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WHY THE MUTUAL FUND SCANDAL MATTERS

Introduction

Early in September, New York State Attorney General Eliot Spitzer made headlines by announcing that his office had launched an investigation into certain trading practices involving a number of large mutual fund companies. The two primary trading practices Mr. Spitzer's office is investigating are typically styled "late trading" and "market timing." As the news reports generally have it, late trading, if proved, is illegal. Market timing, while not necessarily illegal, often does violate individual funds' policies, as set forth in their registration statements and prospectuses. Since the initial announcement, a startling number of mutual fund companies have disciplined or dismissed portfolio managers and other executives, citing improper practices. The sweep and severity of the charges threaten to tarnish the fund industry's prior reputation for giving small investors fair treatment.

Late trading involves entering orders to buy or sell mutual funds after hours, for execution at today's price. In effect, it permits certain investors to buy and sell at today's closing price after the close – even (or especially) if information emerges after the bell that will obviously move the market tomorrow. Late trading is improper simply because it allows investors to choose whether or not to trade at old prices after learning new information. Market timing is frequent trading in and out of funds, typically over short periods of time. It can operate similarly to late trading, especially in funds investing in overseas securities. Many funds state in their prospectuses that they prohibit the practice. A fund that permits any practice in spite of a stated prohibition in its prospectus is operating in violation of its own policies, and likely in violation of securities law.

In many ways, the investigation, accusations, and subsequent dismissals or resignations of executives at various mutual fund companies seem like just another act in an ongoing morality play of financial malfeasance and wrongdoing. But in many of the previous incidents – the collapse of Enron, the ImClone insider trading case, the

Quattrone trial – most ordinary investors may well have felt like curious onlookers. Some may enjoy feeling they are watching the rich and powerful get their comeuppance, but for the most part the cases have not involved ordinary investors directly. The mutual fund case is different. If some traders benefit from preferential treatment that allows late trading or market timing, those benefits come directly at the expense of ordinary fund holders. To see why, we need to examine mutual funds and how they work.

Anatomy of a mutual fund

Mutual funds traditionally exist to offer small investors the advantages of professional money management and diversification. An investor with five thousand dollars cannot pay a professional manager a fee large enough to support the direct management of such a small amount. Mutual funds pool the investments of many small holders, allowing money managers to manage them profitably. The same pooling also permits fund managers to build portfolios that are much more broadly diversified than the portfolios that small investors would be able to create individually.

Mutual fund shares are actually shares in a special type of corporation, an investment company, which operates under particular rules. If you own 2000 shares of XYZ fund and XYZ fund has 20,000,000 shares outstanding, then you own 1/10,000 of everything in the fund – securities, accrued income, accrued expenses, and anything else that affects the net worth of the fund. Every day most mutual funds calculate the value of their portfolios, making suitable adjustments for accrued income, accrued expenses, and the like. By dividing the resulting figure by the total number of shares outstanding, the fund derives its net asset value per share (NAV), which is the figure you find if you look in the newspaper or online for a price quotation. If the total value of XYZ fund is \$250,000,000, then the NAV is \$12.50 per share.

The most common type of mutual fund is the *open-end* fund. This is the type of fund that is the subject of the current controversy. The term *open-end* refers to how investors contribute to or withdraw from the fund. When an investor buys into an open-end fund, the fund issues new shares. When an investor makes a withdrawal, the fund redeems and cancels existing shares. Many funds apply sales charges on new investments (front-end loads), and some impose redemption charges or deferred sales charges (back-end loads), but these charges are not the source of the potential harm to investors at the center of the current controversy (they have been part of other controversies, but that's another story). For this note, I will ignore them.

When an open-end fund creates or redeems shares, it does so at net asset value. If an investor puts \$10,000 into XYZ fund, and XYZ's NAV is \$12.50 per share, the investor receives 800 ($\$10,000 / \12.50 per share) newly-issued shares of XYZ. Similarly,

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if on the same day another investor who owns 1000 shares of XYZ redeems all those shares, XYZ redeems those 1000 shares, paying the investor \$12,500 (1000 shares x \$12.50 per share). The use of NAV to calculate the effect of fund contributions and withdrawals has a compelling logic of fairness to it, designed to give each investor the correct share of the large pool based on market prices prevailing at the time money moves into and out of the fund. Late trading and market timing permit privileged investors to have a bit more than their fair shares. The excess they enjoy comes at the expense of the other investors in the fund.

Late trading

The more prominent of the Spitzer charges is late trading. Unlike stocks, which trade throughout the day, open-end mutual funds generally process contributions and withdrawals on a daily cycle. Each day the fund determines its NAV and processes the day's activity at that price. Most funds calculate their NAVs after the market closes (4pm Eastern for the US stock market), based on end-of-day prices. Each fund generally has a daily deadline for trading at that day's NAV. The deadline is usually some time in the afternoon, not later than the market close. Orders coming to the fund after that deadline must wait until the next day for execution.

A late trading arrangement between a mutual fund and a privileged investor would permit that investor to enter fund orders after the usual deadline – oftentimes, according to the allegations, after the market closes. Imagine that XYZ fund, a \$250,000,000 fund with 20 million shares outstanding and a \$12.50 NAV, has entered into such an arrangement with an investor. XYZ's normal deadline for orders to be eligible for today's NAV is 4pm Eastern, but our hypothetical investor may enter orders as late as 6pm Eastern. Now suppose that on a particular day important news developments occur late in the afternoon that create a high likelihood that the market, or the stocks in XYZ's portfolio, will rise sharply. Perhaps the news has already caused those stocks to rise in after-hours trading. Our investor enters a late order to buy \$1,000,000 worth of XYZ, not at tomorrow's NAV, but at today's NAV of \$12.50.

The next day, as expected, the market rises, and our investor cashes out. Suppose the increase in value is 2%. Although our investor's \$1 million is technically in the fund for one day, the portfolio manager never has the chance to buy stock with it. The following table compares the action of the fund for the day, with and without our late trader's "investment." In the table, we compare the experience of our late trader with that of an existing holder with \$10,000, or 800 shares, in the fund.

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Illustration of effect of late trading			
		Day 1 (starting values)	Day 2 (after 2% gain)
Case 1: No Late Trading			
Portfolio Value		\$250,000,000	\$255,000,000
Number of shares		20,000,000	20,000,000
NAV/share		\$12.50	\$12.75
Value of 800-share holding		\$10,000	\$10,200
Case 2: With Late Trading			
Portfolio Value	Original holdings	\$250,000,000	\$255,000,000
	Late trader cash	\$1,000,000	\$1,000,000
	Total	\$251,000,000	\$256,000,000
Number of shares	Original holdings	20,000,000	20,000,000
	Late trader	80,000	80,000
	Total	20,080,000	20,080,000
NAV/share		\$10.50	\$10.7490
Value to late trader		\$1,000,000	\$1,019,920
Value of 800-share holding		\$10,000	\$10,199.20

Source: TIA illustration.

In the upper panel of the table, with no late trading, the fund experiences a 2% gain in the normal way. Its total portfolio value increases from \$250 million to \$255 million (a 2% gain), the number of shares remains constant at 20 million, and the NAV per share increases from \$12.50 to \$12.75 (also a 2% gain). An investor holding 800 shares would experience a gain from \$10,000 to \$10,200, the same 2%.

The second panel of the table illustrates the effects of a late trade of \$1 million. The late trader purchases 80,000 shares at the starting NAV of \$12.50 per share, bringing the total assets in the fund to \$251 million. The next day, the original \$250

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million captures the gain of 2%, to \$255 million, but the late trader's cash, having reached the portfolio manager after the increase in value already occurred, does not. At the end of the second day, the total portfolio's value is \$256 million. Dividing the \$256 million by 20,080,000, the new total number of shares, the NAV per share is \$12.749, just slightly less than the \$12.75 it should be. If the late trader cashes out, it is at this NAV of \$12.749, for a total value of \$1,019,920 – a one-day gain of \$19,920.

To see the source of the late trader's \$19,920, turn to the small investor with \$10,000. Our hypothetical late trader gained by buying a riskless ticket to participate in a pool of money already poised to jump by 2%. The gain is a direct transfer from the other holders of the fund, with each small holder making a tiny contribution. In our example, an investor holding 800 shares would see a \$10,000 holding increase to \$10,200 in the absence of late trading, but with the late trader in the picture, the gain is only to \$10,199.20. In other words, the \$10,000 holder suffers a tiny reduction in value – 80 cents. The holders of the other \$249,990,000 worth of shares make proportional contributions, adding up to the late trader's \$19,920. This is the stuff of which rationalizations are made.

Market timing

The second practice currently under investigation is market timing. In market timing, a trader makes rapid, in-and-out trades in a mutual fund. This is not necessarily illegal, but many funds have stated policies, spelled out in their prospectuses and other documents, discouraging or prohibiting the practice.

In many instances market timing can operate in exactly the same way as late trading. Many US –based mutual funds invest largely or entirely in overseas securities. By accident of geography, the US markets are the last major markets in the world to close on any given day. By the time the New York markets close at 4pm Eastern, markets in Australia and Asia are warming up to open *the next day*. So even at 2pm Eastern, a trader entering an order to buy a mutual fund holding Japanese stocks may be able to trade at Japan's closing levels from nearly twelve hours earlier. Market timers can trade in and out of international equity funds in a fashion similar to late traders, but without violating fund deadlines. If they do so intentionally to take advantage of stale prices, the effect is the same as with late trading.

The real problem

Recent press reports have placed considerable emphasis on the reputation effects that late trading and market timing may have on the mutual fund industry. For years, mutual funds have successfully created and maintained an image of fairness and freedom from scandal. The industry has been particularly good at holding itself out as a place where small investors can successfully reach the market on fair and reasonable

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terms. Now emerge serious allegations of practices that amount to expropriation of the assets of the many for the benefit of the few.

The public (and press) reaction has been strongest where there have been indications that fund company insiders have engaged in market timing for their own accounts. In one instance, in spite of resignations and dismissals among mutual fund managers, the taint of impropriety has affected a major money manager's institutional business. A number of public pension funds have withdrawn large institutional accounts from at least one manager, citing an erosion of the trust so crucial to a successful investment relationship.

Most of the published reports on the mutual fund scandal have conveyed a correct, if vague, sense that improper trading has worked to the benefit of favored parties, at the expense of the multitude of mutual fund investors. Improper trading appears to have been going on for some time. In any individual trade, the benefits to the favored trader are moderate, and the harm to each individual investor is tiny. But the accumulation of benefits, and the accumulation of harm, has become substantial. No less substantial is the doubt the entire scandal casts on the probity of the mutual fund industry.

After decades of sterling credibility, certain members of the mutual fund industry stand accused of operating in ways that favor some investors at the expense of others. If true, these allegations are a severe blow to an industry whose only substantial asset is investor confidence. Mutual funds will surely remain an important form of management of retail investor's assets, but the unfolding scandal can only increase the skepticism with which investors already approach the problem of finding a home for their assets.

- Jonathan Tiemann
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About Tiemann Investment Advisors, LLC

If you have been reading my newsletters for some time, you may well be wondering what Tiemann Investment Advisors is, and how I work. I established Tiemann Investment Advisors (TIA) in June of 2002 as a vehicle to broaden and leverage my ability to offer investment expertise to high net worth investors. My aim is for TIA to become the most influential exemplar of rational, efficient, and customized management of high net worth investors' assets.

Tiemann Investment Advisors inverts the approach most advisors take to designing and managing clients' portfolios. Instead of building model portfolios or picking stocks for a non-existent "average" investor, I work directly with each investor, directly applying my investment expertise to the planning, structuring, and design of your individual portfolio. These are the decisions that will ultimately make the most difference in the results you live with. After all, you hired a top architect to design the perfect house for you—you didn't go shopping for a set of "ideal" plans that suited lots of others. I believe you should approach your portfolio plan the same way. Once the detailed portfolio plan is in place, I apply a range of sophisticated, quantitative investment techniques to build and manage a portfolio that aims to match that plan.

A word on my background – I received my B.S. in Applied Mathematics from Yale University, an M.S. in Operations Research from Stanford University and my Ph.D. in Finance from Yale. I taught Finance at Harvard Business School for five years and then went on to be chief investment strategist responsible for nearly \$200 billion in institutional investments at Wells Fargo Nikko Investment Advisors. I have also served as President of BARRA RogersCasey Asset Services Group, and Chief Investment Officer at AdvisorTech Corporation, providing comprehensive investment programs to individuals around the world.

If you would like more information about me or about Tiemann Investment Advisors, LLC, including a copy of Part II of TIA's current Form ADV, please contact me at TIA's office in Palo Alto, California, or by email at jonathan@tiemann.net.