantageous price obtainable after the order is
index arbitrageurs targets a future contract's price that trades at a premium to the cash or spot markets based on the carrying costs (usually represented as the ninety-day T-Bill rate).

If the futures market exceeds or falls below this point (also known as basis), a program is triggered, and the arbitraguers enter their orders.

Index-related trading of this ilk has raised serious questions concerning the effects of these programs on the securities market. The initial question of manipulation arose from the increased volatility caused by the programs during the so-called "triple witching hour." From the initiation of index arbitrage in the early 1980s until July 1987, the triple witch occurred in the last hour of the last business day of the quarter when index futures, equity options, and index

represented in the Trading Crowd." New York Stock Exchange, Inc., The Official Constitution and Rules of the New York Stock Exchange Inc. ¶ 2013, Rule 13, at 2528 (1990). A limit order is "an order to buy or sell a stated amount of a security at a specified price, or at a better price, if obtainable after the order is represented in the Trading Crowd." Id.

90. See Weiner, supra note 18, at 148-50. This model can be expressed mathematically as $F^* = S(1 + r - d)$. In this formula, "$F^*$" represents the fair value of the index futures contract, "$S$" represents the spot value of the underlying index, "$r$" represents the riskless rate of interest for borrowing funds over the life of the contract (i.e., 90 day T-bills), and "$d$" represents the rate at which dividends of the stocks in the underlying index are expected to accrue. See Solomon & Dicker, supra note 71, at 203 n.99. For example, if the annual yield on T-bills is seven percent, the annual yield on dividends is four percent, and the spot value on the S&P 500 is 240.00, then the fair value of the S&P 500 index future with three months to expiration is 241.80. [241.80 = 240.00 X (1 + 0.0175 - 0.01)]. See id.

91. See Solomon & Dicker, supra note 71, at 213.

92. See Susan Antilla, Phelan: Market Is Volatile Enough Without Programs, USA Today, Nov. 10, 1989, at 10B (former Chairman of the NYSE attacking the volatility caused by program trading); John Crudele, A Recipe for Increased Volatility; Small Traders Leaving Stock Index Futures to The Big Brokerages, Wash. Post, June 24, 1990, at H13 (noting that locals [small independent futures dealers] were leaving the index futures pit to a small group of large brokerage firms, who were gaining more control over the direction of futures prices); John Crudele, How Crafty Speculators 'Persuade' the Market: Contracts on Index Futures Bought Rapidly, Wash. Post, May 26, 1991, at H7 (noting that the futures market is used to "persuade" the equities markets, particularly on slow volume days); Craig Torres & Kevin G. Salwen, New Hot Line Hunts Program Trading Abuse, Wall St. J., Feb. 8, 1990, at C1 (reporting that the NYSE had established a hot line for institutional investors to report program trading abuses and asks whether they think their brokers are manipulating the market).

93. See Sloan & Stern, supra note 78, at 55.

94. Equity options grant the holder the right, but do not obligate the holder, to purchase or sell an individual security at a predetermined price within a predetermined amount of time. See Nix & Nix, supra note 25, at 11. A call option grants the holder the right to buy, and a put option the right to sell a specified number of shares. See id. Each option contract represents 100 shares of stock. See id. For example, an individual can buy 10 IBM October 100 calls at $1.00; this option grants the buyer the right to purchase 1000 shares of IBM at $100 per share between the time of purchase and the expiration of the call in the coming October for a transaction cost of $1000 plus commissions. See id. at 13. There are risks associated with each type of option strategy. See id. at 14. For instance, the purchase of a call risks the cost of the contract. In the above example the buyer is risking the $1000 if the option expires worthless. Perhaps the riskiest strategy is the writing of a naked call—selling the right to purchase a security which the seller
options all expired at the same time. During a triple witch, owners of options and futures attempted to close out their positions at the best possible spread price using "Market on Close" orders. These index-generated orders flooded the market, generally swamping the demand or surpassing the supply of the securities. Consequently, stock prices traded far beyond the usual ranges indicated by fundamental valuation techniques during a triple witch.

Although there have been some expressions of doubt that programs added to this market volatility, the SEC and the relevant SROs took measures to reduce the problem. Originally, the exchanges staggered the hours of expiration and trading. Despite these efforts, however, market volatility persisted at the time of the 1987 Crash. Further, there are strong indications that program trading still contributes to market volatility today. As a result, some have seen fit to label program trading manipulative.

II. MANIPULATION AS DEFINED BY THE SECURITIES EXCHANGE ACT OF 1934

In determining whether program trading is manipulative, it is first necessary to examine the definition of "manipulation" under the '34 Act. This task involves a close scrutiny of the statutory language and of the

neither hedged or owned. The risk involved here is that the stock will skyrocket (usually expressed as unlimited risk) beyond the premium paid and the option will be executed, thus forcing the writer to cover the option by buying the stock in the open market.

95. An option contract on the index has the same features as an equity option, except that the underlying product is an index. See Brady Report, supra note 13, at VI-19 to VI-20. The options value is derived from the price of the underlying index. See Nix & Nix, supra note 25, at 12. There are also index futures-options which grant the right but not the obligation to take or make delivery of an index futures contract. See id. at 11. The options price is set by the corresponding futures price and not the price of the underlying index. See id.

96. A Market "At the Close Order" is defined as "[a] market order which is to be executed at or as near to the close as practicable." New York Stock Exchange, Inc., The Official Constitution and Rules of the New York Stock Exchange, Inc., ¶ 2013, Rule 13, at 2527 (1990).


100. See Brady Report, supra note 13, at v.


102. See Thel, supra note 8, at 429.
historical context of the '34 Act, as well as relevant case law. Moreover, it helps to contrast the '34 Act's definition of manipulation with definitions of manipulation under the Commodities Exchange Act and proposed by academics.

A. The Relevant Statutory Provisions

Sections 9(a), 10(b) and 14(e) of the '34 Act proscribe securities manipulation. The SEC uses these sections in tandem with Rule 10b-5 in addressing the issue of manipulation.

1. Securities Manipulation Under Section 9(a)(2)

The goal of section 9(a)(2), which the SEC has called the "very heart of the Act," extends beyond merely outlawing pool operations. The section regulates all acts and devices that tend to create an illusion of supply or demand where no such supply or demand exists. Section 9(a), Congress's first anti-manipulation effort, was carried over, almost word for word, from the '34 Act's original version, and is clearly directed toward deceptive activities. Section 9(a)(2) seeks to prevent the creation of artificial prices with the intent to induce investors into purchasing or selling securities.

There are three elements necessary to prove manipulative practices under 9(a)(2): (i) A series of transactions; (ii) creating an artificial price; (iii) with the intent to induce investors into purchasing or selling securities.

103. 17 C.F.R. § 240.10b-5 (1992). Rule 10b-5 prohibits any person, in relation to the purchase and sale of securities to "employ any device, scheme, or artifice to defraud" or "engage in any act, practice, or course of business which operates or would operate as a fraud." Id.

104. Because § 9(a) covers several types of manipulation, including wash sales and matched orders, this part of the Note will necessarily be limited to § 9(a)(2): price manipulation.


107. See id.

108. See H.R. 7852, 73d Cong., 2d Sess. (1934), reprinted in 10 Legislative History of the Securities Act of 1933 and Securities Exchange Act of 1934, item no. 24, at 20 (J.S. Ellenberger & Ellen P. Mahar eds., 1973) (the original versions of §§ 9(a) and 10(b)).

109. Section 9(a) states in relevant part as follows:

It shall be unlawful for any person, directly or indirectly, by the use of the mails or any means or instrumentalities of interstate commerce, or of any facility of any national securities exchange, or for any member of a national securities exchange . . . (2) [t]o effect, alone or with one or more other persons, a series of transactions in any security registered on a national securities exchange creating actual or apparent active trading in such security or raising or depressing the price of such security, for the purpose of inducing the purchase or sale of such security by others.

and (iii) showing a manipulative purpose. The SEC has determined that three transactions are sufficient. The SEC does not require a purchase or sale but does equate bidding on a security to a series of transactions. Bidding "may be as effective an influence on price as a completed sale." The prevalent use of bids to implement manipulative schemes led the SEC to codify bids on securities as transactions. In doing so, the SEC relied on the theory that the false bid would coerce other buyers to enter higher bids.

The second element, creation of an artificial price, is discoverable by circumstantial evidence about the performance of a stock both before and after the alleged manipulation took place. Typically, proof of stock manipulation is seen in "the collapse of the market for the security when the manipulator ceases his activity." When the manipulator's support or pressure is removed from the stock, the price returns to its "natural" levels. This return often leaves those investors who bought stock from or sold stock to the manipulator with deep losses.

Finding a series of transactions and the creation of an artificial price are not the difficult part of a securities manipulation claim; rather, the challenge has been finding the requisite manipulative purpose.

The central, and third element, in all manipulation charges is whether the defendant had a manipulative purpose. Absent an admission from the defendant, which rarely occurs, the manipulative purpose is also shown through circumstantial evidence. Courts have generally looked

111. See, e.g., Kidder Peabody & Co., 18 S.E.C. 559, 570 (1945) (holding the defendants' three separate purchases over a two day period met the "series of transactions" requirement).
112. See id. at 568-70.
113. Id. at 570.
115. See Loss, supra note 110, at 1550.
116. See Pagel, Inc. v. SEC, 803 F.2d 942, 945-46 (8th Cir. 1986) (affirming SEC finding that dominant stock position in connection with sharp price fluctuations was sufficient proof of stock manipulation); Dlugash v. SEC, 373 F.2d 107, 109 (2d Cir. 1967) ("[R]apidly rising prices in the absence of any demand are well-known symptoms of... unlawful market operations.").
117. SEC v. Resch-Cassin & Co., 362 F. Supp. 964, 976 (S.D.N.Y. 1973). The court also noted that here are three other elements: price leadership, dominion and control, and a reduced stock float. See id. at 976-78.
118. See id.
119. See Loss, supra note 110, at 1552.
to a separate pecuniary motive to supply this evidence. Examples include owning a large block of stock that defendant wished to sell,\(^{121}\) participating in the distribution of a large block of stock in which the defendant had a stake,\(^{122}\) and owning an option on a security at a higher or lower strike price than the prevailing market price.\(^{123}\)

The presence of an improper purpose to induce others to buy or sell at an artificial price or to unduly influence the market in a particular stock is necessary to determine whether the activity should be condemned as unlawful manipulation.\(^{124}\) As one court has found: "So long as the investor's motive in buying or selling a security is not to create an artificial demand for, or supply of, the security, illegal market manipulation is not established."\(^{125}\) Moreover, many completely legitimate stock purchases may be at successively higher prices, or on plus ticks at or near the close of trading. Similarly, simply "[b]ringing about a price rise . . . is not unlawful in itself."\(^{126}\) Congress expressly rejected the notion that manipulative intent could be inferred from the fact that the trader made sizeable purchases or sales and knew or should have known that this would affect the price of the security.\(^{127}\) Congress realized that section 9(a) would not cover all methods of manipulation. Accordingly, it passed section 10(b) to enable the SEC to protect the market from innovative means of manipulating the market.\(^{128}\)

2. Securities Manipulation Under Section 10(b)

Under section 10(b) of the '34 Act, Congress granted the SEC the power to regulate manipulative and deceptive devices that would disrupt the market place or cause harm to investors.\(^{129}\) Congress intended sec-

\(^{121}\) See R.J. Koepe & Co. v. SEC, 95 F.2d 550 (7th Cir. 1938) (paying touts to recommend security).


\(^{123}\) See In re Charles C. Wright, 3 S.E.C. 190, 197, 199-202, 206 (1938), rev'd on other grounds sub nom. Wright v. SEC, 112 F.2d 89 (2d Cir. 1940).


\(^{125}\) Chris-Craft Indus. v. Piper Aircraft Corp., 480 F.2d 341, 383 (2d Cir.), cert. denied, 414 U.S. 910 (1973); see also Aaron v. SEC, 446 U.S. 680, 689-95 (1980) (extending the scienter requirement to SEC enforcement actions under § 10(b) and Rule 10b-5); Chemetron Corp. v. Business Funds, Inc., 682 F.2d 1149, 1164 (5th Cir. 1982) ("scienter" is an element of manipulation), vacated on other grounds, 460 U.S. 1007 (1983).


\(^{128}\) See Hearings on H.R. 7852 and H.R. 8720 Before the House Comm. on Interstate and Foreign Commerce, 73d Cong., 2d Sess. 115 (1934) (spokesman for the '34 Act's drafters stating that § 10(b) was to protect against future and unforeseen manipulation schemes and devices).

\(^{129}\) In pertinent part, section 10(b) states as follows:
tion 10(b) to act as a catchall to section 9(a), empowering the SEC "to deal with new manipulative [or cunning] devices"\(^\text{130}\) that were not thought of at the time of the '34 Act's conception. In order to implement the mandate of section 10(b), the SEC has promulgated numerous rules, including Rule 10b-5, that seek to prevent the misuse of the markets.\(^\text{131}\) Although section 10(b)'s language appears open to expansive interpretation, the Supreme Court has limited its scope to those manipulative devices that act to deceive or defraud.\(^\text{132}\)

In *Ernst & Ernst v. Hochfelder*,\(^\text{133}\) the Supreme Court stated that manipulation is "virtually a term of art when used in connection with securities markets . . . connot[ing] intentional or willful conduct designed to deceive or defraud investors."\(^\text{134}\) Oddly, although the Court stated that manipulation is "a term of art," it relied on the 1934 edition of Webster's International Dictionary to define manipulation.\(^\text{135}\) In *Santa Fe Industries, Inc. v. Green*,\(^\text{136}\) the Court further explained that "[t]he term [manipulation] refers generally to practices, such as wash sales, matched orders, or rigged prices, that are intended to mislead investors by artificially affecting market activity."\(^\text{137}\) The Court reasoned that the '34 Act had "substitute[d] a philosophy of full disclosure for the philosophy of caveat emptor,"\(^\text{138}\) thus requiring a finding of deceit to prove manipulation. Following *Ernst & Ernst* and *Santa Fe*, the Court later extended its

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\(^{130}\) It shall be unlawful for any person, . . . (b) [t]o use or employ, in connection with the purchase or sale of any security registered on a national securities exchange or any security not so registered, any manipulative or deceptive device or contrivance in contravention of such rules of and regulations as the Commission may prescribe as necessary or appropriate in the public interest or for the protection of investors.


\(^{131}\) *Hearings on H.R. 7852 and H.R. 8720 before the House Comm. on Interstate and Foreign Commerce*, 73d Cong., 2d Sess. 115 (1934) (comment of '34 Act drafter Thomas Corcoran).

\(^{132}\) See, e.g., 17 C.F.R. § 240.10a-1 (1992) (Rule 10a-1 limits the use of short sales, considered the primary tool of manipulators); 17 C.F.R. § 240.11a-1 (1992) (prohibiting self-dealing by members of a national securities exchange).

\(^{133}\) Rule 10b-5, although pertinent in part, is not central to the discussion at hand. Oddly, when the court interprets section 10b—including its limiting decisions discussed below—it is actually handling Rule 10b-5 cases.

\(^{134}\) 425 U.S. 185 (1976).

\(^{135}\) Id. at 199.

\(^{136}\) An early writer on the stock exchanges, Sereno S. Platt, used a similar method to define manipulation. He, however, did not limit the definition to fraudulent or deceptive acts. *See* Frank Fayant, *Short Sales and Manipulation of Securities*, 19-24 (1913) (quoting Sereno S. Platt, *The Work of Wall Street* 147, 364 (1912)). Rather, Platt asserted that there was a "higher type of manipulation" in which no fraud of deceit was used. *Id.* at 22. Instead, the manipulator uses secrecy and diplomacy to raise or lower the price of a security. *See* id. at 23. The Supreme Court relied solely upon the part of the definition that described manipulation as fraud or deceit. *See* Ernst, 425 U.S. at 199 & n.21

\(^{137}\) Id. at 462 (1977).

\(^{138}\) Id. at 476.
narrow definition of manipulation to all cases arising under the '34 Act.\textsuperscript{139}

In applying the Supreme Court's definition, lower courts have attempted to reconcile the broad language of section 10(b) and Rule 10b-5 with the requirement of deception.\textsuperscript{140} One court stated that "[10b-5's] prohibition with respect to manipulative activity is not confined to any particular kind of manipulative activity but . . . is necessarily designed to outlaw every device 'used to persuade the public that activity in a security is the reflection of a genuine demand instead of a mirage.'"\textsuperscript{141} In contrast, another court explained that, although some practices appear to be injurious and unfair to investors, they are not prohibited by section 10(b).\textsuperscript{142} This court found that "[m]anipulation cannot be extended to cover every form of unfair dealing which appears to the layperson to be manipulative."\textsuperscript{143} Currently, under the Supreme Court's definition, an investor injured by the effects of a manipulative scheme, but who cannot show deception, will find no recourse in the '34 Act's manipulation sections.

The SEC, in following the Supreme Court's definition of manipulation, has culled out approximately fifteen separate categories of manipulative activities.\textsuperscript{144} To meet the deception requirement, the SEC has expanded its definition of "intent to deceive" to bizarre and often counter-intuitive

\begin{thebibliography}{99}
\bibitem{139} See Schreiber v. Burlington N., Inc., 472 U.S. 1, 5-8 (1985) (extending the requirement of deception to cases under § 14(e) of the Williams Act).
\bibitem{140} See United States v. Mulheren, 938 F.2d 364, 370-71 (2d Cir. 1991) (holding that the defendant's activities—using a floor broker not often used, and the floor broker's failure to reveal the purchaser—were not sufficient proof of the deceptive intent required for a 10(b) manipulation charge); Pagel, Inc. v. SEC, 803 F.2d 942, 945-46 (8th Cir. 1986) (quoting In re Pagel, Inc., [1985-1986 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 83,909, at 87,752 (Aug. 1, 1985)) (agreeing with the SEC that the defendants had abused their dominant position in a security; the SEC stated that the defendants' "engage[d] in a scheme to distort the price of a security for their own benefit, they violate[d] the securities laws by perpetrating a fraud on all public investors"); Biechele v. Cedar Point, Inc., 747 F.2d 209, 214 (6th Cir. 1984) (holding that an add-on agreement did not create artificial barriers to the market nor did it act to mislead investors); Shivers v. Amerco, 670 F.2d 826, 829 (9th Cir. 1982) (holding that a manipulation claim under 10b-5, like a claim under § 9(a), must clearly state that the alleged manipulator "artificially affected market activity in order to mislead investors"); Panter v. Marshall Field & Co., 646 F.2d 271, 287-88 (7th Cir.) (holding that deception is a necessary element of 10b-5 manipulation claims), cert. denied, 454 U.S. 1092 (1981).
\bibitem{143} Id. But see Steve Thel, The Original Conception of Section 10(b) of the Securities Exchange Act, 42 Stan. L. Rev. 385, 388-94 (1990) (calling for a much more extensive view of manipulation than that currently held by the Supreme Court).
\end{thebibliography}
limits. For example, in \textit{SEC v. Choset},\textsuperscript{145} the court accepted a consent agreement which recognized an act known as "painting the tape" as manipulative.\textsuperscript{146} This practice involves entering large orders near the market's close in order to move the closing price.\textsuperscript{147} The defendant, Choset, engaged in this activity in order to boost his department's profit/loss statement for the year and receive a larger Christmas bonus.\textsuperscript{148} Although Choset had no intent to deceive investors, he did, however, intend to deceive his employers. While there is no statement of why section 10(b) and Rule 10b-5 were implicated, the SEC concluded that Choset's acts were manipulative because the fictitious trades could, if entered often enough, induce investors to purchase or sell securities.\textsuperscript{149}

Oddly, the two major markets for investment—commodities and securities—define manipulation differently. The commodities markets define manipulation as the intentional creation of an artificial price. Thus, although intent is required in both securities and commodities cases, intent to defraud is required only in securities cases. The following Section examines and contrasts the different definitions and attempts to determine which definitions offers a better model in light of the legal history of the '34 Act.

3. Manipulation as Defined in the Commodities Exchange Act

In comparison to the '34 Act cases, the Commodities cases have a broader definition of manipulation.\textsuperscript{150} This view of manipulation is

\textsuperscript{145} 28 S.E.C. Docket 172 (S.D.N.Y. June 15, 1983).
\textsuperscript{146} See id. Usually traders paint the tape to increase their credit standing or to get a better bonuses. See Matthews et al., \textit{supra} note 144, at 120.
\textsuperscript{147} See Choset, 28 S.E.C. Docket at 173.
\textsuperscript{148} See id. at 172.
\textsuperscript{149} See Theil, \textit{supra} note 143, at 419-20.
\textsuperscript{150} Commodities manipulation, particularly in futures trading, has a much longer history of investigation and legislation than securities manipulation. Beginning with the first futures trading, shortly after the Civil War, farmers and merchants began to call on the government to either halt all futures trading or monitor it closely to prevent manipulation. See Markham, \textit{supra} note 1, at 287-88. From 1884 until 1921, more than 200 bills were presented before the Congress, but none got out of committee. See Note, \textit{Federal Regulation of Commodity Futures Trading}, 60 Yale L.J. 822, 832 n.46 (1951). Farm-belt Congressmen were worried about the deleterious effects of the "artificial" pricing structure brought about by futures trading. See 23 Cong. Rec. 5980, 5984 (July 11, 1892) (statement of Sen. Washburn) (attacking the futures markets as disastrous to U.S. farmers).

After these numerous false starts, Congress enacted the Grain Futures Act in order to regulate futures trading. See 42 Stat. 998 (1922). Contained in the Act was Congress's first anti-manipulation measure. Congress demanded that the exchanges prevent their members from engaging in price manipulation. See id. § 5. The Act's primary purpose was "to control the evils of manipulation of prices in grain... effected through dealings in grain futures." Dickson v. Uhlmann Grain Co., 288 U.S. 188, 198-99 (1933). The driving force was not deceit but the effect that manipulation had on the cash markets. In 1974, Congress, feeling that the futures exchanges and Commodities Exchange Authority had failed to police their members adequately, created the Commodities Futures Trading Commission. See 7 U.S.C. § 4(a) (1988). Congress outlawed manipulation in the 1974 Act, but left it up to the courts to define the term. See id. § 13(b).
closer to the definition held by financial experts at the time of the '34 Act's writing.\textsuperscript{151} Manipulation, in these cases, is governed by section 13(b) of the Commodities Exchange Act ("CEA").\textsuperscript{152} The CEA, however, does not define manipulation but rather leaves this task to the courts.\textsuperscript{153} Similarly, Congress did not define manipulation in sections 9(a), 10(b), or 14(e) of the '34 Act.

Often in commodities cases, the courts determine manipulation in the factual context of a "squeeze"\textsuperscript{154} or an attempt to "corner the market."\textsuperscript{155} For example, in Frey v. Commodities Futures Trading Commission,\textsuperscript{156} the Court of Appeals for the Seventh Circuit defined manipulation as an "intentional exaction of a price determined by forces other than supply and demand."\textsuperscript{157} The Court laid out the elements of a squeeze as follows: (i) holding a controlling or dominant position in the market; (ii) intending to execute the squeeze; (iii) intending to create an artificial price; and (iv) creating an artificial price with the squeeze.\textsuperscript{158} Unlike the securities cases, there is no requirement that the manipulator intend to deceive investors.\textsuperscript{159}

In contrast to Frey, courts have treated stock market domination cases quite differently. In United States v. Mulheren,\textsuperscript{160} for example, the Second Circuit held that defendant's order, which constituted over seventy percent of the market from the opening until 11:10 a.m., was not enough to be considered evidence of market manipulation.\textsuperscript{161} The Second Circuit also held that due to the lack of deception on the defendant's part, the charge could not be carried.\textsuperscript{162}

While the securities cases have struggled to find deceit, the commodities markets have focused simply on the creation of an artificial price. Although this latter interpretation may result in prosecutorial difficul-

\textsuperscript{151} See Dice, supra note 54, at 414; 1 Dos Passos, supra note 5, at 647.
\textsuperscript{153} See id.
\textsuperscript{154} A squeeze is defined as a position in the futures market that far exceeds the deliverable supply of the underlying commodity. See Cargill, Inc. v. Hardin, 452 F.2d 1154, 1162 (8th Cir. 1971), cert. denied, 406 U.S. 932 (1972).
\textsuperscript{155} Cornering the market is having and maintaining a dominant position in the spot commodities market. See id. at 1162.
\textsuperscript{156} 931 F.2d 1171, 1175 (7th Cir. 1991).
\textsuperscript{157} Id. at 1175; see also In re Indiana Farm Bureau Cooperative Ass'n, Inc., [1982-1984 Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶ 21,796 (1982) ("[S]pecific intent to create an 'artificial' or 'distorted' price is the \textit{sine qua non} of manipulation.").
\textsuperscript{158} See Frey, 931 F.2d at 1175.
\textsuperscript{159} See id.; see also Utesch v. Dittmer, 947 F.2d 321, 327 (8th Cir. 1991) (defining artificial price as any price not established by supply and demand), cert. denied, 112 S. Ct. 1764 (1992); Volkart Bros., Inc. v. Freeman, 311 F.2d 52, 58 (5th Cir. 1962) (defining "manipulation" as purposeful conduct calculated to bring about a price distortion); General Foods Corp. v. Brannan, 170 F.2d 220, 230-31 (7th Cir. 1948) (defining manipulation as the extraction of artificial prices; those prices not arising from natural forces).
\textsuperscript{160} 938 F.2d 364 (2d Cir. 1991).
\textsuperscript{161} See id. at 371-72.
\textsuperscript{162} See id.
ties, it offers a viable alternative to the Supreme Court's deceit-based definition of securities manipulation.

Perhaps the most important difference between market manipulation in commodities and securities is in the injury requirement. Courts differentiate securities manipulation from commodities manipulation by looking to the injured party. Specifically, in securities cases, the investor is injured. In commodities cases, the market is injured. As one court stated in a commodities case,

[i]n order for the . . . market to perform its functions effectively, prices must reflect as nearly as possible market factors of supply and demand. Manipulation of prices by means not reflecting basic supply and demand factors creates conditions which prevent the . . . market from performing its basic economic function and hence diminishes its utility to those members of the trade and general public who rely on its basic purposes.

Moreover, courts examining commodity manipulation do not look at the methods used or ask whether a profit was made because "the economic harm done by manipulation is just as great" regardless whether money was made or lost.

4. Academic Definition of Manipulation

Currently, there is also a tension among scholars, over the definition of manipulation. On the one hand, some theorists believe that the term should be broadly construed in order to coincide with the historical data

163. The cases prosecuting commodities manipulation are rarer than those prosecuting securities manipulation because of the extended and difficult economic analyses that the courts require in order to prove the accused created an artificial price. See Markham, supra note 1, at 356-58, 361-62 (noting that the CFTC has brought as many manipulation cases in the years of its existence as the SEC usually brings in one year). Because of this lack of prosecution, many commentators have called for a redefinition of manipulation. See, e.g., Edward T. McDermott, Defining Manipulation in Commodities Futures Trading: The Futures "Squeeze", 74 NW. U. L. REV. 202, 205 (noting that the analysis of manipulation under the CEA is confusing, contradictory, complex, and unsophisticated). Redefining "manipulation," however, may be insufficient to solve this problem. Instead, it may be necessary to increase the CFTC's enforcement and regulatory power grant the staff more leeway to prosecute cases. See Markham, supra note 1, at 361, 368-70, 375.

164. See, e.g., Santa Fe Indus. v. Green, 430 U.S. 462, 476 (1977) (stating that § 10(b) "provides a cause of action for any plaintiff who 'suffer[s] an injury as a result of deceptive practices'" (quoting Superintendent of Ins. v. Bankers Life & Cas. Co., 404 U.S. 6, 12-13 (1971)).

165. See, e.g., Cargill, Inc. v. Hardin, 452 F.2d 1154, 1171 (8th Cir. 1971) (stating that the defendants' executed squeeze caused severe fluctuations and thus "constituted a threat to a free and orderly market"), cert. denied, 406 U.S. 932 (1972).

166. Id. at 1158.

167. Id. at 1163; see also United States v. Lewis, [1989 Transfer Binder] Fed. Sec. L. Rep. (CCH) § 94,479, at 93,053 (S.D.N.Y. June 15, 1989) (denying defendants' motion to dismiss the manipulation charge because a profit or gain is in not "an element of a § 10(b) manipulation offense"). But see United States v. Mulheren, 938 F.2d 364, 370 (2d Cir. 1991) ("One of the hallmarks of manipulation is some profit or personal gain inuring to the alleged manipulator.").
regarding the intent of the drafters of the '34 Act.168 This theory reasons that by limiting the '34 Act to "substitut[ing] a philosophy of full disclosure for the philosophy of caveat emptor,"169 the Supreme Court has misinterpreted the original intent of the '34 Act.170 The goal of section 10(b), according to this theory, was to grant the SEC power to regulate manipulative or deceptive devices and this power is not limited to fraudulent acts.171 This theory also notes that, by requiring deceit, the Supreme Court limited what was a generally accepted definition in 1934. A financial scholar just before the '34 Act's inception noted that "manipulation is usually understood [to mean] the creation of an artificial price by planned action, whether by one man or a group of men."172 Moreover, as one court found, the essential objective of securities legislation is to protect both the individual investor and the marketplace from the overreaching of sharp operators.173

Other theorists, however, see no need to define manipulation, or believe that the term is at best defined overbroadly if not erroneously.174 They premise their argument against regulating manipulation on four basic grounds. First, "there is no objective definition" for manipulation.175 Second, that the subjective test for manipulation fails to exclude perfectly legal activity.176 Third, any attempt to manipulate the market is self-defeating.177 Due to the cost of manipulation, it makes no sense to manipulate. Finally, because regulating manipulation is so expensive, it achieves no constructive ends and simply wastes the taxpayers' money.178 Thus, according to these theorists the regulation of manipulation is both inappropriate and wasteful.179 Nevertheless, manipulation is illegal and continues to be prosecuted.

To determine the appropriate definition of manipulation and whether program trading would fall within that definition, it is helpful to examine the historical background and legislative history of the '34 Act's anti-manipulation sections.

168. See Thel, supra note 143, at 385, 388-460.
170. See Thel, supra note 143, at 388-90.
171. See id. at 388-94.
172. Dice, supra note 54, at 414.
173. See Charles Hughes & Co. v. SEC, 139 F.2d 434, 437 (2d Cir. 1943); see also 2 Charles H. Meyer, The Law of Stockbrokers and Stock Exchanges 34-35 (2d ed. 1936) ("One of the evils which the Securities Exchange Act was designed to prevent is the manipulation of securities markets by practices which are deceptive or otherwise improper.”) (emphasis added).
175. See id. at 510, 508-10.
176. See id. at 519-20.
177. See id. at 512-13, 547-49, 553.
178. See id. at 522-23, 553.
179. See id. at 553.
B. The Historical and Legal Background of the Securities Exchange Act of 1934

1. The Historical Underpinnings of the '34 Act

In section 2 of the '34 Act, Congress aimed to protect investors from the unscrupulous activities of traders, particularly those who would manipulate the market.\(^{180}\) As such, Congress intended a broad, inclusive definition of manipulation.\(^{181}\) The Supreme Court, however, has interpreted the definition of manipulation narrowly, requiring an element of deception.\(^{182}\) This definition may be counter-intuitive, particularly in light of Congress's overriding concern with the stock market's pricing structure.\(^{183}\) Although there is little in the way of traditional legislative history regarding section 10(b), there are extensive records of congressional and public debates over the role of the market in society.\(^{184}\) Addi-

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\(^{180}\) Section 2 (Necessity for Regulation) states in relevant part as follows:
[T]o insure the maintenance of fair and honest markets in such transactions:

\(\ldots\)

(3) Frequently the prices of securities on such exchanges and markets are susceptible to manipulation and control, and the dissemination of such prices gives rise to excessive speculation, resulting in sudden and unreasonable fluctuations in the prices of securities which \(\ldots\) cause alternately unreasonable expansion and unreasonable contraction of the volume of credit available \(\ldots\) and (b) hinder the proper appraisal of the value of securities \(\ldots\)

(4) National emergencies, which produce widespread unemployment and the dislocation of trade, transportation, and industry, and which burden interstate commerce and adversely affect the general welfare, are precipitated, intensified, and prolonged by manipulation and sudden and unreasonable fluctuations of security prices and by excessive speculation on such exchanges and markets.\ldots


182. See Schreiber v. Burlington N. Inc., 472 U.S. 1, 5-8 (1985) (extending the requirement of deception to cases under § 14(e) of the Williams Act); Santa Fe Indus. v. Green, 430 U.S. 462, 476 (1977) (stating that deceit is an element of manipulation); Ernst & Ernst v. Hochfelder, 425 U.S. 185, 203 (1976) (holding that scienter is required for all § 10(b) violations).

183. See Thel, supra note 143, at 391-92.

tionally, the drafters of the '34 Act and their predecessors in the Hughes' Committee and the Money Trust Investigation left vast numbers of documents recording their understanding of the market.\textsuperscript{185}

In the early part of this century, three stock market crashes brought about serious investigations into the operation of the securities markets. The first investigation arose out of the Panic of 1907 when depositors lost confidence in a group of New York banks that were thought to be stock market pool operators. The banks lost large amounts when their alleged pool operations failed and a run on the banks occurred followed. As a result, the stock market fell sharply.\textsuperscript{186} Governor Charles Evans Hughes\textsuperscript{187} of New York led a committee that investigated the causes of the collapse. The Committee avoided using "manipulation" in the pejorative sense, believing that certain manipulations (e.g., price stabilization) had beneficial purposes.\textsuperscript{188} The Committee, however, sought to censure those individuals who had moved market prices "to draw in the public as buyers and to unload upon them the holdings of the operators."\textsuperscript{189} This finding is arguably a precursor to section 9(a)(2) of the '34 Act.

Moreover, the Committee also found speculation, specifically gambling, hazardous to the market's stability.\textsuperscript{190} The Committee's conclusion was not necessarily related to the acts intended to draw investors into the market.\textsuperscript{191} Rather, the committee focused on the effects of the speculation on the market's valuation of stock prices.\textsuperscript{192}

In the end the Committee left it to the NYSE to police its members and to lessen the effects of speculation.\textsuperscript{193} Since little was done by the NYSE to implement the suggestions of the Hughes' Committee, Congress, in 1912, authorized an investigation. The purpose of the inquiry, known as The Money Trust Investigation, was to determine if, as was widely believed, a relatively small number of financiers controlled the markets and banks.\textsuperscript{194} Even though it centered on banking practices, the investigation found manipulation of the securities markets troubling:

\begin{quote}
A very important phase of speculation on the New York Stock Exchange is the manipulation of prices up or down, as desired, without regard to the real value of the securities, and the creation of a false appearance of activity in particular stocks. . . . [T]his practice prevents the exchange from faithfully reflecting the current value of securities—
\end{quote}

\textsuperscript{185} See supra note 184.
\textsuperscript{186} See, e.g., Thel, supra note 143, at 395 (sources cited).
\textsuperscript{187} Hughes later served as a Supreme Court Justice from 1930-1940. See Walter F. Murphy et al., American Constitutional Interpretation 1226 (1986).
\textsuperscript{188} See Hughes' Committee Report, supra note 184, at 7; see also Thel, supra note 143, at 397-400 (discussing Hughes Committee).
\textsuperscript{189} Hughes' Committee Report, supra note 184, at 7.
\textsuperscript{190} See id. at 4.
\textsuperscript{191} See id.
\textsuperscript{192} See id.
\textsuperscript{193} See id. at 10-11.
\textsuperscript{194} See Money Trust Investigation Report, supra note 184, at 13, 17.
one of its true functions—and gives those controlling great supplies of capital a further power over the enterprises of the country.\footnote{Id. at 46 (emphasis added).}

Although the investigation did not conduct a thorough examination of manipulative practices, it did look into the notorious "pools."\footnote{See id. at 46-52.} Pools consisted of a group of individuals who would use their combined vast resources to push a stock up or down.\footnote{See Dice, supra note 54, at 427-33 (describing the operation and establishment of security pools and noting the tricky nature of that form of manipulation). Pools, in many ways, resembled the trusts the Sherman Act was to abolish. A pool would have its individual members sign contracts granting discretionary power to a single member. These contracts would forbid any member from purchasing or selling the security in question without the permission of the whole pool. See id. at 428.} The pools used whatever means necessary, both deceptive and truthful, to accomplish the movement of a stock price.\footnote{See id. at 434.} Many of the pools used concerted buying or selling, in conjunction with rumors, to take control of a stock's float. Whether the pools used deceptive practices was determined by their needs at the time of transaction.\footnote{See id. at 430-31.} Not all pools were successful in their endeavors, but the effects of failures were just as disturbing to the market as the successes.\footnote{See id. at 434-35.} The Committee noted that the pools contributed to speculation, and that speculation "whether for the rise or for the fall, needs to be curbed rather than stimulated."\footnote{See id. at 47-48.} The investigators concluded that Congress should reform the securities markets.\footnote{See id. at 108-44.}

The findings of both the Hughes' Committee and the Money Trust Investigation were widely disseminated among American leaders in government and business. Nevertheless, they were not acted upon until after the market crash of 1929 and the onset of the Great Depression.\footnote{See id. at 115-28.} At this time, a backlash of public contempt over the "rigged practices" of the stock markets led to the passage of the Securities Act of 1933 ('33 Act), the '34 Act, and the creation of the SEC.\footnote{See Parrish, supra note 3, at 21-41.} President Franklin D. Roosevelt, with the aid of members of Congress, set out to reform the operations of securities markets and to solve the markets' problems through legislation.\footnote{See id. at 47-48.} Their mission was to enable the federal government to prohibit the sharp practices that operators used to profit from the market without regard for basic tenets of fairness.\footnote{See id. at 111.}
The '34 Act included numerous disclosure sections, but it was also directed toward the effects of speculative trading. It also included attempts to use margin requirements to limit speculation. Additionally, the '34 Act mandated the segregation of trading and brokerage on the floors of the exchanges. There are also indications, in both the language of the Act itself and in the congressional history, that deception may not have been a necessary element in all manipulation claims.

The intent of section 10(b) to prevent the market from overt and dangerous speculation may be derived from the conjunction of these debates and documents. In accordance with this intent, section 10(b) is broadly worded and grants the SEC the power to proscribe any "manipulative or deceptive device or contrivance . . . necessary or appropriate in the public interest or for the protection of investors." The only language in the section that leads one to believe that fraud is an element is the phrase "manipulative or deceptive devices." Although manipulation has various meanings, in light of the history one must consider who the '34 Act sought to protect and what it sought to prevent. When one of the '34 Act's authors, Thomas "Tommy the Cork" Corcoran, was asked what section 10(b) meant, he answered: "Thou shalt not devise any other cunning devices." Whether this statement implies a prerequisite of deceit is not clear.

2. The Supreme Court's Definition of Manipulation in Light of the '34 Act's History

The Supreme Court has managed to read out the "or" and added an "and" into the phrase "manipulative or deceptive devices." In doing so, the Court may have erroneously analogized the philosophy of the '33

208. See 15 U.S.C. § 78g (1988) (establishing minimal margin requirements for securities accounts); see also Parrish, supra note 3, at 129 (quoting Henry Morgenthau, Memorandum on Conversation with Franklin Delano Roosevelt (Mar. 22, 1934), in Official Files 34, Franklin D. Roosevelt Papers Box 2) (using margin account requirements to limit speculation, a non-deceptive activity).


210. See Thel, supra note 143, at 461.


212. Id. (emphasis added). But see Ernst & Ernst v. Hochfelder, 425 U.S. 185, 203 (1976) ("manipulative and cunning devices").

213. Hearings on H.R. 7852 and H.R. 8720 Before the House Comm. on Interstate and Foreign Commerce, 73d Cong., 2d Sess. 115 (1934) (discussing § 9(e) of the Fletcher Rayburn-Bill, which is identical to § 10(b)).

214. As with manipulation "cunning" has a variety of meanings. Cunning is defined as "[a]bility, skill, or expertise; skill employed in a crafty manner; skilful deceit; craftiness; guile; . . . [e]xhibiting ingenuity; artfully subtle or shrewd; crafty; sly; guileful." Living Webster Encyclopedic Dictionary of the English Language 246 (1975). Whether, as in the case of "manipulation," the Supreme Court will only consider "cunning" in the pejorative sense is an open question.

215. Ernst, 425 U.S. at 197, 199.
Act, which deals with full disclosure in the underwriting of securities, to the '34 Act.\textsuperscript{216} Although the '34 Act did include numerous disclosure sections, it was also directed toward the effects of speculative trading.\textsuperscript{217} Some commentators have argued that simply because it was first, the '33 Act's philosophy has been carried over to the '34 Act.\textsuperscript{218}

Moreover, the Court has carried over the definition of manipulation from the language of Rule 10b-5. Rule 10b-5 was designed to defeat fraudulent practices.\textsuperscript{219} But, it was promulgated under section 10(b) and the Court has tended, when looking to manipulation, to define the statute by using the rule.\textsuperscript{220}

The Supreme Court's holdings in \textit{Santa Fe Industries v. Green}\textsuperscript{221} and \textit{Ernst & Ernst v. Hochfelder}\textsuperscript{222} seem to contradict the generally accepted definition of manipulation in 1934. At the time, manipulation was seen as the intentional creation of an artificial price.\textsuperscript{223} The issue of whether the means were deceptive was not addressed. Congress, with the findings of the Money Trust Investigation and the Hughes' Committee, focused on the pricing impact of overt speculation. As the Hughes' Committee regarded "gambling" to be dangerous,\textsuperscript{224} and the Money Trust Investigation found speculation to deprive the market of its ability to correctly evaluate security prices,\textsuperscript{225} the '34 Act's drafters saw their essential mission as reducing the damage by speculators who sought "profits without regard for the welfare of the exchange, other investors, or the economy as a whole."\textsuperscript{226} Congress set forth this goal in section 2 of the '34 Act.\textsuperscript{227} Moreover, as one court stated, "[t]he essential objective of securities legislation is to protect those who do not know market conditions from the overreaching of those who do."\textsuperscript{228}

\textsuperscript{216} See id. at 200.
\textsuperscript{217} See, e.g., Parrish, supra note 3, at 129 (quoting Henry Morgenthau, Memorandum on Conversation with Franklin Delano Roosevelt (Mar. 22, 1934), in \textit{Official Files 34, Franklin D. Roosevelt Papers Box 2}) (limiting speculation as a major goal of the '34 Act); see also H.R. 7852, 73d Cong., 2d Sess. §§ 6, 7, 8, & 10 (1934), reprinted in 10 Legislative History of The Securities Act of 1933 and The Securities Exchange Act 1934, item 24, at 15-21 (J.S. Ellenberger & Ellen P. Mahar eds., 1973) (delineating margin requirements, segregation of broker-dealer activities, and manipulative and deceptive practices).
\textsuperscript{218} See Thel, supra note 143, at 415-16.
\textsuperscript{221} 430 U.S. 462 (1977); see discussion supra notes 133-39 and accompanying text.
\textsuperscript{222} 425 U.S. 185 (1976); see discussion supra notes 133-39 and accompanying text.
\textsuperscript{223} See Dice, supra note 54, at 414.
\textsuperscript{224} See Hughes' Committee Report, supra note 184, at 4.
\textsuperscript{225} See \textit{Money Trust Investigation Report}, supra note 184, at 46.
\textsuperscript{226} \textit{Id.} at 111.
\textsuperscript{227} See supra note 180 and accompanying text.
\textsuperscript{228} Charles Hughes & Co. v. SEC, 139 F.2d 434, 437 (2d Cir. 1943) (affirming the SEC's revocation of a brokerage firm's license due to blatantly fraudulent activity); see also 2 Charles H. Meyer, \textit{The Law of Stockbrokers and Stock Exchanges} 34-35 (1936)
III. PROGRAM TRADING AS MANIPULATIVE UNDER THE SECURITIES EXCHANGE ACT OF 1934

Under the Supreme Court's current definition of manipulation, it would be difficult, if not impossible, to find program trading manipulative per se. Individual users of program trading may use deceptive means to manipulate the market, but the programs themselves are fairly straightforward. Alternatively, program trading would likely be found manipulative per se under a price-based theory of manipulation.

A. The SEC's Policy Grounds for Index Futures Contracts Are No Longer Compelling

The first step in defining whether program trading is manipulative per se is to analyze the policies behind the establishment of index futures contracts. This is necessary because where a manipulative scheme is found to have benefits for the market, the SEC has allowed a highly regulated use of that scheme. The SEC's policy grounds for creating index futures and options are no longer as compelling. As noted in Part I, the SEC's primary reasons for accepting the creation of index futures—(i) hedging opportunities for institutional investors; (ii) faster information transfer; and (iii) price discovery—have not proven to be worthwhile.

The boon promised by index futures trading, the ability of portfolio managers to hedge their positions, has proven to be a bust. The 1987 crash proved that managers' reliance on portfolio insurance was not founded in reality. The number of portfolio managers using index futures hedging has shrunk exponentially since the 1987 crash.

Also, the second of the SEC's policy grounds, the supposedly added value of futures markets' faster reaction times to news and economic information has been questioned. The futures market's reactions normally only subtract minutes from the stock exchanges' reaction time. These minutes do not make up for the vast swings caused by program trading. Although the exchanges consider efficiency important, it is not

(“One of the evils which the Securities Exchange Act was designed to prevent is the manipulation of securities markets by practices which are deceptive or otherwise improper.”) (emphasis added).


230. See supra notes 29-38 and accompanying text.


232. See Harris, supra note 86, at 934 (misuse of portfolio insurance prevented the hedge sought).

233. See id.; Eichenwald, supra note 231, at D1.

234. See Solomon & Dicker, supra note 71, at 214 (questioning the value of the information flow between the securities and futures markets given the illiquidity of the former in comparison to the latter); see also Stout, supra note 29, at 631-32 (noting that two of the SEC's defenses of index-related trading, faster transference of pricing information and the ability to hedge positions are either de minimis are no longer viable).

235. See Stout, supra note 29, at 631.
important enough to weaken the demand of individual investors for the markets' services.

This leaves only the price discovery aspect of index-related trading as the SEC's defense for the existence of inter-market efficiency.\textsuperscript{236} Is price discovery worth the disruptive effects of index-related trading?\textsuperscript{237} With the hedgers, the most conservative part of the index futures market triad, gone, the value of price discovery must be questioned as the futures market suffers from radical intra-day price shifts.

B. Program Trading Under the Supreme Court's Current Definition of Violations of Sections 9(a)(2) and 10(b)

Using the three-pronged test for manipulation, as stated in section 9(a)(2) of the '34 Act,\textsuperscript{238} program trading probably would not be considered manipulative. As noted earlier,\textsuperscript{239} there are three elements necessary to prove manipulative practices under 9(a)(2): (i) effecting the requisite series of transactions; (ii) creating an artificial price; and (iii) showing a manipulative purpose.\textsuperscript{240}

It is not clear whether program trading would satisfy the series of transactions element. Manipulation cases generally look to single stock transactions, not to broad market movements.\textsuperscript{241} The main issue is whether the simultaneous selling of stock and buying of futures would meet the requirements of a series of transactions. There is, at this time, no clear answer to this question, but, if it arose, it would be easy to prove a series of transactions through order tickets and clearing house runs.

Some of the effects of index-related trading resemble the evidence required to show the creation of an artificial price, the second prong. The collapse of the market after the program trading ends is very similar to the circumstances relied upon in the early cases on manipulation.\textsuperscript{242} Often, after a series of programs has been executed, the market either drops (after the increase from a buy program) or rises (after the drop from a sell program).\textsuperscript{243} The programs overwhelm the normal supply or demand for a stock and push prices beyond their natural level creating an artificial price.\textsuperscript{244} The market's collapse or rise, however, although indic-

\textsuperscript{236} See id. at 632.
\textsuperscript{239} See supra notes 110-28 and accompanying text.
\textsuperscript{241} See In re Kidder Peabody & Co., 18 S.E.C. 559, 568 (1945).
\textsuperscript{243} See, e.g., Dave Pettit, Abreast of the Market: Industrials Decline 9.73 in Session Dominated by Program Trading, Wall St. J., Nov. 4, 1992, at C2 (noting that “program trading whipsawed prices throughout the session,” but the market recovered from a midafternoon deficit of 25 points); Stocks Turn Up; Dow Regains 11.23, N.Y. Times, June 20, 1992, § 1, at 38 (noting the quick recovery of the market after an expiration Friday).
\textsuperscript{244} See infra notes 232-58 and accompanying text.
ative of foul play,245 has never alone sufficed to prove manipulation.246

Finally, program trading is not likely to satisfy the third element: manipulative purpose. As a result of the Supreme Court's holdings in Santa Fe and Ernst, proof of the manipulative purpose must include the intent to deceive. Simply profiting from a transaction is not enough; the courts require that alleged manipulators have a separate pecuniary interest (stake) in order to prove that a manipulative purpose exists.247 Program traders do have large financial stakes in the market's overall increase or decrease before the trigger is pulled. In the instance that the trigger calls for the purchase of securities and sale of futures or options, any increase in the overall market decreases the particular trader's profitability. This is so because the shift would make it costlier for the trader to lock in the differentials. Thus, although a stake exists, it does not follow the usual type seen by the courts. The courts look for stakes that will be enhanced during or after the manipulative scheme is put into action.248 For example, owners of options who manipulated the stock price to increase the options' value, would sell or execute options after the stock price is pushed up. On the other hand, as discussed above, the index arbitrageurs' sole stake in the market is before the program's execution. Therefore, they do not benefit from the price swings caused by their program trading.

Although there are certain aspects of program trading's impact on the equities market that resemble the circumstantial evidence the courts rely on to find manipulation, the intent to deceive appears to be lacking. When index arbitrageurs complete their transactions and lock in the differentials, they lose interest in future market activity because it does not affect their profits.249 Therefore, the after-effects of program trading on individual investors create no real pecuniary interest, as required under section 9(a)(2), for the arbitrageur.

Although the impact of program trading has proven harmful to the securities markets, the current definition of manipulation is not adequate. The price-based definition of manipulation, however, could encompass program trading.

C. Program Trading Under a Price-Based Theory of Manipulation

The last bastion for finding program trading manipulative relies on the price-based theory of manipulation in effect at the time of the '34 Act's writing and often used in commodities cases.250 Following the price-

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245. See Resch, 362 F. Supp. at 978.
246. See supra notes 116-18 and accompanying text.
247. See supra notes 120-23 and accompanying text.
248. See supra notes 119-23 and accompanying text.
249. With the job completed, there is no need for further trading, unless the arbitrageur wants to trigger a new split between the derivative markets and the securities markets. See Kerwin, supra note 74, at 38.
250. See supra notes 150-59 and accompanying text.
based definition of manipulation—the intentional creation of artificial prices—it becomes easier to characterize program trading as manipulative per se. There are two ways to make the characterization—(i) the effects of program trading on the stock exchanges and (ii) the new structure of the index futures markets.

1. The Effects of Program Trading on the Stock Exchanges

Commentators have noted that programs may be manipulative in that they create an artificial pricing structure that has the effect of driving securities prices either up or down. Essentially by overwhelming the market with an increased supply of or demand for the securities underlying the indices, program trading drives prospective investors from the market, raising the inference of an artificial pricing structure. Furthermore, the actions of the arbitrageurs and portfolio insurers continue to interfere with the normal actions and reactions of other investors.

251. See generally Thel, supra note 8, at 429 (the conduct of program traders is "essentially the same as that prohibited or subjected to regulation under the heading of 'manipulation' in sections 9(a)(2), 9(a)(5), 9(b), 9(c) and 10(a) of the Act .... [and] is fairly characterized as manipulative, and accordingly section 10(b) should be understood to forbid its use or employment").

252. See id.

253. For example, on March 24, 1992, an order clerk for Salomon erred and entered a sell program for 11 million shares of stocks instead of $11 million worth of stocks in the last minutes of trading. See William Power et al., Clerk's Error Stirs Worry on Street: SEC Vows Response; Big Board Presses For Trading Changes, Wall St. J., Mar. 27, 1992, at Cl. The order, with an estimated value of $500 million, hit the NYSE hard. See William Power & Craig Torres, Stocks Drop As Salomon Clerk Errs: Bungle Spurs Selling, Turning Dow's Gain Into 1.57-Point Loss, Wall St. J., Mar. 26, 1992, at C1. The error drove the DJIA from a 12 point gain to a loss in a matter of minutes. See id. As one trader stated: "It happened in the last minute; the orders were peppered all over the place .... There was no inking of it; all of a sudden it came in at 3:58 and 3:59 and it just rolled across the floor .... This was a misguided missile." Id.; see also Diana B. Henriques, Similarities to 1987, & Significant Differences, N.Y. Times, Nov. 18, 1991, at D1 (noting that index-related trading accounted for up to 16-25% of the markets loss); Floyd Norris, Market Place: S.E.C.'s Analysis of Nov. 15 Plunge, N.Y. Times, Jan. 9, 1992, at D8 (use of index-related trading strategies accelerated the market's 102 point drop on Nov. 15, 1991); Dave Pettit, Abreast of the Market: Industrials Drop 10.27 In Session Dominated by Program Trading, Wall St. J., Aug. 13, 1992, at C2 (noting the low investor participation led to a greater-than-usual pricing impact by program trading); Craig S. Smith, Abreast of the Market: Industrials End with Modest Gain; Program Trading Trims Early Rise, Wall St. J., Mar. 5, 1991, at C2 (noting that program trading's late afternoon wave of orders overcame the weak resistance of buyers, forcing prices to decline).

254. See, e.g., Dow Falls 6.22 in Light, Cautious Trading, N.Y. Times, Sept. 22, 1992, at D6 (reporting that investors were avoiding the market before the "triple witching"); Jonathan Fuerbringer, Stocks Fall as the Dow Loses 41.73, N.Y. Times, June 18, 1992, at D1 (noting that securities buyers sat on the sideline until the expiration day trading had passed, removing the much needed demand to support the market in the face of a sell-off); Dow Down 15.79 on Olympia News, N.Y. Times, May 16, 1992, at A47 (index expiration as a factor in markets loss).

Despite the questions raised by some economists, index-related trading has a strong effect on the pricing structure of securities. See, e.g., Pickard & Axe, supra note 20, at 96-97 (noting that, although both the volatility of the market and the velocity of securities
Similarly, program trading can dominate the market. The Brady Report found that at numerous periods during the week before the 1987 crash, index-related trading controlled twenty-nine percent of the market in the underlying securities during the last half hour of trading on Thursday, October 15, 255 and fifteen percent during the last two hours on Friday, October 16. 256 However attractive the theory of program trading as dominating the market is,257 market domination is judged, in part, by how long the alleged manipulator dominated the market.258 Generally, the domination period is extended over weeks or months, not hours.259

The differing view of the injury requirement260 may be dispositive and may also explain why it may not be proper to require an element of de-

ownership turnover have increased dramatically since the introduction of index futures, there is nothing "inherently wrong with index futures providing price discovery for the stock market" even with the technical problems these futures cause); see also Hu, supra note 237, at 1305 (claiming index-related transactions have led to an increased velocity in the turnover of security ownership).

These facially artificial pricing structures certainly raise the inference of manipulation. See Thel, supra note 8, at 428-29 (disruptive trading practices that effect stock prices, although not deceptive, may be considered manipulative). But see Fischel & Ross, supra note 174, at 505-07 (raising the specter of market manipulation in program trading, but argues that manipulation should be abandoned and replaced by a fraud analysis). These pricing fluctuations have had a profound effect on the securities industry.

255. See Brady Report, supra note 13, at III-8.

256. See id. at III-13. The SEC's study of the crash found that in 10 minute intervals in the week before and during the crash, program selling had crossed the 50% barrier a number of times. See SEC Crash Report, supra note 15, at 2-30 to 2-42. For example, on October 6, the SEC had found that program selling was above the 60% mark for one 10 minute period and above 40% for three additional periods. See id. at 2-30. On October 16, program selling accounted for over 60% of the market in one period, and 50% in another. See id.

257. See, e.g., United States v. Mulheren, 938 F.2d 364, 371 (2d Cir. 1991) (holding that defendant's control of 70% of the market for almost two hours was not sufficient proof of manipulation).

258. The courts have recognized that the time necessary to dominate the securities markets varies significantly with each case. See, e.g., United States v. Gilbert, 668 F.2d 94, 95-96 (2d Cir. 1981) (one year period of domination), cert. denied, 456 U.S. 946 (1982); United States v. Stein, 456 F.2d 844, 846-47 (2d Cir.) (four month period of domination), cert. denied, 408 U.S. 922 (1972). But see In re Delafield & Delafield, [1967-69 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 77, 648, at 83,400 (SEC 1969) (unlike Mulheren, a period of approximately two hours proved to be enough to be evidence manipulation). Note that the Mulheren Court distinguished Delafield by the defendant's use of deceptive acts, particularly the use of fictitious names in purchasing the securities to hide the true purchasers. See Mulheren, 938 F.2d at 371.

The Mulheren court restated the shibboleth that at the time a single order is executed, the buyer makes up 100% of the demand for a security and the seller 100% of the supply of the security. See id. Although this may be true, in Mulheren, the defendant had constituted 70% of the market for over two hours, yet this was not enough in the eyes of the Second Circuit.

For a general background of Mulheren, his relationship with Ivan Boesky, and his weapons violation arrest, see James R. Stewart, Den of Thieves 232-34, 96-97, 100-01, 104-06, 171, 265, 428 (1991).

259. See cases cited supra note 258.

260. See supra notes 164-67 and accompanying text.
ception in manipulation cases. If the injury is to the market, why should deceit be a factor? Regardless of deceit, the market is injured by manipulation in that current and future investors will avoid participation because of what they perceive as a fixed game where only insiders and sharp operators can win.\textsuperscript{261}

Moreover, a price-oriented test is both workable and sensible.\textsuperscript{262} Market manipulation is to be judged from a practical test.\textsuperscript{263} Because "[t]he methods and techniques of manipulation are limited only by the ingenuity of man,"\textsuperscript{264} the requirement of deception may allow too many acts which are injurious to the market to escape prohibition.\textsuperscript{265} Although it would not fulfill the Supreme Court's requirement of deception, manipulation defined as "conduct [that] has been intentionally engaged in which . . . result[s] in a price which does not reflect basic forces of supply and demand"\textsuperscript{266} offers a more inclusive alternative.

Additionally, the aberrational effect on the market, both in the spiking of prices and driving away of investors, certainly distorts the normal supply and demand for securities.\textsuperscript{267} This distorting effect has led individual investors and congress to re-evaluate the securities markets, leaving many individual investors with the sense that the game is rigged.\textsuperscript{268} Program trading's effects have forced a number of the larger brokerage firms to stop participating in the practice in order to restore investor confi-

\textsuperscript{261} See, e.g., Greg Heberlein, Program Trading Erodes Market, Seattle Times, July 15, 1990, at E1 ("I completely missed the fundamental dynamic of some Wall Street goons programming their computers to chisel a few bucks out of an inefficient system.").

\textsuperscript{262} See Markham, supra note 1, at 376-78.


\textsuperscript{264} Id.

\textsuperscript{265} See Thel, supra note 8, at 429.

\textsuperscript{266} Cargill, 452 F.2d at 1163.

\textsuperscript{267} See Thel, supra note 8, at 425-27.

\textsuperscript{268} See William J. O'Neil, How Program Trading Hurts Every Investor, Investor's Daily, June 26, 1990, at 1 (analogizing program trading to a run-away car and asking, "When will program traders demolish your stock market again and how bad will it be?"); see also Salomon Agrees to $1.3 Million Fine in Settling Charges it Cheated Clients, 23 Sec. Reg. & L. Rep. (BNA) 111 (Jan. 25, 1991) (Salomon's altering of ticket prices and assigning the difference to its proprietary account was a 10b-5 violation according to the NYSE Stipulation of Charge); CBOE Member Firm Agrees to Huge Fine to Settle Improper Trading Allegations, 22 Sec. Reg. & L. Rep. (BNA) 741 (May 11, 1990). Particularly the futures and option segment of the program are susceptible to manipulation by the traders on the floor of the exchange through improper trading schemes. See generally Markham, supra note 1 (covering the history of manipulation in the commodities and futures markets).

The general nature of commodities and futures trading has caused at least one public director of an exchange to resign. See Thomas F. Eagleton, Chicago's Markets: Corrupt to the Core, N.Y. Times, Nov. 14, 1989, at A31, ("The truth, regrettably, is that the public cannot invest in the futures exchanges and be confident that it is getting a fair deal."); Thomas Eagleton Resigns CME Post, Blasts Exchange, 21 Sec. Reg. & L. Rep. (BNA) 1708 (Nov. 17, 1989) (Eagleton said in his resignation letter that he was "now convinced that the public interest is not being well served at the Exchange").
dence in the marketplace. Many of the major brokerage houses still do not allow index arbitrage for their own accounts. For those investors who see program trading as dangerous to their equity holdings, and see no way to protect themselves from that danger, the only escape is to leave the market or invest in a mutual fund. Ironically, by leaving the market, investors reduce the demand for securities and, in the end, make the market-place less efficient and even more susceptible to manipulation.

2. The New Structure of the Index Futures Markets

Since the flight of the hedgers, speculators dominate the index futures market. This domination raises an additional inference of an artificial pricing structure. Specifically, speculators rely on their expertise in predicting the stock market's future performance. Using index futures as betting tools, the speculators wager on the market. Moreover, purchases of futures and options are, by their very natures, exceptionally risky forecasts of market performance. Consequently, the mechanism of program trading appears subject to the self-fulfilling prophecies of the index program and futures traders. At the market's low point during the 1987 Crash, hovering around 1700 points on the DJIA, the futures index was predicting a drop to the 1400 point level—ultimately, a point never reached. Thus, the ability of futures and options to accurately predict future value is dubious.

Furthermore, these derivatives are not based on the fundamental


270. See Hal Lux, Program Trading on Smaller Stocks May Get Midcap Boost, Investment Dealers' Digest, Feb. 17, 1992, at 8 (noting that some brokerage houses have remained out of the program trading field for proprietary accounts).

271. See Harris, supra note 86, at 934; Solomon & Dicker, supra note 71, at 215; Stout, supra note 29, at 613, 631-632; Eichenwald, supra note 231, at D1.


273. See cases cited supra note 272.

274. See Brady Report, supra note 13, at 15.

worth of the underlying securities.\textsuperscript{276} As a result, the unrepresentative wagers of the futures contracts traders are transferred from the futures exchanges to the stock exchanges through the index arbitrage mechanism. This transfer disrupts the normal valuation of security prices and creates an artificial price. Donald Regan, the former White House Chief of Staff, Treasury Secretary, and CEO of Merrill Lynch, testified before the House, that program trading is a “false thing,” that causes instability in the equities markets.\textsuperscript{277}

Additionally, the structure of the securities markets is more diverse than the index futures markets. At best the index futures markets have three tiers, but securities exchanges have greater depth in their investor pool. There is not only speculation on the NYSE, but also long term investment, as well as several shades of each in between. Consequently, index arbitrage’s price levelling merely transfers the bets of speculators to a market that is not made up solely of speculators. The cost of index arbitrage is too high for the equity markets to bear.

There have been calls to ban index arbitrage because of its effects on the stock exchanges.\textsuperscript{278} Without the overriding public policy that once existed, perhaps it is time to reevaluate whether, under the original intent of the ’34 Act, program trading should be defined as manipulative \textit{per se} and hence banned.

\textbf{CONCLUSION}

Strictly following the Supreme Court’s definition of manipulation in \textit{Santa Fe} and \textit{Ernst}, program trading is not manipulative \textit{per se}.\textsuperscript{279} However, in light of the ’34 Act’s impetus and section 10(b)’s broad language, a price-based theory of manipulation may be preferable to the Court’s misconstrued definition. The ’34 Act was created to prevent the misuse of the marketplace by speculators and sharp operators. Whether the speculators used deceptive devices was not the only issue, rather it was the effects of speculative activity that the ’34 Act sought to prevent.

A price-based theory of manipulation, defined as any act that severely disrupts the market’s pricing structure, is closer to the intent of Congress as expressed in the ’34 Act than the Court’s current definition. Under a price-based theory of manipulation, program trading would be manipulative \textit{per se}. Program trading overwhelms the natural supply and demand for securities. Furthermore, it transfers the bets of futures speculators to a more diverse market and has chased individual investors from the stock

\textsuperscript{276} See Weiner, \textit{supra} note 18, at 5, 108-10 (the goal of indexing is to remove or to take advantage of market risk; market risk is a macroeconomic feature and not one determined by the microeconomic factors that affect the individual stocks).


\textsuperscript{278} See id.

\textsuperscript{279} Or as one over-the-counter trader told me, “it [stinks] but it ain’t illegal.”
exchanges, making the securities markets more susceptible to manipulation.

The prohibition of program trading will likely create a better marketplace for securities. Consumers would be more comfortable investing individually in a securities market free from artificially created price swings. The rebirth of individual investor interest would create more demand for the markets' services. Moreover, the market will be freed of the taint, similar to that which existed in the 1920s, that it is only suitable for those with the power and money to buy their way into the inner circle of computer trading. Consequently, the marketplace would be fairer and more efficient.