

Detecting Personal Trading Abuses

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Preface

The mutual fund industry has been rocked recently by disclosures of alleged personal trading abuses. The market timing alleged by portfolio managers in their personal trading accounts is just the tip of the scandalous personal trading abuses, some of which will be uncovered in the months and years to come.

While working at the Securities and Exchange Commission in 1994 and 1995, I studied alleged personal trading abuses by mutual fund portfolio managers. At this time, the Division of Investment Management conducted a "study" of the industry, asking large mutual fund companies to voluntarily report the results of self-audits. These funds reported that their portfolio managers did not front-run fund trades and the Division therefore concluded that personal trading abuses were not widespread. It was my view at the time that front running was the least profitable and easiest to detect form of personal trading abuse and therefore that the Division's factual observations were pre-ordained and told us nothing about widespread personal trading abuses.

The paper, which follows, was written to explain a simple, cost effective method for ferreting account personal trading abuses. The paper was updated slightly and included in published comments at the SEC's Roundtable on Investment Adviser Regulatory Issues (*see* http://www.sec.gov/rules/other/f4-433.shtml). If my proposal had been adopted abuses like the abuses which have recently come to light would have been avoided. CJM 11/19/03.

1 Introduction

On August 20, 1999, the Securities and Exchange Commission adopted amendments to its Rule 17j-1 regarding personal trading by mutual fund company and investment adviser

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personnel.² Effective this spring and summer, these amendments place additional duties on fund companies' boards of directors to monitor personal investment activities of their employees and to detect and deter personal trading abuses.

The amendments require that all persons with regular access to information concerning funds' trading file initial and annual reports detailing their security holdings and quarterly reports detailing their security transactions. The amendments also require that fund's boards of directors approve codes of ethics governing personal trading and review annual reports describing any personal trading abuses uncovered during the previous year. Critically, the amendments require that funds' management or compliance personnel review the reports to detect violations of the funds' code of ethics. Unfortunately, current discussions of personal trading abuses provide little useful guidance for boards of directors seeking to comply with the amended Rule 17j-1.

The purpose of this paper is to describe an effective method for determining when employees of mutual funds and investment advisers might be engaging in abusive personal trading without placing undue burden on fund companies and investment advisers. I argue that effective detection of personal trading abuses can only be accomplished by monitoring trading profits <u>not</u> trades. The proposed technique will be useful for securities regulators faced with the daunting task of overseeing the ever-growing mutual fund industry while operating on restrictive budgets. It raises a red flag when suspect trading needs to be investigated more thoroughly. Finally, it suggests a simple yet effective disclosure that investment companies could make that would inform investors about personal trading activities.

available at http://www.sec.gov/rules/other/f4-433/mccann1.htm only with my changed contact information and the correction of a couple of typographical errors.

² See U.S. Securities and Exchange Commission (1999).



2 Background

In 1963 the Securities and Exchange Commission reported to Congress on the results of its comprehensive study of securities markets.³ Three years later, the SEC returned to Congress with recommendations to deal with problems in the mutual fund industry including several potential conflicts of interest arising from personal trading by portfolio managers.⁴ First, managers might use information about pending client trades to inform their personal trading. Second, and closely related, personal trades in advance of fund trades might adversely affect the prices at which the funds traded. Finally, portfolio managers might use their portfolios' holdings to prop up the value of securities managers hold in their personal trading accounts.

More than thirty years later, questions persist about personal trading in an industry which has grown from \$21 billion in 1962 to over \$6.8 trillion in 1999. Fund companies and investment advisers increasingly have a clear business incentive to maintain public confidence in the industry and assure investors that excessive personal trading does not distract portfolio managers.⁵ Revelations about the size and rumored profitability of Jeff Vinik's personal trading during a time when the funds he managed floundered created a heightened public awareness of potential conflicts of interest in the mutual fund industry.

The Securities and Exchange Commission has stepped up its efforts to scrutinize personal trading abuses and initiated a number of high profile enforcement actions against investment advisors.⁶ In 1994, the SEC alleged that Invesco Funds Group portfolio manager John Kaweske diverted fund resources to his son by investing in startup companies who agreed to pay secret commissions and failed to disclose many fund-matching personal trades. Chairman Arthur Levitt has forcefully made the case for strict adherence to the highest standards of ethical conduct, going so far as to say "If I were a director, I would have

³ See U.S. Securities and Exchange Commission (1963).

⁴ See U.S. Securities and Exchange Commission (1966).

⁵ See Lowenstein (1996) and SEC v. Capital Gains Bureau, Inc. 375 U. S. 180 (1963).



reservations about portfolio managers trading for their own account." Mutual fund companies have taken steps to reduce personal trading abuses. Yet there remains a vast gulf between the opportunities for abuse and the ability of fund companies and the SEC to detect such abuse.

Proposals for regulating personal investing activities of portfolio managers continue to focus on the conduct identified in the 1966 SEC Report. However, these practices are less likely to be profitable and are more easily detected than subtle forms of trading abuses available to investment advisors. In an effort to curb personal trading abuses by investment managers, current regulatory, compliance and enforcement activities should be revised to address the greater scope for abusive trading in the investment management industry.

3 Traditional Regulation

3.1 Front-running and Scalping

Rule 17(j)-1 has been interpreted to make it illegal for portfolio managers to *front-run* their clients. Front-running occurs when portfolio managers buy securities in their personal accounts prior to buying the same securities for their clients, or when the managers sell securities out of their personal accounts prior to selling the same securities for their clients. The rule has also been interpreted to prohibit managers from scalping stocks. Scalping occurs when managers purchase securities for their clients for the sole purpose of increasing the value of the same securities held in the managers' personal accounts.⁹

A manager might buy shares for his personal account that he intends to subsequently buy for one of his clients if he believes that the client's purchases will cause the securities' prices to rise. Likewise if a manager plans to sell a security out of the fund's portfolio he might first sell

⁶ The SEC reallocated resources from inspecting holdings of money market mutual funds to increased inspections of other types of mutual funds in 1994. *See* Sturc and Tycko (1996).

⁷ See Levitt (1996)

⁸ See "Fidelity Curbs Employee Stock Trades," The Reuter Business Report, June 21, 1996.

⁹ See Frankhauser and Frye (1988).



any of the same security he holds in his personal account if he believes that the fund's sales will reduce the securities' prices.

Front-running harms a portfolio manager's clients if the trades affect the prices at which the clients subsequently trade. This will occur when a manager's personal trades are large or if the trades convey information of impending large or informed client trades. Even where the manager's personal trades are relatively small, if front-running is detected and that trading pattern is emulated by other market participants before the client's trades are effected, the combined effects will cause the prices paid (received) by the client to increase (decrease).

Portfolio managers might use fund assets to buy securities that the manager already owns in his personal account if he believes that the funds' purchase will prop up the securities' prices. If a manager identifies an opportunity in a stock with only \$100 million in capitalization, a \$3 million purchase would constitute a 3% holding. Stakes of this size are likely to have significant price effects. More subtly, the manager might fail to sell securities from the funds' portfolio securities that he owns in his personal account if he believes such trades would depress prices.

Scalping harms portfolio managers' clients in two ways. The price support that funds' assets provide is directly related to the size of price impacts of the trades. That is, portfolio managers benefit from scalping only to the extent that the trades adversely affect prices at which clients buy and sell. Furthermore, scalping is more likely to occur in securities that have fallen in price or that portfolio managers believe are going to underperform the market. Scalping thus results in a perverse selection of securities for funds to purchase or sell.

3.2 Front-running and scalping generate thin profit margins

Conventional front-running is an extremely unlikely form of investment management personal trading abuse. When fund trades are large and uninformed, managers must make opposing trades in the same securities within a day or less *after* funds trade and even then can capture only a fraction of a transitory blip in prices induced by liquidity constraints. If the trades



are small there isn't even this transitory blip to chase. When trades are informed, managers must front-run clients' trades but such fund-matching trades are easy to detect and therefore effectively deterred.

If trades don't convey private information, their price effects are likely to be temporary. Mutual funds' trading is uninformed on average and therefore any price effects caused by fund trading are likely to be short-lived.¹⁰ When a manager enters a trade for his client he knows whether the trade was informed or not; the market has only an expectation that will be right on average but wrong on every individual trade. The manager therefore knows better than the market whether the price will return to its pre-fund-trade level.

To profit from prior knowledge of uninformed trades managers must *back-run* their funds; front-running is only incidental and often unnecessary. Managers can profit by following uninformed fund sales with personal purchases and following uninformed fund purchases with personal sales. That is, to profit from clients' sales, managers must buy immediately after the fund sells before the price returns to its full information level. To profit from funds' buying, managers must sell immediately afterwards. Of course, absent short selling, in order to sell the manager must already own the securities or front-run the fund's purchases. The returns to be earned from such abusive trading are limited to the amount of the short-term liquidity-induced price change that the manager can capture. This amount is likely so small that the manager would have to establish a regular pattern of close back-running his clients that would be easily detected.

If a manager has determined that a security is over- or under-priced, the manager will profit by preceding informed fund sales with personal sales and informed fund purchases with personal purchases. Knowing that the fund is going to trade based on this information allows

priced there is an investment adviser buying the same security because it is under-priced.

¹⁰ Actively managed mutual funds earn risk adjusted returns which equal those earned by passively managed benchmarks. In this sense mutual fund trading is "uninformed on average." In addition, to a first approximation for every transaction where an investment adviser is selling a security because it is over-



the manager to profitably front-run since the initial price reaction to the fund's trade will be in the same direction as the ultimate price reaction. Current monitoring efforts which focus on personal trades in securities traded in clients' portfolios easily detects such trading abuses.

4 Personal Trading Abuses Transfer Clients' Wealth

Potential trading abuses are more varied than front-running and scalping. Trading abuses may be as blatant as profitable allocations of hot initial public offerings or other "sure bets." Trading abuses may be as subtle as trading stocks across the bid-ask spread or refraining from making the indicated trades for clients after using valuable research insights developed at clients' expense to inform personal trades.¹¹

4.1 Favored allocation of trading opportunities

Portfolio managers may receive advantageous trading opportunities in exchange for trading with certain brokers. They might induce brokers to preference them when favorable trading opportunities are being rationed in exchange for heavy trading and a light monitoring of execution quality. Such preferencing occurs when brokers allocate underpriced initial public offerings ("IPOs") to managers in exchange for heavy fund trading actively. Of course, not all trading in IPOs is suspect and many managers may earn only normal risk-adjusted profits on their IPO trading.

The allocation of underpriced IPOs to active traders is not of concern when the IPOs are placed in the fund portfolio that generated the commissions used to fund the underpricing. But when hot IPOs are placed in the manager's personal account they represent a clear misappropriation of client wealth and breach of fiduciary duty. Recent amendments to Rule 17j-1 require that portfolio managers get prior approval before participating in an IPO or private placement.

¹¹ I would add market timing of international funds to this list today. The main point though is that it is impossible to enumerate and detect specific practices given the ingenuity of traders. The only sure way to detect and deter personal trading abuses is to monitor the profitability of personal accounts. CJM 11/19/03.



4.2 Mispricing Thinly Traded Securities

Small capitalization stocks and almost all bonds are thinly traded; these securities are perfect conduits for personal trading abuses. If a portfolio manager does a significant amount of trading at high commission rates, brokers may be willing to sell him thinly traded securities for much less than their market value—or to buy them from him for much more than their value. Since the vast majority of bond trading, even in exchange-listed bonds, lacks quote and trade reporting, brokers can safely sell a bond to portfolio managers at 98 and have the manager turn around and sell *the same bond the same day* in a prearranged trade for 102. Both brokers can claim that their prices were at the market and the portfolio manager can claim to have identified and arbitraged an arbitrage opportunity. Yet it is likely that either the selling broker or the buying broker was paying the portfolio manager for his patronage and the portfolio manager was taking advantage of his control over his clients' portfolios to benefit himself surreptitiously.

4.3 Trading at Negative Commissions

Managers may be allowed to trade in their personal accounts at favorable terms. These favorable terms could be in the form of reduced commissions or trading at prices within - even across - the bid-ask spread. At the extreme, managers might be allowed to trade at *negative* commissions in their personal account, buying at the bid prices and selling at the offer prices. This strategy is guaranteed to generate significant abnormal returns in an active personal trading account as the broker transfers its customary revenues to the portfolio manager without transferring any of its customary costs. Reducing commissions and/or giving preferential price improvements to managers for their personal trading will increase the net returns earned by managers in their personal account and, even in their most extreme forms, are highly unlikely to be detected by inspection.

4.4 Valuable Research Insights

Portfolio managers can effectively front-run clients without any risk of detection by conventional methods. Where fund trades are informed, it is knowledge of the research insights

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informing the trade, not knowledge that the fund is trading *per se* (or even that the trading is informed), that is valuable to the manager. Managers can fully exploit the valuable information exactly as if they were front-running without trading any of the same securities as their clients by trading in their personal accounts based on the research insights developed and then not trading for the client.

4.5 Soft Dollars

Favorable personal trading terms can be created through the use of soft-dollars. Brokers regularly advertise their ability to convert commissions to pay research expenses and services incidental to brokerage. These soft dollars may be rebated directly to mutual fund companies or pension funds sponsors or as payments to third party suppliers to pension fund and mutual fund investment advisors. The difficulty of tracking soft dollar purchased benefits makes soft dollars a ready conduit for personal trading abuse. Managers can simply trade clients' portfolios at soft dollar commissions and use the rebates and services to support their personal trading activities.

4.6 Cross Front-running

If a portfolio manager can purchase securities whose returns are related to the returns on securities he plans to purchase for his clients he may be able to front-run his clients' trades without appearing to do so. If a portfolio manager can drive up the price of a small capitalization firm 10%, he will likely increase the price of firms in the same industry as well. For portfolio managers at the largest funds it may be quite possible to drive up the price of Ford or Motorola by buying General Motors or Intel. Not only is this type of abuse not going to be detected, it is likely to be praised! A portfolio manager can claim to believe in a sector so much that he puts his own money into that sector's poorer firms before buying the sector's best firms for his clients. The use of derivatives makes subtle forms of trading abuses like cross front-running more profitable. By purchasing options on Ford (or index futures) before buying

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General Motors, portfolio managers may be able to significantly increase their personal trading profits.

5 Trading Abuses Could Be Effectively Detected At Low Cost

The current approach to detecting personal trading abuses is to check for fund-matching trades and suspicious IPO trades. This approach will detect unsophisticated front-running and some scalping and fraudulent trade allocations. I have suggested a number of ways that portfolio managers can abuse their clients through personal trading activities that can not be detected by the current approach. These undetected personal trading practices have the same deleterious effects on investors as front-running and scalping.

Fortunately, the trading abuses I have identified, and the myriad others I haven't identified, can be detected with the data funds already gathered. Unscrupulous portfolio managers engage in personal trading abuses because it allows them to transfer wealth from their clients to themselves. It is precisely this wealth transfer that provides fund companies and regulators with an effective method for rooting out abuses.

5.1 Serious Trading Abuses Result in Statistically Significant Abnormal Profits.

A portfolio manager who is front-running, scalping, being allocated hot IPOs, trading across the bid-ask spread, exploiting soft dollars or appropriating investment opportunities will receive abnormally high risk-adjusted returns in his personal trading account. So long as the portfolio manager is reporting all his trades the risk adjusted returns observed provide clear indications of which managers are most likely to be engaging in personal trading abuses.

5.2 Monitor *Trading Profits* Not *Trades*

Absent a complete prohibition on personal trading, the only way to detect personal trading abuses reliably is through statistical analysis of trading profits earned in personal accounts. Standard statistical tests of the returns to his personal trading can provide confirmatory evidence if there is reason to believe that a portfolio manager has engaged in personal trading abuses. Personal trading returns of more than two standard deviations beyond

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the average returns earned in similar portfolios is evidence that the suspect manager has engaged in personal trading abuses.¹² If the manager is trading the same type of securities in his personal account as he trades for his clients, a comparison of the returns earned in his personal trading with those earned for his clients will adjust for risk. Extensive information on mutual funds' returns provides us with additional benchmarks for evaluating portfolio managers' personal trading profits.

Statistical analysis of all access persons' personal portfolio returns would highlight potential problems and allow fund companies and regulators to focus their limited resources. Fund companies being examined could report to the Securities and Exchange Commission the historic returns earned by all access persons in their personal accounts by fund. This information would give the SEC a clear indicator of which funds and which individuals should be investigated further.

The technique I have proposed for detecting personal trading abuses imposes no additional costs on fund companies or regulators; funds are already required to gather all the necessary information and the calculations are simple. In fact, detecting personal trading abuses by analyzing returns would not only be more effective than traditional methods it would be much less costly than searching trading records for fund-matching trades or suspect allocations.

5.3 Disclose Aggregate Personal Trading Profits

The SEC and the industry are searching for simple informative prospectus disclosure. My analysis suggests such a disclosure. Funds could disclose the historic returns earned by all access persons in their personal accounts in a footnote to the returns earned by the fund. The funds could also disclose aggregate returns to classes of funds and to the personal trading of all access persons of those classes. If a fund company's access persons as a group have earned significantly more than the fund has, there should be strong suspicion that the funds code of ethics, and perhaps federal securities laws, have been violated.

¹² See Meier, Sacks and Zabell (1994) at p. 10.



6 Conclusions

I have presented an analysis of personal trading by investment company personnel that suggests much of the current focus on front-running is misplaced and cataloged numerous ways in which managers can abuse their positions with virtual impunity under current surveillance. Fortunately, these abuses can be detected through simple, low cost, statistical analysis of personal trading returns. Finally, our analysis suggests a simple prospectus disclosure that would effectively inform investors about potential personal trading abuses.

References

Frankhauser, M. and D. Frye, "Front Running." The Review of Securities & Commodities Regulation, October 19, 1988, pp. 179-186.

Levitt, A., Chairman, U. S. Securities & Exchange Commission at Investment Company Institute, Washington, D. C. May 22, 1996.

Lowenstein, R., "Fund Industry's Real Conflict of Interest," *Wall Street Journal April* 25, 1996, C1.

Meier, P., J. Sacks and S. Zabell, "What Happened in Hazelwood: Statistics, Employment Discrimination and the 80% Rule," in Statistics and the Law eds. Morris H. Degroot, Stephen E. Fienberg and Joseph B. Kadane, Wiley Classics Edition 1994.

U. S. Securities and Exchange Commission, *Report of the Special Study of the Securities Markets*, H. R. Doc. No. 95, 88th Congress, 1st Session (1963).

Company Growth, H.R. Rep. No. 2337, 8	, Public Policy Implications of Investment
Company Growin, n.K. Rep. No. 2557, 6	Sour Congress, 2nd Session 200 (1900).
	, Personal Investment Activities of
Investment Company Personnel and Coa	des of Ethics of Investment Companies and Their
Investment Advisers and Principal Under	rwriters, Investment Company Act Release No.
21341 September 1995.	
	, Personal Investment Activities of
Investment Company Personnel, Release	Nos. 33-7728, IC-23958, IA-1815, August 20,
1999.	

Sturc, J. and J. Tycko, "Keeping an Eye on Fund Managers; Personal Trading by Investment Advisers is Triggering SEC Scrutiny," *Legal Times*, July 1, 1996.

"Fidelity Curbs Employee Stock Trades," *The Reuter Business Report*, June 21, 1996.