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A MODEL FOR DETERMINING THE EXCESSIVE TRADING ELEMENT IN CHURNING CLAIMS

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Courts and commentators have long considered annual turnover rates a significant factor in evaluating the excessive trading element of churning claims. These authorities, however, have lacked coherent guidelines for assessing the importance of investor objectives in the determination of whether a particular turnover rate for a broker-managed investment account is excessive.

In this Article Professors Donald Winslow and Seth Anderson set forth a statistical study of annual turnover rates exhibited by nine different categories of mutual funds with diverse investment strategies. The authors randomly selected test samples for each category from industry turnover rate data compiled over ten years. Because a mutual fund manager's compensation does not depend upon trading activity, in theory mutual funds should experience optimal turnover rates necessary to pursue the funds' objective. These authors propose guidelines for using annual turnover rates exhibited by mutual funds as reference points for evaluating whether excessive trading has occurred in broker-managed investment accounts.

I. INTRODUCTION

Churning of a customer investment account occurs when a broker overtrades the securities in the account for the purpose of generating commissions.¹ This simple description belies the numerous complex issues facing a customer who seeks a judgment against a broker for churning damages. Courts generally require a plaintiff-customer to prove three elements to recover under a churning claim: (1) “control” over the account by the broker; (2) excessive trading in the account in light of the customer’s objectives; and (3) scienter, an intent to de-

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¹. Note, Customer Sophistication and a Plaintiff’s Duty of Due Diligence: A Proposed Framework for Churning Actions in Nondiscretionary Accounts Under Rule 10b-5, 54 FORDHAM L. REV. 1101, 1101 (1986) [hereinafter FORDHAM Note]. As broadly phrased over 20 years ago, churning occurs “when a dealer, acting in his own interests and against those of his customer, induces transactions in the customer’s account which are excessive in size and frequency in light of the character of the account.” Note, Churning by Securities Dealers, 80 HARV. L. REV. 869, 869 (1967) [hereinafter HARVARD Note].
fraud or a reckless disregard of the customer's best interests by the broker. The apparent precision and clarity of this statement of the churning elements masks the difficulty of determining the existence of churning in a particular case. Each of these elements possesses a degree of analytical difficulty.

Of the three elements, excessive trading is perhaps the most difficult for plaintiffs to establish and the most troublesome for courts to evaluate. This issue is difficult to analyze because under current practices no single standard exists for determining what constitutes excessive trading. The lack of a definitive standard derives from the relevance of the investor's objectives. Since those objectives lie along a wide spectrum and different objectives require investment in distinct security portfolios, presumably with various optimal levels of trading to achieve the stated goals, no single level of trading should be considered a definitive threshold. The problem remains, however, that courts lack coherent


The three elements listed correspond to the language in the rules promulgated by the Securities and Exchange Commission (SEC). Rule 15c1-7 of the Securities Exchange Act of 1934 (1934 Act) directly supports the first two elements. See 17 C.F.R. § 240.15c1-7 (1988). That rule, however, is nominally limited to accounts with respect to which the broker holds discretionary authority, and the statute pursuant to which rule 15c1-7 was promulgated limits its scope to transactions on the over-the-counter market. See id. § 240.15c1-7(b) to -8; O'Hara, supra, at 1884 & n.23. Despite restrictions on the scope of this rule, it is well settled that churning also violates the broad antifraud provisions of the securities laws, including section 10(b) of the 1934 Act and rule 10b-5, which was promulgated under it. In re Catanella & E.F. Hutton & Co., 583 F. Supp. 1388, 1405-06 (E.D. Pa. 1984); see 15 U.S.C. § 78j(b) (1982); 17 C.F.R. § 240.10b-5; infra note 31 (discussing section 10(b) and rule 10b-5). The bulk of private actions for churning have been brought under these provisions. See O'Hara, supra, at 1885-86. Because rule 10b-5 and section 10(b) actions require scienter, churning claims under these sections generally require scienter as a third element. 17 C.F.R. § 240.10b-5; 15 U.S.C. § 78j(b); see M & B Contracting Corp. v. Dale, 601 F. Supp 1106, 1111-12 (E.D. Mich. 1984), aff'd, 795 F.2d 531 (6th Cir. 1986).

3. For an extensive treatment of the cases on the excessive trading and scienter elements and a particularly thorough description and treatment of the control element, see O'Hara, supra note 2, at 1889-95, 1899-931.

4. See id. at 1891.

5. See, e.g., Booth v. Peavey Co. Commodities Serv., 430 F.2d 132, 134 (8th Cir. 1970) (excessive trading element "cannot be determined by any precise rule or formula"); FORDHAM Note, supra note 1, at 1103-04 (noting confusion in several areas including the separation of the excessive trading element and the scienter element); Comment, The Lack of a Definite Standard to Measure Excessive Trading Activity in Over-the-Counter Customers' Securities Accounts, 41 TEMP. L.Q. 116, 117-18 (1967) (no single standard for determining excessive trading). This statement does not deny that other issues also may present difficulties. See O'Hara, supra note 2, at 1933 (observing that reliance has been a very difficult issue for the courts).

6. Once it is acknowledged that the level of trading must be viewed in light of the investor's investment goals to determine excessiveness, an absolute bright-line test becomes impossible. Jacobs, The Impact of Securities Exchange Act Rule 10b-5 on Broker-Dealers, 57 CORNELL L. REV. 869, 932 (1972); O'Hara, supra note 2, at 1891.
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guidelines to determine if a certain level of trading is excessive.

The most direct means of measuring the trading level in an account is to use some version of the quantitative turnover rate or ratio in the account.7 This rate generally represents the number of times the investments in the account are liquidated and reinvested in a given period.8 For example, an account would experience an annual turnover rate of one if all the investments in the account were sold and the proceeds reinvested during the same year.

The courts and commentators using quantitative turnover rates to deal with the excessive trading issue, however, have used them without satisfactory analysis.9 To some extent, their analysis has drifted due to lack of a basis in financial theory. There is little, if anything, of substance that can be gleaned from the cases as to why a particular rate is or is not excessive or how, precisely, investment objectives should influence that inquiry. The symptoms of this lack of financial grounding have been imprecision and timidity in use of quantitative turnover rates as a factor indicative of excessive trading.

This Article focuses exclusively on the excessive trading element of churning claims, in particular on the quantitative measure of this element by use of the turnover rate. The Article sets forth a study of turnover rates in mutual funds for the years 1978 to 1987. By analyzing the trading activity for mutual funds with diverse investor objectives, this Article attempts to establish more coherent and precise guidelines for use of turnover rates to determine whether excessive trading has occurred in broker-managed accounts. In particular, the study permitted a categorical estimation of expected turnover rates for broker-managed accounts with diverse investment objectives. The findings of this study should assist in determining, for any particular investment account, whether the broker pursued the customer's investment goals. By comparing the activity level or turnover rate for the customer's account with the expected turnover rates (based on this study) for mutual funds with comparable investor objectives, courts will be able to better determine whether the broker's trading was excessive. The findings of this Article demonstrate that prior authorities generally have been too reluctant to find that excessive trading activity is indicated by turnover rates. The Article concludes that analysis of the data from mutual funds presents the possibility of a more precise use of turnover rates and that these rates should take on increased importance in determining whether excessive trading has occurred.

II. BACKGROUND ON CHURNING AND CURRENT CONTEXT

Given the compensation structure of the securities industry, it is not surprising that excessive trading is quite common. The brokerage industry's compensation structure rests on the volume of trading activity in customer accounts.10 Transactions conducted in customer accounts generate profits in the

7. O'Hara, supra note 2, at 1891.
8. Id.; Poser, supra note 2, at 582.
9. See infra notes 52-65 and accompanying text.
10. Poser, supra note 2, at 573.
form of commissions charged by securities brokerage firms. Approximately thirty to forty percent of the commission paid by the customer to the investment firm flows directly to the individual registered representative who handled the account. This person is commonly referred to as the "broker." Like any salesperson who is compensated through sales commissions, brokers employed by these firms generally receive compensation only when their customers trade in their accounts by buying or selling stock.

Because of this compensation system, both the firm and the broker enjoy a substantial financial benefit from increased trading activity in a customer's account, regardless of any gain to the customer from this trading. A broker thus possesses a terrific incentive to increase the frequency of trading in the customer's account. In the extreme case, a broker might profit tremendously from accelerated trading while the customer suffers severe losses from poorly performing investments consumed by increased commissions.

The compensation structure creates one side of a potential conflict of interest situation for brokers regarding their customers; the conflict is completed by another aspect of the brokers' business—the touting of themselves as "investment advisors." In order to make their income, securities brokers typically solicit buy-and-sell orders for which they receive commission income from their clients. In addition, they dispense free advice concerning specific investment vehicles. Many large brokerage firms spend substantial sums advertising their investment advice as the best and most reliable available. These efforts naturally cause customers to rely upon their judgment and recommendations. The financial incentive presented to brokers by the industry compensation structure, however, can impair that judgment and bias those recommendations. These dual roles of commission salesperson and dispenser of investment advice present the broker with an inescapable conflict of interest: the temptation exists to generate commission income by advising that a security be bought or sold, irrespective of the customer's needs. Given this potential for abuse by brokers, it is not

11. Id. at 573-76. A firm executing a customer order to buy or sell a security functions in the capacity of a broker. 5B A. Jacobs, Litigation and Practice Under Rule 10b-5 § 210.02, at 9-5 (2d rev. ed. 1988). A firm selling from or purchasing for its own inventory acts in the role of dealer. Id. at 9-5 to -6. The focus of this Article is on the acts of these firms as brokers.

12. Poser, supra note 2, at 573.

13. Although in legal jargon the brokerage firm often is referred to as a "broker," this Article will refer to the individual registered representative as the "broker" and to the brokerage firm as the "firm."

14. See 1 S. Goldberg, Fraudulent Broker-Dealer Practices § 2.2[a], at 2-3, 2-8 to -10 (broker's compensation dependent on commissions generated for firm); Poser, supra note 2, at 573-76 (same).

15. 1 S. Goldberg, supra note 14, § 2.1, at 2-3 (just as with a poker casino or a parimutuel horserace, a brokerage firm and its representatives face a system that means "the more action, the higher the total amount of the cut and the greater the ultimate profits").

16. See Miley v. Oppenheimer & Co., 637 F.2d 318, 323 (5th Cir. Unit A Feb. 1981) ("as long as investment brokers have remunerated on a commission basis, the potential has existed for brokers to excessively trade accounts in an effort to generate fees").

17. 1 S. Goldberg, supra note 14, § 2.2[a], at 2-8 to -10 ("[n]o clearer example of a conflict of interests can be imagined"); Poser, supra note 2, at 573-76; Harvard Note, supra note 1, at 870.

18. See O'Hara, supra note 2, at 1879 (arguing that customer's reliance on broker should be guiding inquiry on the control issue in churning cases).
surprising that litigation over alleged overtrading of customer accounts has long abounded.\textsuperscript{19}

Enormous changes in the securities industry over the past fifteen years have created greater incentives for brokers to churn customers' accounts. First, churning has been stimulated by the declining profit margins experienced by brokerage firms as a result of the introduction of competitive commission rates on May Day, 1975.\textsuperscript{20} The increased competition has resulted in higher pressure on individual representatives to produce.\textsuperscript{21} This pressure has been magnified by the accompanying increase in commissions flowing through to individual brokers from their firms in order to encourage further production and attract producing brokers.\textsuperscript{22} These factors make overtrading accounts more profitable than was previously the case.\textsuperscript{23}

A review of the current state of affairs indicates that the problem of churn-

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\textsuperscript{19} See Miley v. Oppenheimer & Co., 637 F.2d 318, 323 (5th Cir. Unit A Feb. 1981) (for as long as brokers have been compensated on a commission basis “churning” cases “have dotted the federal docket”). It has been suggested that the securities industry needs to develop a new compensation system “that rewards brokers for their efforts on behalf of customers, not for defrauding them.” Pinto & Poser, \textit{Brokers Who Trade Too Often}, Wall St. J., May 20, 1985, at 26, col. 3; Haas, \textit{Let’s Put Brokers on a Straight Salary}, N.Y. Times, Sept. 4, 1977, \textsection 3, at 12, col. 3.


\textsuperscript{21} See Poser, \textit{supra} note 2, at 575. Brokerage houses generally imposed tougher production quotas on their brokers, making it necessary for those individuals to increase the size and frequency of transactions handled in order to shore up their firms’ profits and their own paychecks. \textit{See generally} Govoni, \textit{supra} note 20 (discussing the results of brokerage firm quotas); Poser, \textit{supra} note 2, at 575 (arguing that increased competition has led to intensified pressure on brokers by firms).

\textsuperscript{22} Poser, \textit{supra} note 2, at 575.

\textsuperscript{23} In addition, the rapid growth of option vehicles, which are high-commission, short-term investments, further complicates matters. Option vehicles present a form of investment that is susceptible to churning (or perhaps a naturally higher rate of turnover that may disguise churning), but not so amenable to traditional measures (including the turnover rate discussed in this Article) used to determine the presence of excessive trading. For discussions of churning in options and the special incentives in that context, see Packard, \textit{A Test for Churning in Stock Options}, 4 CORP. L. REV. 222 (1981); Poser, \textit{supra} note 2, at 576. These commentators suggest that economic differences and complications with options require a different analysis of excessive trading than that used for other investment accounts. \textit{See Packard, \textit{supra}, at 232-44; Poser, \textit{supra} note 2, at 607-08.}

The SEC prefers the commission-equity ratio, which is the quotient of the amount of commissions divided by the average equity. \textit{Securities and Exchange Commission, 96th Cong., 1st Sess., Report of the Special Study of the Options Markets} 454-55 (Comm. Print 1978). Because “commissions ostensibly are the most common motive for excessive trading... they provide a basis for comparison of accounts using various investment vehicles [and] the accounting information necessary for this calculation is readily available in the industry.” \textit{Id.} This method of detecting churning in the options context has been criticized as subject to undue variations, depending on strategy used, and thus would fail to sort cases accurately. Packard, \textit{supra}, at 236-40.

Legal scholars have proposed alternatives to the SEC’s commodity-equity ratio for dealing with option churning. Packard proposes a “commission turnover rate,” which involves a complicated measurement designed to replace the turnover rate. \textit{Id.} at 236-41. Professor Poser concludes that
ing has worsened in this most recent period. The financial and legal communi-

ties have increased their attention on the churning problem. Complaints to the

Securities and Exchange Commission (SEC) about unauthorized trading, which

often parallels churning, more than doubled from 1982 to 1984.24 The legal

industry press perceives that churning claims as well as other complaints against

brokers are “on the rise.”25 A prominent congressional leader has recently

voiced concern over “increasing numbers of complaints in connection with

churning and violations of suitability requirements.”26 This series of observa-
tions has been punctuated by the conclusion of leading securities scholars who

have noted that churning litigation appears to have been on the increase in the

last few years,27 an observation which confirms that inquiries into churning is-

sues are timely.

quantitative measures such as the turnover rate will not reveal whether there has been excessive trading in options accounts:

Although the courts still require excessive trading as one of the elements of liability in such cases, excessiveness apparently means little if anything more than that the broker has entered into transactions inconsistent with the customer’s investment objectives and financial needs, and that his conduct was inconsistent with his duty not to favor his own interests over those of his customer. . . . In view of the complexity and other special characteristics of the options market, this definition of “excessive trading seems justified. Statistical measurement of the trading is too blunt an instrument to determine whether or not fraudulent activity has occurred in the intricate market for listed options.

Poser, supra note 2, at 606. Poser suggests a multistep inquiry, asking: 1) what was the investment strategy? 2) was that strategy consistent with the customer’s financial needs and investment strategy? 3) was the customer able to understand the strategy and risks? and 4) did the broker minimize commissions? Id. at 607-08. The model developed in this Article is not designed to detect excessive trading in options.

Churning may also occur with respect to commodities accounts. Like options, however, commodities differ from other securities in that they are inherently short-term investments, highly sensitive to market fluctuations, and bear commissions computed differently from other securities. O’Hara, supra note 2, at 1893 n.55. Although commodity churning cases do present an issue of excessive trading, courts do not seem ready to use turnover rates to the same degree as with investment accounts. See, e.g., Evanston Bank v. Cointicommodity Serv., 623 F. Supp. 1014, 1024 (N.D. Ill. 1985). The commission-to-equity ratio has taken some prominence in commodity churning cases. See Bowling v. Stotler & Co., 731 F.2d 641, 649 (3d Cir. 1985). This sort of analysis leads to the exclusion of the turnover rate. See Lincolnwood Commodities, [1982-84 Transfer Binder] 2 Comm. Fut. L. Rep. (CCH) ¶ 21,986, at 28,247 (1984). One commentator has stated that those quantitative measures are meaningless in the commodities context. See Lowe, Churning in the Commodity Futures Accounts, 5 CORP. L. REV. 322, 338 (1982). But it is also possible to find cases that attribute significance to turnover rates under some circumstances. See, e.g., McBlane v. Jack Carl Assocs., Inc., 705 F. Supp. 1340, 1344 (N.D. Ill. 1989) (turnover of account 8.5 times in roughly two years adequately states excessive trading with respect to commodities options account that was set up for customer seeking preservation of capital and long-term appreciation); Roche v. E.F. Hutton & Co., 603 F. Supp. 1411, 1416-17 (M.D. Fa. 1984) (pleadings in commodity future trading account required to include turnover ratio or percentage of account value paid in commissions where customer alleged conservative investment goals) (citing Mihara v. Dean Witter & Co., 619 F.2d 814 (9th Cir. 1980)), and HARVARD Note, supra note 1, for the proposition that annual ratio in excess of six is excessive).

24. Govoni, supra note 20, at 76.


27. See L. Loss, FUNDAMENTALS OF SECURITIES REGULATION 705 n.21 (2d ed. 1988); Pinto & Poser, supra note 19, at 26, col. 3.
III. LEGAL STANDARDS FOR CHURNING LIABILITY

A churning case may be based on either common-law or statutory grounds. Numerous authorities support common-law rights of action for churning. In addition, churning is prohibited expressly by rule 15c1-7, which was promulgated by the SEC under section 15(c)(1) of the Securities Exchange Act of 1934. But the general antifraud provisions of the federal securities laws, such as section 10(b) and rule 10b-5, provide the most commonly used basis for churning liability. In practice, however, the application of these antifraud pro-


29. Rule 15c1-7 states:

   The term "manipulative, deceptive, or other fraudulent device or contrivance," as used in section 15(c) of the Act, is hereby defined to include any act of any broker, dealer or municipal securities dealer designed to effect with or for any customer's account in respect to which such broker, dealer or municipal securities dealer or his agent or employee is vested with any discretionary power any transactions or purchase or sale which are excessive in size or frequency in view of the financial resources and character of such account.

17 C.F.R. § 240.15c1-7(a) (1988).

30. Section 15(c)(1) authorizes the SEC to promulgate rules to prohibit manipulative, deceptive or fraudulent devices by brokers in effecting transactions. 15 U.S.C. § 15(c)(1) (1982); see T. Hazen, supra note 28, at 282-83; O'Hara, supra note 2, at 1884-85; Poser, supra note 2, at 576 n.33. Rule 15c1-7, however, by its terms together with the limitation on authority given by the statute, "applies only to churning of a discretionary account in transactions effected through the over-the-counter market." O'Hara, supra note 2, at 1884; see 15 U.S.C. § 15(c)(1) (applies only to transactions other than on a national exchange); 17 C.F.R. § 240.15c1-7(a) (1988) (limited to discretionary accounts); 1 S. Goldberg, supra note 14, § 2.4[a], at 2-18 (rule does not apply to "excessive trading of securities listed on an exchange, in which the broker-dealer has membership" and "only in those situations where discretionary authority has been expressly given to a broker by the investor, is it technically proper to employ this particular rule"); Jacobs, supra note 6, at 930 (rule 15c1-7(a) applies "only where the customer has granted formal discretionary authority."). But see T. Hazen, supra note 28, at 282 ("account overall need not be formally discretionary," but "it must be shown that the broker had 'control' over the account") (citing Norris & Hirshberg, Inc., 21 S.E.C. 865, 890 (1946), aff'd, 177 F.2d 228 (D.C. Cir. 1949) and Follansbee v. Davis, Skaggs & Co., 681 F.2d 673 (9th Cir. 1982)). For further discussion of the control issue and the statements in Norris & Hirshberg supporting a broader interpretation of the rule, see infra note 37.

31. 15 U.S.C. § 78j(b) (1982); 17 C.F.R. § 240.10b-5 (1988). Section 10(b) makes unlawful "in connection with the purchase or sale of" a security the use of "any manipulative or deceptive device or contrivance in contravention of such rules or regulations as the Commission may prescribe . . . ." 15 U.S.C. § 78j(b) (1982). Rule 10b-5 makes unlawful, among other things, "any device, scheme, or artifice to defraud" or "any act, practice, or course of business which operates or would operate as a fraud or deceit upon any person," all "in connection with the purchase or sale of any security." 17 C.F.R. § 240.10b-5 (1988).

32. O'Hara, supra note 2, at 1886; see, e.g., Hotmar v. Lowell H. Listrom & Co., 808 F.2d 1384, 1385 (10th Cir. 1987) (violation of section 10(b)); Arceneaux v. Merrill Lynch, Pierce, Fenner & Smith, 767 F.2d 1498, 1500 (11th Cir. 1985) (violations of federal securities laws); Costello v. Oppenheimer & Co., 711 F.2d 1361, 1367 (7th Cir. 1983) (case brought under section 10(b) and rule 10b-5); Miley v. Oppenheimer & Co., 637 F.2d 318, 324 (5th Cir. Unit A Feb. 1981) (broker who churns an account may be liable for violating section 10(b) and rule 10b-5); Mihara v. Dean Witter & Co., 619 F.2d 814, 820-21 (9th Cir. 1980) (broker may be liable for churning under rule 10b-5); Landry v. Hemphill, Noyes & Co., 473 F.2d 365, 368 (1st Cir. 1973) (violation of section 10(b) and
visions has been somewhat limited in recent years by various Supreme Court rulings. As a result of these rulings many broker-churning cases will be arbitrated rather than tried before a court.

Although recent Supreme Court cases have imposed substantive requirements on private rights of action under rule 10b-5 such as “scienter” and “deception,” the legal standards adhered to by the lower federal courts have


33. In Shearson/American Express v. McMahon, 482 U.S. 220, 226 (1987) (arbitration agreement enforceable under 1934 Act), and Rodriguez de Quijas v. Shearson/American Express, 109 S. Ct. 1917, 1921-22 (1989) (arbitration agreement enforceable under 1933 Act), the Supreme Court held that prediscpute agreements to arbitrate claims under the federal securities laws were enforceable and not subject to an exception to the United States Arbitration Act, which generally makes agreements to arbitrate future conflicts specifically enforceable. See 9 U.S.C. § 2 (1982). Brokers often take advantage of arbitration by requiring their customers to sign a prediscpute arbitration agreement when the investment account is opened. Courts have not been receptive to customers' claims that these agreements are adhesive. See Katsoris, Securities Arbitration After McMahon, 16 FORDHAM URB. L.J. 361, 373-74 (1988) [hereinafter After McMahon]; cf. Katsoris, The Arbitration of a Public Securities Dispute, 53 FORDHAM L. REV. 279, 292 n.86 (1984) (discussing whether customers are required to sign arbitration agreements). After McMahon and Rodriguez de Quijas, the tendency of brokers to require such prediscpute agreements should result in panels of arbitrators hearing churning cases as well as other federal securities claims against brokers under the 1933 and 1934 Acts in increasing numbers. See Katsoris, After McMahon, supra, at 368-69.

34. Although many churning cases will be arbitrated because of these agreements, not all cases will be forced into arbitration. See 21 Sec. Reg. & L. Rep (BNA) No. 19, at 684 (May 12, 1989) (“only 39 percent of cash accounts contain mandatory arbitration clauses”) (relating comments by SEC Commissioner Grundfest). Moreover, even in arbitration some measure of excessive trading activity is necessary to analyze even arbitrated claims. The turnover rate is one measure that is used for that purpose in securities arbitration. P. Hoblin, Securities Arbitration 9-17 to -22 (1988).

35. See, e.g., Santa Fe Indus. v. Green, 430 U.S. 462, 473-77 (1977) (rule 10b-5 prohibits deception, not unfairness); Ernst & Ernst v. Hochfelder, 425 U.S. 185, 201 (1976) (negligence not sufficient to support rule 10b-5 action); Blue Chip Stamps v. Manor Drug Stores, 421 U.S. 723, 736 (1975) (purchaser or seller status required for standing under rule 10b-5); see also T. Hazen, supra note 28, at 445 (“Although several recent Supreme Court cases have limited the scope of the 10b-5 private right of action, it continues to flourish.”); 2 A. Bromberg & L. Lowenfels, Securities Fraud & Commodities Fraud § 5.7(400) (1988) (citing cases). In particular, lower courts find the requisite "deception" in the violation of the broker's fiduciary duty to the customer and the requisite scienter in the act of consciously overtrading. See, e.g., Armstrong v. McAlpin, 699 F.2d 79, 91 (2d Cir. 1983) (“Churning, in and of itself, may be a deceptive and manipulative device under section 10(b), the scienter required by section 10(b) being implicit in the nature of the conduct.”); Costello v. Oppenheimer & Co., 711 F.2d 1361, 1368 (7th Cir. 1983) (“As a scheme, the essence of which is deception of a relying customer, ... churning, as a matter of law, is considered a violation of section 10(b) and Rule 10b-5 ... ”); Mihara v. Dean Witter & Co., 619 F.2d 814, 821 (9th Cir. 1980) (“The churning of a client's account is, in itself, a scheme or artifice to defraud within the meaning of Rule 10b-5.”); In re Catenella & E.F. Hutton & Co., 583 F. Supp. 1388, 1405-07 (E.D. Pa. 1984) (despite Santa Fe's requirement of deception, churning claims do state a cause of action under rule 10b-5); Yancoski v. E.F. Hutton & Co., 581 F. Supp. 88, 91 (E.D. Pa. 1983) (churning is deceptive under rule 10b-5). One might believe that grounding such cases on section 10(b) violates the spirit, if not the holding of Santa Fe, regardless of what the lower courts say on the matter. Of course, the line between fraud and breach of fiduciary duty is not always sharp, especially in this context. See Langevoort, Fraud and Deception by Securities Professionals, 61 TEX. L. REV. 1247, 1280-83 (churning is the best example of fiduciary misconduct amounting to fraud) (1983).

The duty of a broker "to refrain from overtrading arises from the ubiquitous shingle theory." Jacobs, supra note 6, at 930 (1972). The "shingle theory," which was developed by the SEC, has been described as holding that by "hanging out his shingle," a broker gives an implied warranty that he will treat his customers fairly and honestly. See Kahn v. S.E.C., 297 F.2d 112, 115 (2d Cir. 1961); L. Loss, supra note 27, at 811-20; Cohen & Rabin, Broker-Dealer Selling Practice Standards: The
remained essentially unchanged. Three elements are necessary to establish churning: 1) control of the account by the broker; 2) excessive trading in light of the customer's objectives; and 3) scienter, which is defined as intent to defraud, or a reckless disregard by the broker of the customer's best interests.36

Each of the three elements of the churning cause of action possesses its own analytical difficulties.37 Yet, the "excessive trading" element, while clearly recognized as a necessary element of a churning case,38 has been perhaps the most troublesome for the courts to evaluate. In theory, a court must determine "whether the volume and frequency of transactions, considered in light of the nature of the account and the situation, needs and objectives of the customer, have been so 'excessive' as to indicate a purpose of the broker to derive profit for..."

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Importance of Administrative Adjudication in Their Development, 29 LAW & CONTEMP. PROBS. 691, 702-03 (1964); HARVARD Note, supra note 1, at 870; cf. T. HAZEN, supra note 28, at 274 (under shingle theory broker impliedly represents that he has adequate information about the security; interpretation of the implied warranty as extending to the soundness of the representations about the stock's value "is too strong a statement of the rule"); M. STEINBERG, SECURITIES REGULATION 502-505 (1986) (some aspects of shingle theory may no longer be viable in light of Santa Fe). That "implied warranty" is violated when the broker chums or overtrades a customer account.


37. For example, it has been noted that the "control" element has been particularly troublesome. See O'Hara, supra note 4, at 1890 (defining control has been a "veritable nightmare for the courts"). Control most clearly exists when the broker is given discretionary power over the customer account. If the broker is not the decisionmaker, however, control can also exist in the more difficult cases as de facto control over a nondiscretionary account, the context of many churning cases. 1 S. GOLDBERG, supra note 14, at 2-22 to -23; Jacobs, supra note 6, at 930 (control can be indirect); see Hotmar v. Lowell H. Listrom & Co., 808 F.2d 1384, 1386 (10th Cir. 1987) ("control, though not formal, may be inferred from all the facts and circumstances"); Bowley v. Stotler & Co., 751 F.2d 641, 644 (3d Cir. 1985) (nondiscretionary account may be under broker's de facto control; determinative factor not label, but identity of person making trading decisions); Mihara, 619 F.2d at 821 (nondiscretionary account may be under de facto control of broker); In re Catanella & E.F. Hutton & Co., 583 F. Supp. at 1406 n.25 (level of control depends upon various factors); Newburger, Loeb & Co. v. gross, 365 F. Supp. 1364, 1371 (S.D.N.Y. 1973) (control not determined by label on account but by identity of decisionmaker), aff'd, 563 F.2d 1057 (2d Cir. 1977). It has been suggested that this difficult issue should be resolved by asking whether the customer relied on the broker. O'Hara, supra note 2, at 1933-36; Jacobs, supra note 6, at 930-31 ("de facto discretionary account is created . . . when an investor evidences trust and confidence in his broker by regularly following his advice"). Long ago the SEC, in discussing rule 15c1-7, stated:

[In our view, the handling of a customer's account may become fraudulent whenever the broker or dealer is in a position to determine the volume and frequency of transactions by reason of the customer's willingness to follow the suggestions of the broker or dealer and he abuses the customers [sic] confidence by overtrading.

Norris & Hirshberg, Inc., 21 S.E.C. 865, 890 (1949), aff'd, 177 F.2d 228 (D.C. Cir. 1949); see also Bowley, 751 F.2d at 648-49 ("touchstone is whether or not the customer has sufficient intelligence and understanding to evaluate the broker's recommendations and to reject one when he thinks it unsuitable"); Follansbee v. Davis, Skagg & Co., 681 F.2d 673, 677 (9th Cir. 1982) (same); Mihara, 619 F.2d at 821 ("requisite degree of control is met when the client routinely follows the recommendations of the broker"). For discussions of the difficulties associated with the elements other than excessive trading, see Langevoort, supra note 35 (discussing the intent to defraud element in light of the deception requirement of Santa Fe); O'Hara, supra note 2, at 1899-931 (exhaustive discussion of the confusion relating to the control element); FORDHAM Note, supra note 1, at 1104 (discussing confusion over the separation between the excessive trading element and the element relating to the broker's intent).

38. See, e.g., Hotmar, 808 F.2d at 1385; Arceneaux v. Merrill Lynch, Pierce, Fenner & Smith, 767 F.2d 1498, 1501 (11th Cir. 1985); Romano v. Merrill Lynch, Pierce, Fenner & Smith, 834 F.2d 523, 529 (5th Cir. 1987), cert. denied, 108 S. Ct. 2846 (1988); Mihara, 619 F.2d at 820-21.
himself while disregarding the interests of the customer.\textsuperscript{39} A broker's over-trading of a customer account to garner commissions is the essence of churning,\textsuperscript{40} and it is the direct cause of the injury to the investor. At some point the degree of activity in an account alone should be sufficient to prove churning.\textsuperscript{41}

In the typical case, however, it is difficult to determine whether excessive trading has occurred. This difficulty derives from the highly factual nature of the inquiry, which precludes the development of a fixed rule or formula.\textsuperscript{42} The lack of coherent guidelines for using turnover rates to analyze the excessive trading element raises concern about the effectiveness of current methods. The excessive trading standard involves an in-depth probe into the relationship between the amount of trading activity and the customer's investment objectives. Such an inquiry necessitates an evaluation of the relationship between a qualitative characteristic (investor objectives) and a quantitative measurement (trading activity).

The investor's qualitative individual objectives generally set the standard in any churning case. Different investors desire diverse financial risks and returns and therefore utilize a rich variety of investment vehicles such as bonds, blue-chip stocks, speculative stocks, and options. For example, courts generally accept the proposition that the frequency of trades for a speculator naturally might exceed that for a person desiring a low-risk investment strategy and preservation of initial capital invested.\textsuperscript{43} Thus, courts will look generally at what the individ-


\textsuperscript{40} Poser, supra note 2, at 577 ("gravamen of a churning claim is . . . the overall amount of trading which is excessive in view of the size and character of the account"); id. at 582 ("crux of a traditional churning charge is that the trading was excessive"); see Fey v. Walston & Co., 493 F.2d 1036, 1050 (7th Cir. 1974) ("aggregation of transactions excessive in number and effect . . . constitutes the gravamen of the complaint"); cf. O'Hara, supra note 2, at 1899 (broker's "[a]buse of . . . control [over account] is the gravamen of a churning offense").

\textsuperscript{41} See Poser, supra note 2, at 572. Professor Poser states:

The amount of trading in the customer's account, which gives the churning offense its name, is relevant only because an excessive amount of trading creates an inference that the broker has disregarded his customer's interests in order to gain commissions for himself, thereby acting fraudulently to the customer. In cases involving trading in shares of stock, this inference is often justifiable simply on the basis of the amount of trading in the account.\textit{Id.} at 572.

\textsuperscript{42} See Bowley v. Stotler & Co., 751 F.2d 641, 646 (3d Cir. 1985) (question of fact; no precise rule or formula); Booth v. Peavey Co. Commodity Serv., 430 F.2d 132, 134 (8th Cir. 1970) (same); \textit{Hecht}, 283 F. Supp. at 435 (same); Rules of Fair Practice, art. III, § 2, NASD Sec. Dealers Manual (CCH) ¶ 2152 (Board of Governors policy; no specific standard for churning); \textit{Fordham Note, supra note 1}, at 1101 ("no single formula for showing that an account has been traded excessively").

\textsuperscript{43} See Costello v. Oppenheimer & Co., 711 F.2d 1361, 1368 (7th Cir. 1983) (aggressive or speculative goals facilitate finding that trading not excessive); Follansbee v. Davis, Skaggs & Co., 681 F.2d 673, 676 (9th Cir. 1982) (trading deemed not excessive for investor looking for short-term profits). For additional authorities and discussion of the anticipated increase in trading activity for...
ual investor was trying to achieve. In addition, under the general formulation of the excessive trading concept, as described above, other qualitative factors such as the customer's financial resources further complicate the decision. One obvious example is the investor with limited resources, a situation that generally suggests that a reduction in trading activity is appropriate. Consequently, any hope for the use of a uniform standard is unrealistic.

After examining the qualitative base of investor objectives, courts often rely upon a variety of more objective factors, often quantitative measurements, to determine the existence of excessive trading. These factors typically include high account turnover, in-and-out trading, and hefty broker commissions.

The leading authorities seem to agree that the foremost quantitative measure is the turnover rate or ratio. Indeed some decisions, including recent trading and speculative accounts as compared to investment accounts, see infra text and accompanying notes 131-35.

44. For an analysis of the customer's investment goals, see Costello, 711 F.2d at 1363, 1368 ("investment objectives were not unduly ambitious" because of customer's desire to "earn a high return on his money," apparently about 20%, but customer was "primarily concerned with preserving principal," suggesting that lower level of activity was justified); Mihara v. Dean Witter & Co., 619 F.2d 814, 817, 819, 820-21 (9th Cir. 1980) (investor's concern about possible layoffs in future and education of children and their financial security apparent interest in growth, together with an average annual turnover rate of 5.59 and 9.3 times in 1971, held to be sufficient evidence of excessive trading); Hecht, 283 F. Supp. at 435-37 (trading accounts generally show greater activity but individual circumstances and needs of investor, who in this case was a retired widow without full knowledge of the markets, may justify a lower level of activity).


46. "In-and-out trading" is "a sale of all or part of the customer's portfolio with the proceeds immediately reinvested in other securities followed in a short period by the sale of the newly acquired securities." Hecht, 283 F. Supp. at 435.

47. See, e.g., Carras v. Burns, 516 F.2d 251, 258 (4th Cir. 1975) ("hallmarks of churning are disproportionate turnover of the account, frequent in-and-out trading, and large brokerage commissions"); Poser, supra note 4, at 582 (same). For a set of concise descriptions of these several measures, see FORDHAM Note, supra note 1, at 1102 n.9. The latter authority contends that only the three measures mentioned above can be used as aggregate measures of excessive trading. Id. at 1109 & n.51.

48. 2 A. Bromberg & L. Lowenfels, supra note 35, § 5.7, at 5:82.104 (turnover rate is "most commonly used analytical tool" for determining excessive trading); 1 S. Goldberg, supra note 14, at 2-44 ("single most material fact in a churning case is the computation of the annualized turnover rate"); Jacobs, supra note 6, at 933 ("most important statistical test in excessive trading opinions is turnover in the account"); O'Hara, supra note 2, at 1891 ("most important test for [overtrading in churning] cases is turnover ratio"); Poser, supra note 2, at 582, 599 ("most frequently used measure of excessiveness in churning cases involving stock trading is the turnover rate").

Other measures do not attract quite this degree of enthusiasm. Costello, 711 F.2d at 1369 n.9. In-and-out trading, for example, see supra note 46, is difficult to match with legitimate investment objectives. HARVARD Note, supra note 1, at 876. It has been observed that the pattern of in-and-out trading is a "key indicator" of excessive trading, where such a pattern exists. Poser, supra note 2, at 582-83.

Some cases accord percentage of account value paid in commissions status equal to turnover rate as far as the pleading requirement is concerned. See, e.g., Baselski v. Paine Webber, Jackson & Curtis, 514 F. Supp. 535, 541 (N.D. Ill. 1981). This information is relevant "because the nub of the offense in overtrading consists of taking repeated profits on a number of transactions conferring no advantage upon the customer." HARVARD Note, supra note 1, at 877. Nevertheless, one of the leading authorities has concluded that the amount of the commissions earned is a "secondary consideration" with no "meaningful guidelines from the cases." Poser, supra note 2, at 582-83. The lesser dependence on such a measure seems understandable in light of the relative directness with which the turnover rate measures whether the trading has been too active for an account.
ones, have held that a churning count fails to state a claim unless it includes the turnover rate or other quantitative measure or facts sufficient to compute them. Authorities in this vein have included some indication that an allegation will be found inadequate to withstand a motion to dismiss if the alleged turnover rate is too low.

The turnover rate for any particular period is the ratio of the total cost of securities purchased to the net amount invested. To borrow a simple example used by a leading authority, "if the purchases during a twelve-month period totalled $1 million and the average equity in the account was $50 thousand, the annual turnover rate would be twenty." It gives the court an idea of the frequency with which the securities in the account have been traded for new securities purchased to the net amount invested.

We should note here that the numerator of "purchases" would approximate "sales." This measure has been computed in a variety of ways. One version is sometimes referred to as the Looper formula. See, e.g., REPORT OF THE SPECIAL STUDY OF THE OPTIONS MARKETS TO THE SECURITIES AND EXCHANGE COMMISSION, 96TH CONG., 1ST SESS. 451 (Comm. Print 1979). The name derives from Looper & Co., 38 S.E.C. 294 (1958), which stated: "The turnover rate is computed by dividing the cost of the purchases by the average investment, the latter representing the cumulative total of the net investment in the account at the end of each month, exclusive of loans, divided by the number of months under consideration." Id. at 297 n.6. This version of the turnover ratio can result in much different figures than the turnover ratio as defined by Goldberg, due to differences regarding the treatment of securities deposited and margin debt. See P. HOBLIN, supra note 34, at 9-17 to -22.

Conclusions relating to our data are not intended to resolve such issues as may result in anomalous figures. We attempt only to put the simplest rates in perspective. The study of and choice among alternative versions of calculating rates are beyond the scope of this Article.


50. See Siegel, 658 F. Supp. at 554 (complaint dismissed because turnover rate of two for account with alleged conservative investment objectives was deemed too low to allege churning absent allegations of other special circumstances); Hempel v. Blunt, Ellis and Loewi, Inc., 123 F.R.D. 313, 317-18 (E.D. Wis. 1988) (turnover of at most two for eight months was too low to maintain an action for churning). Some higher turnover rates may state a claim. See Darrell v. Goodson, [1980 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 97,349, at 97,324-26 (S.D.N.Y. 1980) (annual turnover rates of 1.94, 8.30, 4.2, 4.8, and 5.9 "certainly set out a prima facie case of excessive trading" in a case in which plaintiffs alleged that account was to be managed in a "conservative and prudent manner, with an emphasis on capital preservation").

51. See 1 S. GOLDBERG, supra note 14, at 2-44; O'Hara, supra note 2, at 1891; Poser, supra note 2, at 582; HARVARD Note, supra note 1, at 875; see also Carras v. Burns, 516 F.2d 251, 251 n.2 (4th Cir. 1975); Costello, 711 F.2d at 1369 n.11. In the form of an equation, one variation of the annualized turnover rate (ATR) would appear as:

\[
\text{ATR} = \frac{P}{365} \times \frac{X}{E} \times \frac{E}{D}
\]

\[
P = \text{total cost of purchases in period}
\]

\[
E = \text{average net equity in the account in period}
\]

\[
D = \text{number of days in the period}
\]

We should note here that the numerator of "purchases" would approximate "sales." See 1 S. GOLDBERG, supra note 14, at 2-61 ("fairly stated (as a rough rule of thumb) that the total transactions amount to twice the volume of only the total purchases").
ties on the recommendation of the broker.\textsuperscript{53}

Some authorities, given such a quantitative measure as the turnover rate, have attempted to draw some rather firm guidelines about what turnover rate sufficiently indicates excessive trading. For example, one leading scholarly piece in the \textit{Harvard Law Review}\textsuperscript{54} has been cited with favor by numerous courts for its conclusion that an annual turnover rate greater than six (entire account turned over every two months) is likely to be excessive.\textsuperscript{55} The annual turnover figure of six has taken on independent significance in some courts, which now routinely parrot the observation of that early authority without expressly recognizing its origin.\textsuperscript{56} Indeed, the guideline relating to the figure of six also has now been read by some courts to raise a negative inference for turnovers of less than six.\textsuperscript{57} This acceptance of the magical number of six is remarkable in light of the failure of any of its advocates to suggest a reason for fixing upon it.

Yet another authority has purported to discern in the cases a 2-4-6 “rule” as a measure of excessive trading.\textsuperscript{58} Under this rule, an annual turnover rate that exceeds two indicates a possibility of churning; a rate in excess of four creates a presumption of churning; and a rate in excess of six conclusively establishes churning.\textsuperscript{59} This authority bolsters that conclusion as to its threshold figure by noting that when the ratio is two with a two percent commission rate, the total commissions would amount to eight percent, which would significantly diminish investor returns.\textsuperscript{60} These observations should have substantial force for accounts with conservative investment goals and thus lower returns. This set of guidelines seems to be an attempt to explain how the original suggestion by

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  \item \textsuperscript{53} See Costello, 711 F.2d at 1369 n.11.
  \item \textsuperscript{54} Harvard Note, supra note 1, at 876.
  \item \textsuperscript{55} Poser, supra note 2, at 582 (Harvard Note has been frequently cited by the courts for this proposition); e.g., Mihara v. Dean Witter & Co., 619 F.2d 814, 821 (9th Cir. 1980); Van Allen v. Dominic & Dominic, Inc., 441 F. Supp. 389, 401 (S.D.N.Y. 1976), aff’d, 560 F.2d 547 (2d Cir. 1977); Rolf v. Blyth, Eastman Dillon & Co., 424 F. Supp. 1021, 1039 (S.D.N.Y. 1977), aff’d in part and modified, 570 F.2d 38 (2d Cir.), cert. denied, 439 U.S. 1039 (1978).
  \item \textsuperscript{56} See, e.g., Arceneaux v. Merrill Lynch, Pierce, Fenner & Smith, 767 F.2d 1498, 1502 (11th Cir. 1985) (“courts . . . have indicated that an annual turnover rate of six reflects excessive trading”); Kaufman v. Magid, 539 F. Supp. 1088, 1095 (D. Mass. 1982) (annual turnover rate in excess of six adequately alleges churning) (citing Mihara rather than Harvard Note); Prodx, Inc. v. Legg Mason Wood Walker, Inc., [1987 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 93,238, at 96,145 n.13 (E.D. Pa. 1987) (same); Franks v. Cavanaugh, 711 F. Supp. 1186, 1191 (1989) (excessive trading element of churning generally assumed from an annual turnover rate in excess of six). Thus, one of the leading authorities has stated: “Although the damaging turn-over rate must necessarily be decided on a case by case basis, it appears that a given account’s annual turn-over rate in excess of six times is considered generally to reflect excessive trading.” T. Hazen, supra note 28, at 284.
  \item \textsuperscript{58} 1 S. Goldberg, supra note 14, § 2.9[b][1], at 2-43 to -50. This formulation of excessive trading standards was subsequently adopted verbatim by a securities lawyer writing for brokers. Ferenz, Churning, The Legal Lowdown, REGISTERED REPRESENTATIVE, June 1983, at 22, 25.
  \item \textsuperscript{59} 1 S. Goldberg, supra note 14, at 2-43 to -44.
  \item \textsuperscript{60} Id. at 2-61 to -62. That authority was written over a decade ago and in that time period trading costs have declined and portfolio turnover in general has naturally increased somewhat. See Berkowitz & Logue, The Portfolio Turnover Explosion Explored, J. PORTFOLIO MGMT. Spring 1987, at 38, 38-39.
the Harvard Law Review Note would work for annual turnover rates at less than six, without reading that standard as having a strong negative inference for such lower rates. But again, no substantial financial reasons are given for the set of suggested guidelines.

Although bright-line rules would provide an alluring solution to a thorny problem, such suggestions are unrealistic. Reliance by the courts solely on uniform numerical guides has two major shortcomings. First, the sweeping generality of these tests ignores differences between the objectives of investors, a factor clearly relevant in assessing churning claims, because the excessiveness of a given turnover rate depends on those objectives and the nature of the account.61

Accordingly, despite the frequent statements of quantitative standards, the court decisions have been all over the map in terms of actual conclusions reached regarding particular turnover rates. One can find decisions that, in terms of results reached, are consistent with, or close to consistent with, rules such as the 2-4-6 rule and the more general magical figure of six.62 Nevertheless, some courts have also concluded that high turnover rates did not constitute churning in the cases before them63 and others have held that some apparently

61. Costello v. Oppenheimer & Co., 711 F.2d 1361, 1369 n.11 (7th Cir. 1983) ("Whether a particular turnover rate is excessive depends on the objectives of the customer."); O'Hara, supra note 2, at 1891 & n.51 ("Excessiveness ... must ultimately be measured against the nature of the account and the investment objectives of the customer."). For a discussion of the relevance of the investor's objectives, see supra text accompanying notes 42-45; see also 1 S. GOLDBERG, supra note 14, at 2-41 ("there is no such thing as excessive trading per se"); Jacobs, supra note 6, at 932 ("No mathematical formula can establish a volume of trading which per se violates the Rule [10b-5] since an overriding subjective consideration—the customer's needs and resources—must be superimposed on the objective factors."); O'Hara, supra note 2, at 1891 ("Because determination of an excessive turnover rate depends on the nature of the account and the circumstances of the investor, it is impossible to state definitively how many times an account must be turned over during a given period before trading will be deemed excessive."); Poser, supra note 2, at 582 ("there is no litmus-paper test to indicate what turnover rate is excessive," because the customer's individual situation and objectives must be considered).


low rates were excessive.\textsuperscript{64} Although some express deference is apparently given to the figure of six, one can read the decisions without a comfortable understanding of a systematic relationship between turnover rates and normal investment objectives.

Without more, this state of affairs merely suggests great uncertainty regarding what constitutes an excessively high rate of trading and tentativeness in the use of the turnover rate. At best then, standards, such as the magical figure of six and the 2-4-6 rule, would seem to be only rough rules of thumb. They make the determination of excessive trading deceptively simple by avoiding the often difficult evaluation of the effect of investor objectives. The appropriate gradations within the range of turnover rates for diverse investment objectives remain elusive. Moreover, given the absence of analysis supporting such figures, one may legitimately wonder whether they were simply seized upon as numbers of sufficient size to indicate excessive trading regardless of the investment goals.

This type of impressionistic\textsuperscript{65} approach points to a second, broader problem with turnover ratio analysis—the absence of any foundation in financial theory. The rough rules suggested in the cases may be grossly and generally inaccurate in light of the financial evidence of appropriate turnover rates. They may in fact be inaccurate for any category of investment account. Because investor objectives are relevant, the legal rules proposed and used by previously referenced authorities seem grounded on an arbitrary line drawing, which may not be appropriate for this complex issue.

This Article attempts to ascertain a systematic relationship between the quantitative annual turnover rate and the qualitative objectives of the individual investor. By studying the turnover rates for mutual funds with diverse investment objectives, it should be possible to develop a relationship between the turnover rate and investor objectives that is superior to that suggested by the authorities described in the preceding paragraphs. This study attempts to approximate ranges of acceptable turnover rates for different objectives, and acceptable turnover rates for average investor's objectives, even if one is not comfortable making the fine distinctions required to establish gradations by type

\textsuperscript{64} See, e.g., Jenny v. Shearson, Hamill & Co., [1978 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 96,568, at 94,382 (S.D.N.Y. 1978) (turnover rate of 1.84 not safe as matter of law when nature of account and objectives were in dispute); Stevens v. Abbott, Proctor & Paine, 288 F. Supp. 836, 842 (E.D. Va. 1968) (annualized rate of two plus clearly excessive for investment account of unsophisticated plaintiff); Hecht v. Harris, Upham & Co., 283 F. Supp. 417, 436 (N.D. Cal. 1968) (annualized rate of less than 2 excessive for retired widow even though she acquiesced in trading strategy as opposed to long term investment), aff'd and modified, 430 F.2d 1202 (9th Cir. 1970); J. Logan & Co., 41 S.E.C. 88, 95 (1962) (several annualized turnover rates of less than two excessive for various unsophisticated and vulnerable investors with somewhat limited resources); First Sec. Corp., 40 S.E.C. 589, 590-91 (1961) (annualized turnover rate of about 1.7 excessive when customer was substantially dependent on the income from the account and generally uninformed, rendering inappropriate treatment of the account as a trading account; conservation of principal and receipt of dividends were of primary importance); Behel, Johnsen & Co., 26 S.E.C. 163 (1947) (annualized turnover of about 1.5 excessive for investment account of widows).

\textsuperscript{65} See Jacobs, supra note 6, at 932-33 (“Typically a court or the Commission will recite a series of numbers and ratios and then decide, based on a subjective impression of the facts, whether or not a broker is guilty of churning.”); HARVARD Note, supra note 1, at 874 (“likely that an overall impressionistic view will be taken of the dealings in the account in light of its character”).
of account. In any event, we should have an improved sensitivity to the point at which excessive trading generally occurs.

The next sections lay the groundwork for the study of pertinent portions of modern finance theory, and then describe observations from a study of turnover rates in mutual funds in order to define more fully the relationship between investment objectives and turnover rates.

IV. MODERN PORTFOLIO THEORY

Investments obviously involve elements of both return and risk. An individual investor's objectives depend upon the level of risk and return desired. In order to believe it possible to associate investment objectives with turnover rates, one must have reason to believe that accounts sharing similar investment goals will also share similar levels of trading activity. Courts seem to accept this proposition broadly by their statements, such as those to the effect that speculative or trading accounts should experience higher turnover than conservative accounts. To some extent "common sense" observations support this view that objectives should influence turnover rates.

Nevertheless, a reason that goes beyond the intuitive response is provided by modern portfolio theory and the concept of the efficient set or frontier. In the efficient frontier the expected rate of return is associated with a level of risk (or variance) for a given portfolio of investments. The efficient set is "the set of mean-variance choices from the investment opportunity set where for a given variance . . . no investment opportunity offers a higher mean return." The points lying on the efficient frontier represent the portfolios that would maximize utility for different investors; investors with different preferences for risk and return would choose different points on the frontier.

The concept of the efficient frontier provides an application of the general relationship of risk and return in the context of a particular kind of investment: a portfolio of investments. For any given investment choice, an investor or a professional adviser generally must weigh the potential for greater returns against greater risks. A project offering greater returns may be rejected because it also subjects the invested capital to an unacceptably higher level of risk.

As these concepts would be applied to a portfolio of investments using the efficient frontier concepts, a rational investor, and the broker handling the account, would always seek to invest in a portfolio that lies on the efficient set and


67. T. Copeland & J. Weston, supra note 66, at 165. These parameters are commonly expressed as the expected or mean value for returns and the distribution or dispersion about that value for risk. V. Brudney & M. Chirelstein, CORPORATE FINANCE 58 (3d ed. 1987). The latter element may be expressed in terms of either variance or standard deviation, which basically is a statistical concept designed to quantify how far from the average the figures in the population or sample are spread or distributed. Id. at 65.

68. V. Brudney & M. Chirelstein, supra note 67, at 58.
would avoid portfolios that offer a lower rate of return for the desired level of risk. Thus, each investor would select from the efficient set the single portfolio or point on the efficient set that matches the investor's subjective tradeoff between risk and return. Given a different objective, each would select a unique point on the frontier; different objectives would lead to different mixtures of investments.

In the everchanging marketplace, the maintenance of a position on the efficient frontier implies, if not requires, an optimum turnover ratio. Because transaction costs (commissions) are a direct cost to the investor and are a function of turnover, they directly affect the return that a portfolio will generate. Any transaction costs that are in excess of the minimum amount necessary to maintain a portfolio at a given point on the efficient frontier will reduce the investor's return, yet will not reduce the risk involved. Therefore, one should expect that portfolios managed to lie on the efficient frontier will experience particular turnover rates.

V. USE OF MUTUAL FUNDS AS REFERENCE POINTS

For our purposes, the existence of the efficient set theory shows that one

70. One might argue that because of the portfolio separation theorem the optimum portfolio for an investment objective does not change over time, as it is essentially the market portfolio combined with an optimal rate of lending or borrowing. See R. Brealey & S. Myers, Principles of Corporate Finance 158 (3d ed. 1988); see generally Tobin, Liquidity Preference as Behavior Toward Risk, 25 Rev. Econ. Stud. 65 (1958) (discussing relationship of demand for cash to interest rate).
71. T. Copeland & J. Weston, supra note 66, at 12.
should expect a systematic relationship in the tradeoff between risk and return in determining the optimal portfolios for various investors with diverse objectives. However, direct use of efficient set theory to determine the presence of excessive trading presents great difficulties, which are beyond the scope of this Article. Therefore, in order to estimate optimal turnover rates, we will use a study of a sample of mutual funds as a surrogate to overcome the difficulties with direct use of the efficient set theory.

Observing turnover rates for a sample of mutual funds with diverse, specific investment objectives provides a good opportunity to obtain data that approximates the location of points on the efficient frontier. While the use of mutual funds is an imperfect comparison, it is an informative source untapped for its full potential. At the very least, the turnover rates for mutual funds are representative of portfolios that lie within the efficient frontier, and, assuming that the mutual fund managers pursue the stated goals of the funds, the points will tend toward that frontier. Furthermore, mutual fund managers, unlike commission-rewarded brokers, lack the incentive to overtrade, and therefore serve as a natural test group, potentially associating optimum turnover rates with various investment objectives.

A. Reasons to Believe that Mutual Funds Can Serve as Proxies

Several good reasons support the proposition that the turnover rates of mutual funds will approximate the optimum turnover rates for broker-managed investment accounts. First, the managers of mutual funds are professionals making investment decisions designed to maximize return for a given level of risk. One should expect that brokers strive to maintain a position on the efficient

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72. The efficient set can be determined if we know the expected return, the expected risk, and the covariance of returns among available investment instruments. The covariance is a measure of the way in which two variables move in relation to each other. See T. Copeland & J. Weston, supra note 66, at 153. There are obvious difficulties and uncertainties in predicting or estimating returns and risks associated with each security. See W. Sharpe, supra note 69, at 20-33 (securities analysis is an art and requires predictions about the future prospects of securities). In addition, as the number of investment instruments increases, determination of the efficient set becomes a problem of computation.

Any direct application of the efficient set theory to determine churning is further complicated by the required demonstration that the securities chosen by the broker lie on the efficient frontier. Furthermore, securities comprising the set can change, thus requiring certain securities to be replaced by other securities. It is this activity, caeteris paribus, with which we are concerned.

73. As noted below, some flaws do exist in the comparison of turnover rates for mutual funds and broker-managed accounts. In addition, difficulty exists in accurately matching investor objectives with the appropriate reference point for mutual fund accounts.

74. To some extent, H.A. Dasler v. E.F. Hutton & Co., 694 F. Supp. 624 (D. Minn. 1988), is an exception to this statement. The plaintiffs, administrators of a profit sharing plan, introduced evidence of the turnover ratios of 22 mutual funds recommended by the defendant in the time period in question. The court found the 16 "growth and current income" funds to match the conservative investment objectives of the plaintiffs most closely and to yield annual turnover rates of 0.296, 0.368 and 0.358. Id. at 630. The court concluded that the turnover rate of 4.12 for the account was excessive. Id. at 630-32. The Dasler court did not state how the information from mutual funds should be used, beyond the obvious comparison. Our data indicate a substantially higher rate of turnover for the type of mutual fund considered (0.53), even though our findings relating to the distribution of that type of fund suggest the same conclusion—that the account was overtraded.
frontier by purchasing and selling securities in accordance with the funds' overall investment criteria.\textsuperscript{75} Indeed, mutual funds do have the characteristics that make them capable of serving as valid proxies for the generic investor because they reflect a range of investment goals, and mutual fund managers generally strive for these goals.\textsuperscript{76} Second, the compensation of the investment adviser of a mutual fund is more closely tied to investment performance than trading activity, which determines a broker's compensation.\textsuperscript{77} Thus, there are reasons to believe that the turnover rates evidenced in mutual funds represent a respectable estimate of the level of turnover that professional managers regard as optimum.\textsuperscript{78}

Arguments against using mutual funds as reference points to estimate optimal turnover rates for broker managed accounts are not wholly persuasive, even if they should be recognized. First, one might argue that mutual funds should experience less turnover than individual investment accounts with smaller amounts invested. A smaller dollar-valued account might necessitate greater turnover because adequate diversification might not be possible to protect the investor from market changes. But the large size of the investment accounts frequently at issue in the reported cases (account size in hundreds of thousands of dollars) suggests that this factor should not automatically and completely disqualify mutual funds as a proxy.\textsuperscript{79} Even cases involving smaller investment

\textsuperscript{75} One might argue that any given mutual fund may not trade optimally because of inept management. The market for human capital is generally long-run efficient. See R. EKELUND \& R. TOLLISON, ECONOMICS 311-16 (2d ed. 1988). Given that assumption, the inept management would be replaced.

Similarly, some mutual funds may be so large that the size of their holdings present liquidity problems and they may trade at less than the optimum level. Our study minimizes these problems, because the turnover rates for our sample funds are given equal weight regardless of size. Moreover, such a possibility implies less than optimal behavior by the larger funds, and such a risk exists in any empirical study.

\textsuperscript{76} See Martin, Keown \& Farrell, Do Fund Objectives Affect Diversification Policies?, 8 J. PORTFOLIO MGMT. 19 (1982) (actual investment actions followed by mutual fund managers significantly influenced by stated investment goals of funds); McDonald, Objectives and Performance of Mutual Funds, 1960-1969, J. FIN. \& QUANTITATIVE ANALYSIS 311, 331 (June 1974) (concluding for mutual funds that "stated objectives were significantly related to subsequent measures of systematic risk and total variability and to realized mean excess returns").

\textsuperscript{77} See generally STAFF OF THE NEW YORK INSTITUTE OF FINANCE, STOCKS BONDS OPTIONS FUTURES-INVESTMENTS AND THEIR MARKETS 134 (1989) ("money manager's fee is usually based on a percentage of the total market value of the entire fund"); Note, Shareholder Actions Against Mutual Fund Investment Advisers: Placing Limits on the Demand Requirement, 50 BROOKLYN L. REV. 807, 808 (1984) ("fee generally calculated as a percentage of the fund's net assets").

\textsuperscript{78} We do not argue that managers of mutual funds never trade excessively. Some cases do suggest that investment advisers or fund managers may overtrade. See Armstrong v. McAlpin, 699 F.2d 79, 90 (2d Cir. 1983); Lutz v. Bons, 39 Del. Ch. 585, 605-06, 171 A.2d 381, 394 (1961); First Multifund of Am., 44 S.E.C. 680, 687 (1971) (fund with portfolio turnover rate of 2.531 for 1969 compared to .768 for 1968). We contend only that generally the incentives to do so are less compelling than for commission-compensated brokers managing individual investment accounts. This point is supported by a leading authority. See Poser, supra note 2, at 577 n.38.

accounts with values in the lower tens of thousands of dollars seem to concern accounts of sufficient size to permit reasonable diversification and achievement of a low turnover rate. Furthermore, these cases concerning smaller investments, to the extent that they involve investment in somewhat unstable securities, raise a question of the wisdom of individual security investments for accounts that cannot achieve adequate diversification to achieve the investor’s objectives, and at some point would raise the issue of suitability. Under some circumstances a smaller account size may justify occasionally higher trading due to unusual events. However, it does not justify turnover rates greatly disproportionate to the turnover rates experienced by mutual funds, since “unusual” events by definition do not occur routinely.

$1.6 million, aff’d, 560 F.2d 547 (2d Cir. 1977); Hecht v. Harris, Upham & Co., 283 F. Supp. 417, 424 (N.D. Cal. 1968) (original value of account over $500,000), aff’d and modified, 430 F.2d 1202 (9th Cir. 1970).

See, e.g., Arconeaux v. Merrill Lynch, Pierce, Fenner & Smith, 767 F.2d 1498, 1501 (11th Cir. 1985) (account value of about $77,000); Mihara v. Dean Witter & Co., 619 F.2d 814, 819 (9th Cir. 1980) (average investment in 1971 was $40,000); Gleit v. Shearson, Hammill & Co., [1977 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 95,799 (S.D.N.Y. 1976) (initial purchases of $21,447.66 in margin account); cf. STAFF OF THE NEW YORK INSTITUTE OF FINANCE, supra note 77, at 135 (“Generally, the larger the [mutual] fund, the less the percentage the manager charges because it is almost as easy to run a $200,000 account as it is to run a $100,000 account. (You just buy and sell twice as much of whatever it is you’re going to buy and sell!).”)

Suitability rules lie in several sources. The Manual of the National Association of Securities Dealers provides: “In recommending to a customer the purchase, sale or exchange of any security, a member shall have reasonable grounds for believing that the recommendation is suitable for such customer upon the basis of the facts, if any, disclosed by such customer as to his other security holdings and as to his financial situation and needs.” RULES OF FAIR PRACTICE art. III, § 2, [1982] N.A.S.D. Manual (CCH) ¶ 2152 (March 1988). Rule 405 of the New York Stock Exchange provides that a firm should exercise “due diligence to learn the essential facts relative to every customer,” Rule 405(1), [1984] N.Y.S.E. Guide (CCH) ¶ 2405 (March 1989), and this has been interpreted to require suitable recommendations. N. WOLFSON, R. PHILLIPS & T. RUSSO, REGULATION OF BROKERS, DEALERS AND SECURITIES MARKETS 2-33 (1977); see generally Zaretsky v. E.F. Hutton Co., 509 F. Supp. 68, 75 (S.D.N.Y. 1981) (allegation of willful failure to invest in conservative investments known to be more suitable to investor than options actually purchased satisfies pleading requirement for scienter under rule 10b-5); Cohen, Suitability Doctrine: Defining Stockbrokers’ Professional Responsibilities, 3 J. CORP. L. 533 (1978) (general discussion of suitability doctrine); Mundheim, Professional Responsibilities of Broker-Dealers: The Suitability Doctrine, 1965 DUKE L.J. 445 (same).

The possible direct use of the broker’s obligation to have actual knowledge of the security in question and the “know your customer” rule is slight. As a leading commentator has summarized the point: “It is unlikely that a violation of these rules without more will provide an independent basis for private relief by an injured investor, although it may be relevant in an action brought under SEC rule 10b-5.” T. HAZEN, supra note 28, at 275.

In Mihara, the $40,000 investment was turned over 9.3 times in 1971. Mihara, 619 F.2d at 819. It is difficult to imagine that simple lack of diversification could be responsible for such a degree of activity. The court concluded that there was excessive trading. Id. at 821.

For example, in Gleit v. Shearson, Hammill & Co., [1977 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 95,799 (S.D.N.Y. 1976), a number of transactions were explained by unusual adverse events affecting the stocks in the account. Id. at 90,889-90. To the extent that the customer’s instructions caused the sales of securities, the trading should not be considered excessive and attributable to the broker. See supra text accompanying notes 39-41. If the broker was responsible, however, he should be held accountable for the undue trading activity. The account in Gleit started with purchases of $21,447.66. Within two months two of the four stocks purchased, comprising roughly one-third of the account, were sold due to “their deteriorating condition.” Gleit, [1977 Transfer Binder] Fed. Sec. L. Rep. (CCH) at 90,889. Within seven months another one-third of the initial account was sold pursuant to an instruction to sell if the stock’s price declined. The final one-third of the initial account was sold about eight months after purchase, as it “began to feel the effects of the oil embargo.” Id. at 90,890. These vicissitudes of the market are inevitable and precisely the reason...
Finally, one additional point supports the use of mutual funds as a reference point to estimate optimal turnover rates. While some factors indicate a lower optimal turnover rate for mutual funds than for broker-managed accounts, other factors suggest higher turnover rates for mutual fund accounts. Because mutual funds pay significantly lower commissions to brokers, these expenses on transactions by such funds indicate that, if anything, a greater turnover rate should be the norm in mutual funds as compared to investment accounts with similar objectives managed by brokers. Therefore, since these observations indicate a tendency toward higher turnover rates for mutual funds as compared to turnover rates for broker-managed accounts, the use of mutual fund turnover rates to determine excessive trading of investment accounts will not be unfair.

As the above discussion indicates, in the majority of cases, trading activity inconsistent with that of mutual funds could be justified by a broker only if the customer’s investment objectives differed from those of mutual funds or the broker had a realistic expectation of outperforming the mutual funds. Otherwise, well-advised investors diversify or, if that is not possible, stay out of individual securities and take a long-term outlook even in times of economic downturn, as evidenced in the Gleit case. The circumstances of that case illustrate the folly of investing the entire proceeds of a relatively small account in only four stocks.

Some scholars also believe that turnover should not be affected by the degree of risk or objectives of the client. Professors Jennings and Marsh take such a view:

There would seem to be little, if any, logical connection between the mere rate of portfolio turnover and the investment risk and resulting losses of principal from decline in market values... However, churning seems to take place almost invariably in highly volatile securities, for the obvious reason that there must be some plausible reason for taking the customer out of one security and putting him into the next one.

R. JENNINGS & H. MARSH, supra note 2, at 641. Professors Jennings and Marsh then ask whether the use of more volatile stocks in order to cover churning is a part of the churning case or a separate suitability violation. Id. Compare Hecht v. Harris, Upham & Co., 430 F.2d 1202, 1209 (9th Cir. 1970) (use of volatile stocks is a separate suitability violation) with Fey v. Walston & Co., Inc., 493 F.2d 1036, 1050-51 (7th Cir. 1974) (use of volatile stocks is part of the churning offense) and with McQuesten v. Advest, Inc., [1988] Fed. Sec. L. Rep. (CCH) ¶ 94,011, at 90,722 (D. Mass. Aug. 4, 1988) ("Finally, it should be appropriate on the issue of churning to consider suitability of investments, a matter where defendants come off poorly."). Thus, a poorly diversified portfolio of volatile or unstable stocks conceivably could be used as an excuse for excessive trading.

84. Commissions can approach $1.00 per share on full service accounts and $.30 per share even on discount broker accounts. This amount is significantly higher than the approximately $.10 per share cost that large mutual funds and other institutional investors pay to trade. Therefore, the same turnover ratio in a broker-managed account and a mutual fund account with exactly the same composition of securities will leave the broker-managed account with a lower return. If all other things are equal, the difference in transaction costs indicates that broker-managed accounts should have lower turnover rates than mutual funds with similar objectives.

Of course, in order to determine the total impact on portfolio return and incentives regarding trading activity, one should also consider other relevant costs. Examples include mutual fund sales and management fees and miscellaneous broker-managed account fees. Other fees not specifically examined here, however, do not bear so directly on the trading activity as do the typical broker commissions charged, which, as discussed above, vary directly with the number of trades. See Poser, supra note 2, at 577 n.38 ("Of course, an investment adviser would not be likely to have an incentive to churn an account unless his compensation were related to the commissions generated."). Thus, the turnover rates of mutual funds in general should be valid benchmarks for reasonable activity levels in portfolios with similar investment objectives.

85. For example, the Fidelity Magellan fund had a turnover rate from 1978 to 1980 of 2.38 to 3.38 when its net assets remained below $100 million. The smaller size apparently permitted higher activity. But the returns ranged from 32% to 70% for those three years. Returns and turnover rates decreased significantly in subsequent years. MUTUAL FUND SOURCEBOOK 305 (1989). Realisti-
the customer's funds might have been better placed with mutual funds in the first instance.

B. The Data From Mutual Funds

Mutual funds fall into ten primary categories according to their investment objectives.\(^{86}\) Nine of these categories include funds with similar risk-return or investment objectives. The other category, which this study did not use, is comprised of a variety of "specialty" funds with various objectives; accordingly, these funds are not good reference points for the purposes of this study.\(^{87}\)

The funds in these nine categories of interest represent a spectrum of goals. At one end of the investment objective continuum, aggressive growth funds offer increased returns with high risk.\(^{88}\) In contrast, an income fund's objective is steady, moderate income with lower risk.\(^{89}\)

Table 1 lists the fund types and turnover data for each type.\(^{90}\) In general, cally, the average broker could not expect to match the performance of the Fidelity Magellan fund for the years 1978 to 1980.

86. MUTUAL FUND SOURCEBOOK 31 (1985) (relating investment objectives that span the range of normal or commonly accepted objectives).

87. The exclusion of this category for lack of a coherent or unified objective for these funds serves another useful purpose. Some of these specialty funds purchase the market portfolio in a particular industry and hold it. Such a strategy would result in an abnormally low turnover rate and bias our conclusions if the data from that category were included.

88. An example of the objective and strategy of one typical aggressive growth fund is described as follows:

Putnam Voyager Fund's objective is capital appreciation. Current income is not a factor in portfolio selection.

This Fund pursues its objective by choosing a portfolio of "foundation" growth and "opportunity" stocks. "Foundation" growth holdings are small, high quality, rapidly growing profitable companies with a proprietary or low cost position in their industries. They must conduct their businesses in a manner that maintains profitability.

"Opportunity" companies may not have the established past record of the "foundation" growth companies, but they are poised to show strong earnings growth and improving profitability. Growth opportunities can arise from the introduction of new products, rejuvenated management, a change in the economy, or a change in the public's perception of the company.

This Fund searches for companies with growth potential that it believes can become tomorrow's "blue chips."


89. An income fund's objectives are typically described as follows:

American National Income Fund seeks to provide its shareholders with current income. A secondary but important objective is long-term capital appreciation. Management of this Fund believes that capital growth is important in protecting against inflation as well as in providing an expanded base for income return. It considers both present and potential yield and potential capital appreciation.

Id. at 56.

90. For each type of fund category in Table 1, 25 funds were selected randomly from the 1987 edition of the MUTUAL FUND SOURCEBOOK, which contains data for all mutual funds for which there is public information. Each fund is categorized here as characterized according to the groups used in the MUTUAL FUND SOURCEBOOK. For those categories with fewer than 25 members, all were selected. Those categories containing fewer than 25 members were aggressive growth (19), balanced (20), equity income (21), and option income (9). The mean turnover rates and the standard deviations given for each category represent an analysis of turnover data for each year from 1978 through 1987.

The use of ten years of data for each of the funds selected in each category gives our data multiple pictures (on average 200) of turnover activity for each category. The sample means, there-
the average turnover figures reported in Table 1 are consistent with composite turnover sample figures for mutual funds with growth, growth and income, and balanced funds, which rose from an average turnover rate of 0.46 in 1978 to 0.759 by 1983.

The data indicates that there are real differences between the estimated optimum rates for diverse investment objectives. The majority of the differences in the mean turnover rates indicated in Table 1 are statistically significant, which indicates that differences in the sample means are almost certainly not random occurrences and the optimal means for turnover rates apparently do vary between funds managed under distinctly different investment objectives. This conclusion was drawn from a computation of t statistics for each possible pair of combinations, which are reported below in Table 2. More than half of the possible combinations show that turnover rates significantly differ between categories. We can say, therefore, with almost complete confidence, that such categories have different optimal turnover rates. For example, the mean turnover ratio for the aggressive growth funds shows significantly more turnover than does the mean for the balanced funds (t ratio = −7.20).

Therefore, are good estimates of the population means. For example, the 95% confidence interval for the true mean of the aggressive growth category is computed as 1.18 + or − 2.05(.72) divided by the square root of 156 = 1.30 to 1.06. For the equity income category, it is .70 + or − 2.05(.53) divided by the square root of 179 = .78 to .62. See R. PFAFFENBERGER & J. PATTERSON, STATISTICAL METHODS FOR BUSINESS AND ECONOMICS 260-61 (1981). Therefore, the sample turnover rates are representative of the population means, and we have a high degree of confidence that they are right.

The construct of weak-form efficiency holds that price changes are independent of past prices. Because of this, portfolio management activities (turnover) are in response to expected security price behavior and are not a function of past activities; hence, each picture of a mutual fund in each of the ten years is an independent event and should be counted as such in computing the standard deviations and confidence intervals given above. Any predictions of the managers of such funds are a function of how they view the market, which is random, ex ante, if markets are efficient.

91. The turnover ratios taken from the Mutual Fund Sourcebook are "computed by taking the lesser of purchases or sales (excluding all securities with maturities under one year) and dividing by average monthly assets." MUTUAL FUND SOURCEBOOK 32 (1985). This is a reasonable estimate of turnover as discussed in the legal authorities, even if it would tend to lower by a small amount the resulting turnover figure. See supra note 48. Better information is not currently available to avoid this difficulty with the use of mutual fund data or to determine precisely the amount of any error. This aspect of the study justifies a caution, which we believe should be applied to the use of quantitative measures generally, against assigning too great a weight to any particular figure or figures.

92. See Berkowitz & Logue, supra note 60, at 40. The figures reported by Berkowitz and Logue are consistent with those reported in this Article, which yield a composite turnover ratio of 0.72 for aggressive growth, growth and income, and balanced funds over the period from 1978 through 1987. Those authors note that turnover rates for investments have generally increased in recent years due to a decline in trading costs. This means that our figures may not be good for all time. We believe that our figures, however, represent a fair comparison to the turnover rates discussed in the cases and other legal authorities that necessarily looked to prior years' motivations as well.

93. For a general description of t statistics that constitute a special method of analysis used in small sample estimation and which allow us in this case to draw the conclusions in the text without drawing a greater sample size, see T. Wonnacott & R. Wonnacott, INTRODUCTORY STATISTICS FOR BUSINESS AND ECONOMICS 166-73 (1972).

94. A balanced fund has been described as follows: Eaton & Howard Balanced Fund seeks to provide reasonable income and long-term growth of principal and income to its shareholders. This Fund consistently maintains a balance in its portfolio between bonds, preferred stocks and common stocks. The debt securities provide relative stability of principal and income, while the common stocks enable increases in principal and income.
### Table 1

**Fund Category and Turnover Statistics**

<table>
<thead>
<tr>
<th>Category</th>
<th>Mean Turnover Rate</th>
<th>Std. Dev.</th>
<th>Mean Plus A Number</th>
<th>1 S.D.</th>
<th>2 S.D.</th>
<th>3 S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggressive Growth (AG)</td>
<td>1.18</td>
<td>.72</td>
<td>1.90</td>
<td>2.62</td>
<td>3.35</td>
<td></td>
</tr>
<tr>
<td>Balanced (Bal)</td>
<td>.66</td>
<td>.58</td>
<td>1.23</td>
<td>1.81</td>
<td>2.38</td>
<td></td>
</tr>
<tr>
<td>Equity Income (EI)</td>
<td>.70</td>
<td>.53</td>
<td>1.23</td>
<td>1.76</td>
<td>2.29</td>
<td></td>
</tr>
<tr>
<td>Growth (G)</td>
<td>.98</td>
<td>.61</td>
<td>1.58</td>
<td>2.19</td>
<td>2.80</td>
<td></td>
</tr>
<tr>
<td>Growth-Income (GI)</td>
<td>.53</td>
<td>.55</td>
<td>1.09</td>
<td>1.64</td>
<td>2.19</td>
<td></td>
</tr>
<tr>
<td>International (Int)</td>
<td>.55</td>
<td>.42</td>
<td>.96</td>
<td>1.38</td>
<td>1.79</td>
<td></td>
</tr>
<tr>
<td>Option-Income (OI)</td>
<td>1.45</td>
<td>.74</td>
<td>2.19</td>
<td>2.93</td>
<td>3.67</td>
<td></td>
</tr>
<tr>
<td>Small Company (SC)</td>
<td>.54</td>
<td>.39</td>
<td>.93</td>
<td>1.32</td>
<td>1.71</td>
<td></td>
</tr>
<tr>
<td>Income (Inc)</td>
<td>.58</td>
<td>.40</td>
<td>.98</td>
<td>1.39</td>
<td>1.79</td>
<td></td>
</tr>
</tbody>
</table>

This study yields the sample means that reasonably approximate the average (and therefore assumed optimum) turnover rates for accounts with investment goals corresponding to those of the categories of mutual funds listed in Table 1. The existence of significant differences between the sample means of the various categories of funds shows that the choice of investment objective influences the amount of turnover in funds handled by professional money managers. Excessive trading inconsistent with the stated goals of the investor should push its turnover rate above others of its type.

Tables 1 and 2 show that the turnover ratios for income, balanced, and growth-income funds are relatively low and, in general, not significantly different. Managers of these funds generally invest in securities of mature firms. Interestingly, both international and small company funds also have low turnover rates.
A MODEL FOR EXCESSIVE TRADING

T Table 2

<table>
<thead>
<tr>
<th>Cat.</th>
<th>AG</th>
<th>Bal</th>
<th>EI</th>
<th>G</th>
<th>GI</th>
<th>Int</th>
<th>OI</th>
<th>SC</th>
<th>Inc</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG</td>
<td>-7.2*</td>
<td>-6.89*</td>
<td>-2.84*</td>
<td>-9.3*</td>
<td>-9.47*</td>
<td>2.59*</td>
<td>-9.67*</td>
<td>-9.28*</td>
<td></td>
</tr>
<tr>
<td>Bal</td>
<td>-7.2*</td>
<td>-6.89*</td>
<td>-2.84*</td>
<td>-9.3*</td>
<td>-9.47*</td>
<td>2.59*</td>
<td>-9.67*</td>
<td>-9.28*</td>
<td></td>
</tr>
<tr>
<td>EI</td>
<td>-2.93*</td>
<td>-2.84*</td>
<td>7.99*</td>
<td>-3.04*</td>
<td>-2.33*</td>
<td>9.78*</td>
<td>-2.09*</td>
<td>-1.94</td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>-1.71</td>
<td>-7.96*</td>
<td>4.96*</td>
<td>-8.2*</td>
<td>-7.74*</td>
<td>9.85*</td>
<td>-0.19</td>
<td>1.01</td>
<td></td>
</tr>
<tr>
<td>GI</td>
<td>-1.71</td>
<td>-7.96*</td>
<td>4.96*</td>
<td>-8.2*</td>
<td>-7.74*</td>
<td>9.85*</td>
<td>-0.19</td>
<td>1.01</td>
<td></td>
</tr>
<tr>
<td>Int</td>
<td>.31</td>
<td>9.78*</td>
<td>9.85*</td>
<td>-0.19</td>
<td>1.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OI</td>
<td>9.78*</td>
<td>9.85*</td>
<td>-0.19</td>
<td>1.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SC</td>
<td>9.85*</td>
<td>-0.19</td>
<td>1.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>Inc</td>
<td>9.85*</td>
<td>-0.19</td>
<td>1.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

* significantly different at .05

turnover ratios, even though these funds might be characterized as more risky or speculative than many of the other categories. In the case of the small company funds this probably results from the long-term investment horizon required for the growth and maturation of small or start-up companies.

As one might anticipate, growth, aggressive growth, and option-income funds exhibit higher turnover ratios than any of the other fund categories. The most turnover occurs in the option-income funds in which brokers

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Templeton World Fund's objective is long-term capital growth, which it seeks to achieve through a flexible policy of investing in stocks and debt obligations of companies and governments of any nation.

Id. at 632 (1987).

98. An example of the description of the investment criteria of a small company fund begins as follows:

Lord Abbett Developing Growth Fund's objective is long-term growth of capital.

This Fund's investment strategy is based on the concept that of the four phases of corporate growth, only the second or developing growth phase is characterized by a dramatic rate of growth. This Fund looks for companies in that phase, although it may also purchase new issues. Developing growth companies are almost always small, usually young, and their shares are generally traded over-the-counter. Having passed the pitfalls of the formative years, they are now in a position to grow rapidly in their market.


99. The description of the investment criteria of one aggressive growth fund states:

Armstrong Associates' objective is capital growth. Any interest or dividend income generated by the portfolio is incidental.

This Fund emphasizes investments in common stocks that have the prospect of earnings growth or asset enhancement over a one-to-three-year period. However, it may sell securities within a relatively short period if developments with respect to the issuer, the equity markets or the economy indicate that an investment change would be advisable. The Fund can also vary the proportions of equity and short-term debt investments in its portfolio.


100. A description of an option-income fund's investment criteria begins:

Gateway Option Income Fund seeks a high current return at a reduced level of risk.

This Fund intends to invest at least 95% of its assets in common stocks with respect to which call options are traded on an exchange. Generally, covered call options are written on such common stocks at the time of their purchase by the Fund.

frequently generate cash flows by writing short-term call options against stocks held in the option-income funds' own portfolios.\textsuperscript{101}

One can utilize the data in Table 1 to estimate what level of turnover activity indicates excessive trading for accounts with corresponding investment goals. For each category, one can determine a broad confidence interval within which the turnover figure for an account of that category should lie within a specified degree of certainty. The statistical likelihood of such a turnover rate randomly exceeding the statistically approximated rate by more than two standard deviations is 2.5%.\textsuperscript{102} The likelihood of the turnover rate randomly exceeding the mean by three standard deviations is only 0.5%. For example, for the income fund category, which had a sample mean of 0.58, a turnover ratio of 1.38 lies two standard deviations above the mean. It is unlikely that an income account invested in accordance with the funds' objective would exhibit a turnover rate at this high level.

C. Suggestions For Lower Benchmarks For Turnover Rates

While the discussion above indicates that this study serves as a starting point for ascertaining acceptable turnover rates for accounts with different investment objectives,\textsuperscript{103} we do not regard this point as the major contribution of the Article. Beyond attempting to estimate optimal turnover rates for broker-managed accounts with specific investor objectives, an overall and more fundamental observation about turnover rates in general is pertinent. Only the aggressive growth and option-income fund categories generated data justifying an annual turnover rate in excess of three.\textsuperscript{104} Therefore, it should be difficult for an investment adviser to justify a turnover rate in excess of three for any account in the absence of an unusual objective, such as a desire for high short-term profits. The data produced by this study support this conclusion relating to common investment objectives even more than the findings as to specific investment objectives listed in Table 1.

These observations stand in sharp contrast to the general approaches of courts and commentators. A survey of the relevant case law indicates that annual turnover ratios that seem fairly high by the standards of this study have been tolerated by the courts, often with some degree of confidence.\textsuperscript{105} In \textit{Gleit v.}

\textsuperscript{101} For a discussion of whether the limited use of options should disqualify this category from turnover rate analysis, see \textit{supra} note 23.

\textsuperscript{102} Because of the nature of \textit{t}(z) test, such a figure is not often referenced, but the likelihood of such a turnover rate exceeding the relevant mean by more than one standard deviation is 16%.

\textsuperscript{103} Further empirical work should add certainty to our conclusions. We expect that, with further research, an even more systematic relation between investment objectives and respective acceptable turnover ratios could be developed. Directions for some further work include additional study of mutual fund data, in terms of greater sampling, reexamination of the categories of funds by type, and analysis of the change in turnover rates over time. Additional proxies other than mutual funds might also be studied.

\textsuperscript{104} The mean turnover rate for aggressive growth and option-income funds exhibited a turnover rate in excess of three only at the 97.5% confidence interval (i.e., within three standard deviations). \textit{See supra} notes 90-92 and accompanying text (table 1 and data).

\textsuperscript{105} \textit{See, e.g.,} Newburger, Loeb & Co. v. Gross, 563 F.2d 1057, 1070 (2d Cir. 1977) (annualized rate of about seven not excessive for speculative investor). Even the so-called 2-4-6 rule does not
Shearson, Hammill & Co.\textsuperscript{106} the court stated that a turnover ratio of 2.97 seemed not excessive for an account with an investment goal of accumulating capital to defray children's college expenses. Another court, in Van Alen \textit{v.} Dominick & Dominick, Inc.,\textsuperscript{107} stated that a turnover ratio of three was not excessive in the abstract or apparently for any investment objective and was further "not excessive in light of the [investor's] intent to 'build up' her account."\textsuperscript{108} The Van Alen court flatly stated that no court had found excessive trading based on an annual turnover ratio of three, plainly suggesting that such a rate was low.\textsuperscript{109} Yet another court, in Grove \textit{v.} Shearson Loeb Rhoades, Inc.,\textsuperscript{110} concluded without significant comment that no excessive trading was indicated from the annual turnover ratio of 1.87 in light of the investor's goal of "increasing the return on her investment above the return on fixed income securities."\textsuperscript{111} These authorities seem to suggest that almost any modest goal, other than earning money market interest, would justify a turnover rate in excess of two or three. In addition, and contrary to the findings of this study, the courts seem inattentive to the role of investor objectives in evaluating whether excessive trading occurred. Instead, courts adopt the higher turnover rates commonly associated with high risk investments as the threshold level, even when evaluating excessive trading as it relates to conservative investor objectives.

This broad-brush analysis used by the courts to bolster their holdings is unnecessary in light of our data. For example, while relatively conservative investment goals suggest a low turnover rate, the broker strategy adopted in Grove (and apparently approved by the customer), which involved the use of covered calls, appears justified by our study; it results in a normal turnover rate only modestly higher than the rates for mutual funds with similar investment objectives.\textsuperscript{112} The court could have strengthened its conclusion by noting that the turnover of 1.87 was generally high, but the data on option-income funds show a mean of 1.45 for such funds.\textsuperscript{113} Thus, in this modest use of our findings relating to one specific investment objective, the 1.87 figure seems not excessive for such an account. Similarly, in Van Alen it was reasonably clear that the client ap-

\begin{footnotesize}
\begin{enumerate}
\item \textsuperscript{107} 441 F. Supp. 389 (S.D.N.Y. 1976), aff'd, 560 F.2d 547 (2d Cir. 1977).
\item \textsuperscript{108} Id. at 401.
\item \textsuperscript{109} Id. \textit{But see supra} note 64 and accompanying text.
\item \textsuperscript{111} Id. at 95,980. The Grove case dealt with an investment program consisting of fixed income securities, common stock, and covered calls. \textit{Id.} at 95,979. The writing of covered calls potentially takes this situation into the specific concern relating to options. \textit{See} Poser, \textit{supra} note 2, at 601. The court's use of the turnover rate, however, shows no awareness of such special concerns relating to options, and its comments were offered as a blanket statement of the acceptability of such rates for all types of accounts. Grove, [1982-83 Transfer Binder] Fed. Sec. L. Rep. (CCH) at 95,980.
\item \textsuperscript{112} We noted above the difficulties with using turnover rate analysis with option accounts. \textit{See} \textit{supra} note 23. This limited consideration of turnover rate in connection with the use of covered calls seems justified in light of the customer's holding of the underlying stock. Moreover, in light of the strategy of such accounts, it seems natural to expect a higher turnover rate, but not one greatly out of line with other investment strategies.
\item \textsuperscript{113} \textit{See supra} text accompanying note 91 (Table 1).
\end{enumerate}
\end{footnotesize}
proven or acquiesced in a strategy of intermediate trading with short-term transactions, a strategy that necessarily would seem to involve higher turnover. Indeed, this strategy, which goes beyond the aggressive investment strategies in our data, might be incapable of being analyzed in terms of a normal or optimum turnover rate and it might be more enlightening to analyze whether the trading strategy as executed made logical sense and turnover was minimized. If such alternative analyses were recognized expressly by the courts, there would be no need to make broad statements about what is a generally adequate turnover rate.

Indeed, the greater danger in the loose general statements about the acceptability of turnover rates in the abstract lies in the promotion of a false attitude about normal trading activity. Such loose statements create an atmosphere in which generally high rates are seen as acceptable and the minimum rates deemed excessive will be correspondingly too high. In a sense, they encourage as a next step the setting of unreasonably high threshold rates for excessiveness.

An early and prominent example of this type of undesirable influence of loose analysis can be found in *Rolf v. Blyth, Eastman Dillon & Co.* In that case the court apparently intended to hold that a turnover of 1.85 was insufficient as a matter of law to establish excessive trading. Even though it has been observed that the *Rolf* case involved an investor “who expected that his funds would be used for trading rather than long term investment,” with the consequent expectation that activity in the account would be heavier than for normal investment accounts, the court went out of its way to suggest that annual turnover rates higher than 1.85 might also be inadequate to establish excessive trading in more typical cases. To this effect the court read the magical figure of six as something approaching a minimum threshold, and it stated that “an annual turnover rate will not be considered excessive unless it begins to approach six.” This assumes that the authorities suggesting that an annual turnover rate greater than six is excessive also endorse a negative inference that an annual turnover rate less than six is not excessive. The influence of loose statements from cases like *Van Alen* is readily apparent in the significant citation of and reliance upon *Van Alen* in the *Rolf* opinion.

Once this process started, its spread was almost inevitable. Subsequent de-

115. This is similar to the analysis of churning in options suggested by Professor Poser. See Poser, supra note 2, at 598.
117. Id. at 1039.
118. Poser, supra note 2, at 582 n.70.
119. *Rolf*, 424 F. Supp. at 1039. This analysis is open to the same kind of criticism suggested with respect to the *Van Alen* case. If the particular objectives of the customer justify a higher turnover rate, it is not necessary to make general statements about the excessiveness of turnover in the abstract.
120. *Id.* The *Rolf* court concluded that 1.85 “was not excessive under the decisions” and further interpreted the *Harvard* Note to mean that even higher figures were not excessive: “Indeed, it is the view of at least one commentator that an annual turnover rate will not be considered excessive unless it begins to approach six.” *Id.* at 1039 (referring to *Harvard* Note, supra note 1).
121. See *id.*
cisions apparently accepted the often mentioned magical figure of six to be a general minimum figure, rather than simply a figure at which excessive trading is likely to be found. In *Siegel v. Tucker, Anthony & R.L. Day, Inc.* the court held that an annual turnover rate of about two was insufficient to withstand a motion to dismiss in the absence of the pleading of other special circumstances. The *Siegel* court further related an argument by the defendants that "the claim as stated warrants dismissal pursuant to Rule 12(b)(6) in light of the principle that an annual turnover rate of less than six will not normally be considered excessive," without questioning it and apparently, as did the *Rolf* court, accepted it as a negative inference from the oft-stated rule that a rate greater than six is normally excessive. Similarly, in *Hempel v. Blunt, Ellis and Loewi, Inc.* the court held that an annual turnover ratio of about three would not withstand a motion to dismiss. The *Hempel* court also apparently interpreted the common benchmark figure of six in a manner similar to the *Siegel* court's interpretation.

These more recent decisions seem to be misreading the Harvard Law Review Note's suggestion of six as a key figure, but the problems with these cases are more substantial. They involved situations in which a high level of trading activity was not so easily justified as in a case like *Rolf*. The degree to which the *Siegel* and *Hempel* courts were affected by a misguided attitude or notion of what constitutes normal trading activity is indicated by the lack of significance they attributed to the plaintiffs' allegations of "conservative" investment objectives. And in *Hempel* the plaintiff-customer was, furthermore, "an elderly widow" who was an "unsophisticated investor" placing $102,000, most of her life savings, with the broker. One can only wonder what these courts would accept as an allegation of special circumstances sufficient to create an issue of fact.

Although some judicial authorities do exhibit a greater willingness to find

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123. *Id.* at 554 ("Absent other allegations of special circumstances, not present here, an annual turnover rate of 2.00 is simply too low to justify a claim for churning in this District."). The *Siegel* court thus granted the defendants' motion to dismiss the churning count, despite the investor's alleged conservative investment goals. *Id.* at 553-54.
124. *Id.* at 553.
125. 123 F.R.D. 313 (E.D. Wis. 1988).
126. *See id.* at 317-18 (turnover of at most two for eight months).
127. The *Hempel* court stated: "In the commentary cited by the Costello court for its definition of turnover ratio, it is said that an annual turnover ratio will not be considered excessive unless it approaches six." *Id.* at 317 (citation omitted) (citing *HARVARD Note*, supra note 1, at 819).
128. The more natural interpretation of that authority is that an annual turnover of six is likely to be excessive. These courts appear to be stretching to draw a negative inference for ratios of less than six. *See HARVARD Note*, supra note 1, at 876.
129. *Siegel*, 658 F. Supp. at 553 ("Plaintiff alleges that he communicated his conservative investment goals to defendants"); *Hempel*, 123 F.R.D. at 314 (investor was "placed in the 'conservative' investment category").
130. *Hempel*, 123 F.R.D. at 314. In addition, the investments in *Hempel* apparently were in various mutual funds. *See id.* at 317 (Kemper Option Income Fund, Oppenheimer Premium Income Fund, and American Capital Government Securities Fund). In general, for obvious reasons, rapid turnover of investments in mutual fund shares makes even less sense than does rapid turnover in shares of stock in operating companies. *See* Harold R. Fenocchio, 46 S.E.C. 279 (1976).
excessive trading, the apparently growing number of decisions to the contrary represents a basic misunderstanding of the level of activity to be expected for investment accounts. They seem generally unaware that the turnover rates under their consideration lie at the high end of the spectrum of activity for accounts based on normal investment goals and that excessive trading takes place at annual turnover rates well below six. This misunderstanding by courts of the relevance of investor objectives and the relationship between investor objectives and turnover rates indicates a flaw in current methods for analyzing churning claims.

Courts should lower their threshold levels of the optimum turnover rates to account for the average (non-speculative) investor's objectives. A moment's reflection about the costs involved in securities transactions bolsters this proposition. It is difficult to conceive of a normal (non-speculative) investment strategy that would cause a broker to trade at an annual turnover rate of two, because the commissions at this level of trading would effectively consume most or all of the gains and appreciation. Moreover, the sale of stock at a gain is a taxable event, which triggers income tax liability. Between the commissions and taxes, the costs of trading can discourage an investor from pursuing modest returns on his investment. In short, an investor's desire to achieve a return in excess of that earned by a money market account should not cause courts to adopt without serious question turnover rates that more than double the optimum figures for the fund categories studied.

We believe that our suggestions could be best summarized as an attempt to set new and lower benchmarks for turnover rates considered to be normal for typical investment accounts. Turnover figures such as two or three times per year cannot be justified, without explanation, as necessary to achieve normal investment goals. No one would suggest that a portfolio designed to achieve conservative investment goals should normally and without question turn over twice in one year. Special circumstances and investor instructions may lead to approval of such a rate in a particular case, but the process should not be entered with the expectation, as is apparent in some of the authorities, that two or three is about normal in the abstract.

We also argue against implementing a level of rigid tiers with accompany-
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ing irrefutable presumptions. Such a system would likely be perceived as creating a safe harbor and zones of varying exposure, such that behavior might be distorted. Similarly, a rule that automatically or irrefutably faulted brokers for turnover rates lying in the top 2.5% of the distribution, for example, would also be undesirable, because it is inevitable that some small number of accounts or funds will be in the top of the distribution.

We believe that some use of a weaker form of presumption would be helpful to the courts. Depending to some extent on the specific investment objectives as reflected in the mutual fund data in the tables above, an appropriate annual turnover rate should be seen as lying in the neighborhood of one; rates increasing beyond that should be viewed with skepticism. As the rate increases much beyond one, the broker should bear the burden of explaining the higher than normal rate.\(^1\) Once the rate rises to about three, there should be little room for argument about the excessive trading element of the claim,\(^2\) in the absence of an investment motive or strategy that is not accounted for in our data.

These suggestions do not mean that the turnover rate should be the exclusive method of determining the presence of excessive trading. It is, however, the only direct measure of the level of trading in an account and therefore has achieved some deserved prominence in the cases. In appropriate cases where the level of the turnover rate is ambiguous but suggestive of churning, other evidence such as commissions earned and in-and-out trading should be relevant and may be dispositive.

The important point is that our study should sharpen the use of the turnover rate as our findings provide a good basis for estimating with confidence the normal turnover rates to be expected with common investment motives. With some of the "fat" removed from the turnover rate measure, it can be used with increased assurance. As should be clear from the above discussion, this does not mean that a high turnover rate automatically demonstrates excessive trading. Other considerations are, of course, relevant even after active trading is established.

D. Limits of the Turnover Rate Model

Having suggested reliance on a refined quantitative measure, which might appear simple and straightforward, we also should recognize some of the basic limitations on its use. First, the turnover rate only addresses the element of churning known as excessive trading, and other elements such as broker control

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134. See T. Hazen, supra note 28, at 284 (in cases in which excessive trading would seem to be indicated by a high turnover rate or patterns of trading, "the burden would presumably shift to the broker to justify this activity").

135. We do not wish to overemphasize the difficulty faced by the broker who seeks to explain such a rate. For example, Fidelity Magellan Fund has been one of the most successful funds in recent years. It averaged turnover of 1.96 per year from 1975 to 1984, including one year with the rate exceeding three. See Mutual Fund Sourcebook 134 (1985). This shows that on occasion good managers will have a higher turnover rate, but presumably they can also explain it and, perhaps as in the Fidelity Magellan case, the returns will also justify it.
over the account must also be established.\textsuperscript{136} A high level of trading activity without broker control does not make out a churning claim.\textsuperscript{137}

Second, turnover rates derived from a study of mutual funds should not be taken as conclusively establishing excessive trading. Implementing a level of rigid tiers based on this study with accompanying irrebuttable presumptions would mislead the courts and might result in unfair treatment of brokers who otherwise could justify their high trading levels. If the customer insists on a pattern of trades or an investment strategy or goal that results in a high degree of activity, the broker does not engage in trading that is excessive in light of the investor's goals.\textsuperscript{138} The customer may also direct that certain specific trades be made,\textsuperscript{139} a direction that would appear to remove such a trade from the group that potentially constituted excessive trading, even if all trades authorized as well as unauthorized should be included in calculating the turnover rate.\textsuperscript{140} In this context, the cases tend to support the idea that aggressive goals make it

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\item \textsuperscript{136} Moscarelli v. Stamm, 288 F. Supp. 453, 458 (E.D.N.Y. 1968) (other elements must be satisfied to make out a churning claim); I. S. Goldber, supra note 14, at 2-42 ("Accordingly, the presence of any one element absent the other will be insufficient as a matter of law to constitute the fraudulent practice of churning.").
\item \textsuperscript{137} See Follansbee v. Davis, Skaggs & Co., 681 F.2d 673, 678 (9th Cir. 1982) (client actively involved in the management of his account cannot successfully maintain churning action); M & B Contracting Corp. v. Dale, 601 F. Supp. 1106, 1110-11 (E.D. Mich. 1984) (control of account by account executive not established), aff'd, 795 F.2d 531 (6th Cir. 1986). For example, control might not be proven if the client were directly involved in the broker's activity with the account and was consulted on a routine basis and had meaningful influence about suggested courses of action.
\item \textsuperscript{138} T. Hazen, supra note 28, at 63 (Supp. 1988) ("on appropriate facts a showing that a large amount of trading was consistent with the customer's investment objectives can refute a claim of churning") (citing Trustman v. Merrill Lynch, Pierce, Fenner & Smith, [1984-85 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 91,936 (C.D. Cal. 1985)). As the Seventh Circuit has stated:
\item \textsuperscript{139} [I]f a salesman does only what the customer independently has in mind as an objective, has authority so to do, and fulfills any fiduciary duty to furnish fair advice, the additional motive of the salesman to earn commissions does not convert the transactions into a deceptive or manipulative device in violation of Section 10(b).
\item \textsuperscript{140} In Jaeger v. Presscott, Ball & Turben, [1984 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 91,823 (S.D.N.Y. 1984), the court noted:
\begin{itemize}
\item Defendants contend that only unauthorized transactions should be included in the computation of turnover ratio. This is not correct. Transactions made by a plaintiff based on the recommendations of the broker are considered when determining whether the broker had "control" of the account and are therefore part of the churning violation. These transactions, although apparently authorized, must be included in the turnover ratio to measure accurately all the questionable activity in the account.
\end{itemize}
\end{itemize}
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easier to conclude that a turnover rate is not excessive.141 Evidence of such instructions that deviate from the typical investment goals reflected in the trading of mutual funds would, of course, be highly relevant to the issue.

Several reasons, however, point to a need for caution before courts accept broker explanations of the trading activity. First, even a trading account can be churned.142 This situation may exist in cases when the customer's investment objectives made use of a trading account inappropriate.143 Or the investor's limited financial resources may also require that the trading rate be reduced, even in

141. See Hotmar v. Lowell H. Listrom & Co., 808 F.2d 1384, 1386 (10th Cir. 1987) ("[w]here the goals of the investor are aggressive it is easier to conclude that the trading was not excessive"); Costello v. Oppenheimer & Co., 711 F.2d 1361, 1368 (7th Cir. 1983) (if investor has aggressive and speculative goals, it is easier to conclude that trading rate is not excessive); Miley v. Oppenheimer & Co., 637 F.2d 318, 334 (5th Cir. Unit A Feb. 1981) (higher rate more easily justified for trading account than investment account); Newburger, Loeb & Co. v. Gross, 563 F.2d 1057, 1070 (2d Cir. 1977) (annual ratio of about seven not excessive for speculative investor), cert. denied, 434 U.S. 1035 (1978); Jaeger v. Presscott, Ball & Turben, [1984 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 91,823 (S.D.N.Y. 1984) ("In this case, plaintiffs have apparently entered into a trading account which ordinarily entails high trading activity and large commission."); Rolf v. Blyth, Eastman Dillon & Co., 424 F. Supp. 1021, 1039 (S.D.N.Y. 1977) (plaintiff had to show not only excessive trading, but also that his investment goals did not call for a high amount of trading), aff'd in part and modified, 570 F.2d 38 (2d Cir. 1978); Jacobs, supra note 6, at 932 (stable income accounts should have less activity than a trading account of a wealthy individual); HARVARD Note, supra note 1, at 875 (greater volume usually expected with trading accounts).

In Rolf the court stated:

[Plaintiff's primary goal was capital growth; he was willing to take the risks involved in short-term trading, and he never instructed [the adviser] not to engage in short-swing trades. Plaintiff's twice stated investment intent was to double his equity; indeed, in 1969 he expected his equity to double in approximately one year. In brief, the Court concludes that [the plaintiff] was a trader, not an investor, and that he is now estopped from maintaining that there was excessive trading in his account.


142. Hecht v. Harris, Upham & Co., 283 F. Supp. 417, 435 (N.D. Cal. 1968) (even a trading account can be churned), aff'd and modified, 430 F.2d 1202 (2d Cir. 1970); Jacobs, supra note 6, at 932 n.361 (same).

143. One manner of showing that the activity in a trading account was excessive is to show that the investor's objectives were inconsistent with a trading account and the broker convinced the investor that the trading account was a good idea. In Jaeger v. Presscott, Ball & Turben, [1984 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 91,823 (S.D.N.Y. 1984), the court stated:

Churning with respect to [a trading] account, where there is normally more activity than in a standard account, requires factual allegations in addition to just the trades involved. The complaint must set forth facts sufficient to constitute a basis for concluding that the volume of trades was not for sound trading purposes but for the purposes of generating excessive commissions. . . . For example, allegations that state in substance and effect that a broker did not correlate the type of account opened with the customer's known financial situation would satisfy the additional pleading requirement for a trading account. . . .

Plaintiffs here have alleged that [the account executive] was given an express statement regarding the investment objectives . . . [which were conservative investment objectives]. Accordingly, plaintiffs have sufficiently alleged excessive trading in light of the character of the account.

Id. at 90,137.
the context of a trading account. Thus, simply establishing that the account is a type recognized under the cases as justifying a higher turnover may not be sufficient in light of other circumstances in a particular case.

Second, there is some reason to question why some of the possible goals for accounts should greatly affect the turnover rate. Distinguished legal authorities have noted the lack of a general reason for increased trading even for speculative goals. They suggest that churning so often occurs with speculative accounts because of the culprit's need for a plausible explanation of the increased trading activity. That, of course, is not a substantial reason. In fact, our findings suggest that overtrading probably occurs in more conservative accounts, but the "normal" turnover rate range under existing authorities extends so high that the courts and the parties have not often recognized it as such.

Third, our data suggest that such an explanation may not be so plausible for each of the various goals that may be called speculative or aggressive. Our findings suggest that, although optimum turnover rates may differ for diverse investment goals, the difference is less dramatic than one might believe. For example, the sample of aggressive growth fund turnover rates yielded a figure of 1.17 as compared to the more conservative category of balanced funds, which yielded a figure of .65. Moreover, the rate for the small company funds was .54, and this type of fund would naturally include speculative or untried stocks. Thus, one should be careful not to allow too much leeway for aggressive or speculative investment goals. Short-term trading goals not reflected in mutual funds should be a different matter and lie beyond the scope of our suggestions.

Finally, we also recognize that unusual circumstances may compel a temporarily high degree of activity which could distort the turnover rate. For example, a radical change in investment strategy may necessitate a sale of current investments and the purchase of new assets. Other unusual events, such as a one-time sale for tax purposes, may also create the need for additional trading. Although care must be taken to avoid undue allowance for normal shifts in investment patterns due to typical events such as swings in the economy, some consideration must be given to different circumstances that would not be reflected generally in the mutual fund data.

145. See R. JENNINGS & H. MARSH, supra note 2, at 641.
146. Id.
147. For example, the Rolf court observed that "much of the turnover during the year 1969 came as a result of [the adviser's] liquidation of the Stirling securities, a major overhaul of the account which plaintiff approved." Rolf v. Blyth, Eastman Dillon & Co., 424 F. Supp. 1021, 1039 (S.D.N.Y. 1977), aff'd in part and modified in part, 570 F.2d 38 (2d Cir.), cert. denied, 439 U.S. 1039 (1978).
148. HARVARD Note, supra note 1, at 876 n.65 (high turnover "may be countered by a showing of a special justification for a transaction, such as a tax loss"); see Gleit v. Shearson, Hammill & Co., [1976-1977 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 95,799, at 90,890 (S.D.N.Y. 1976) (one end-of-year sale explained as a "tax savings device").
149. For example, the sale of an asset to take a tax loss may justify the sale of part of a portfolio one time, but it would not justify a turnover of three or four times in one year.
VI. CONCLUSION

This Article presents a study of turnover rates for various mutual fund accounts in an attempt to establish a relationship between investor objectives and optimal turnover rates for broker-managed accounts. In addition, the study establishes benchmarks for determining what turnover rates for any particular account indicate excessive trading.

The observations made from the model should enable the legal and financial communities to make determinations on the issue of excessive trading with more confidence. This Article suggests that optimum turnover rates are generally much lower than leading authorities and commentators previously assumed for common investment goals. In general, an annual turnover rate in excess of one and approaching two should raise concerns of overtrading. Furthermore, by relating the data produced by this study with the specific investor's objectives for the account under examination, one can verify more precisely a broker's claim that high turnover rates were justified by his client's unique investment goals.

This Article, however, is not the last word on the subject. One should expect that, with further empirical work, an even more systematic correlation between investment objectives and respective acceptable turnover ratios could be developed. The data reported here are intended merely to suggest a few tentative benchmarks.

At base, this Article indicates that courts should approach the analysis of excessive trading with a different attitude and that future decisions should move in a somewhat different direction from those currently on the books. Legal authorities suggest that significant deference has been given to the broker's judgment on this issue. The courts and commentators have failed to establish appropriate turnover rates (or ranges of rates) to be associated with diverse investment goals. Correction of these tendencies in line with the suggestions derived from our study of mutual fund data should improve significantly the use of turnover rates in the analysis of the excessive trading element of churning claims.

150. The confidence intervals for many of the fund categories studied suggest the presence of excessive trading for many accounts when the annual turnover approaches two. Moreover, no mutual fund category examined in the study has greater than a 2.5% chance that an account traded with that objective would produce a turnover rate in excess of three, a turnover rate currently tolerated by many courts.