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On

"Mutual Fund Trading Abuses"

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Chairman Cannon, Ranking Member Watt, and Members of the Committee, thank you for the opportunity to appear here today.[1] We are discussing two recent reports by the Government Accountability Office (GAO) that ask whether there are lessons to be learned from the Securities and Exchange Commission's (SEC) handling of recent issues in the pricing and trading of mutual fund shares.[2] Both reports deal with the general issue of regulatory capture – whether the SEC is influenced by the industry in a way that adversely affects investors and whether reforms can make it more immune to that influence.

The first report concluded that the SEC was aware of inefficiencies in the pricing of mutual fund shares that created arbitrage opportunities, and that it relied too heavily on assurances from the industry that they were preventing these inefficiencies from being exploited.[3] This was despite being aware of evidence to the contrary: academic studies of the issue,[4] press reports,[5] complaints from investors and fund employees, and the high

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[1] I should begin by disclosing that in the last four years I have consulted, sometimes for compensation, with state and federal regulators, mutual fund families, two industry associations, law and consulting firms, and a pricing vendor. University rules limit my consulting to 20 percent of my time and I generally try to keep it to about 10 percent, so most of these engagements have been very short-term in nature.

[2] The reports are GAO-05-313, "Mutual Fund Trading Abuses: Lessons Can Be Learned from SEC Not Having Detected Violations at an Earlier Stage," and GAO-05-385, "Mutual Fund Trading Abuses: SEC Consistently Applied Procedures in Setting Penalties, but Could Strengthen Certain Internal Controls."

[3] For an example of such an assurance, see the 12/4/1997 speech of then Director of the Division of Investment Management Barry Barbash to the Investment Company Institute: "Funds that determined not to use fair value pricing at all or only in limited circumstances in October gave various reasons for their decisions. Some noted that fair value pricing can involve complicated judgment calls that are susceptible to second-guessing. Others pointed out that fair value pricing takes more time and is more costly to implement than pricing by reference to market quotations. Moreover, these funds asserted, the possibility of significant dilution in the value of their shares was not high enough to warrant the additional costs of fair value pricing." (http://www.sec.gov/news/speech/speecharchive/1997/spch199.txt). This reliance on industry assurances is also reflected in some of the early press reports on this issue. See, for example, "Monitoring Trades for the Good of the Shareholders," *New York Times*, 4/9/2000 and "Frequent Trading Worries Fund Firms," *Wall Street Journal*, 9/22/2000, C1.

[4] Academic work on mutual fund pricing inefficiencies includes Bhargava, Rahul, Ann Bose, and David Dubofsky, 1998, "Exploiting International Stock Market Correlations with Open-End Mutual Funds," *Journal of Business, Finance, and Accounting*, 765-773; Chalmers, John, Roger Edelen, and Gregory Kadlec, 2001, "On the Perils of Security Pricing by Financial Intermediaries: the Wildcard Option in Transacting Mutual-Fund Shares," *Journal of Finance*, 2209-36; Goetzmann, William, Zoran Ivkovic, and Geert Rouwenhorst, 2001, "Day Trading International Mutual Funds: Evidence and Policy Solutions," *Journal of Financial and Quantitative Analysis*, 287-309; Greene, Jason and Charles Hodges, 2002, "The Dilution Impact of Daily Fund Flows on Open-End Mutual Funds," *Journal of Financial Economics*, 131-158; Boudoukh, Jacob, Matthew Richardson, Marti Subrahmanyam, and Robert Whitelaw, 2002, "Stale Prices and Strategies for Trading Mutual Funds," *Financial Analysts Journal*, 53-71; and Zitzewitz, Eric, 2003, "Who Cares About Shareholders? Arbitrage-proofing Mutual Funds," *Journal of Law, Economics,*

fund share turnover rates publicly reported by some international mutual funds.[6] The GAO report focuses on failings in the handling of referrals (by the Division of Enforcement) and in routine inspections (by the Office of Compliance Inspections and Examinations). It does not mention policy making (by the Division of Investment Management), an issue to which I will return.

The second report examines the negotiation of settlements with fund advisors who priced their funds in a way that created arbitrage opportunities and then either facilitated or, in some cases, engaged in, arbitrage trading. The report appeared motivated by concerns that prosecutorial discretion could lead to excessive leniency, leniency that might be rewarded in a staff member's post-SEC career. The GAO concluded that participation in the settlement negotiations was broad and that negotiations were always conducted in the context of a damage analysis by SEC economists, and that this limited the influence of any individual. That said, the GAO concluded, and the SEC concurred, that improved monitoring of the subsequent employment of SEC Enforcement staff would be a useful reform.

Before commenting on these two issues, I should preface everything by noting that the SEC and mutual fund industry have made a remarkable amount of progress in addressing these issues since September 2003.[7] Furthermore, while economists often critique the incentives created by and outcomes of an institution's design, we do so without impugning the character or work of its staff. I have met many members of the

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and Organization, 245-280. Goetzmann, Ivkovic, and Rouwenhorst (2001), Greene and Hodges (2002), and Zitzewitz (2003) also included evidence on the extent of arbitrage trading, and Boudoukh, Richardson, Subrahmanyam, and Whitelaw (2002) discussed the existence of stale price arbitrage hedge funds.

[5] See, for example, Gavin, Daly, "In Lean Times, Firms Reconsider Timers," *Ignites.com*, 4/19/2002, Stone, Amey, "When Market Timers Target Funds," *Business Week Online*, 12/11/2002, and Carnahan, Ira "Looting Mutual Funds," *Forbes.com*, 3/19/2003.

[6] In contrast, there is no evidence I am aware of that the SEC was aware of the extent or even the existence of late trading in mutual funds.

[7] Specifically, as of the fourth quarter of 2004, the average international fund was removing about 70 percent of the price staleness in its NAVs via fair value pricing; up from about 7 percent in 2002. Dilution due to stale price arbitrage trading has been reduced to less than 5 basis points in international equity funds (at least in the TrimTabs sample of funds). Furthermore, I can no longer find evidence of late trading, at least in the fund-level data that I have access to. At the same time, valuation issues remain in other asset classes, particularly fixed income, and there is some (weak) evidence that arbitrage in high yield bond funds is increasing. See "Update on the Pricing and Dilution of Mutual Funds" (available at http://faculty-gsb.stanford.edu/zitzewitz/Research/mfupdate.pdf) for details.

SEC staff in the last two years, and without exception have found them to be smart and dedicated people whose primary concern is that our capital markets operate as efficiently and fairly as possible. Nothing I say today should be taken to imply otherwise.

The GAO reports are very thorough, and they adroitly handle a set of very sensitive issues. My only major critique of the first report is that it reflects the conventional framing of the "market timing" issue as one of "trading abuses" as opposed to one of pricing inefficiencies.[8] The difference is subtle, but important for two reasons. First, focusing on pricing rather than trading leads one to the correct policy fixes.[9] And second, focusing on pricing leads one to ask the right (or, at minimum, an additional set of) questions about the pre-2003 SEC stance on this issue.

The great irony is that the SEC understood the inefficiencies in international mutual fund pricing[10] and had twice urged the industry to eliminate them through a procedure known as fair value pricing.[11] But when the industry resisted, the SEC essentially backed down.[12] Despite the fact that it was clear from publicly available data that most funds were fair valuing infrequently, if at all, the SEC provided no further formal guidance on the issue.[13]

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[8] Late trading, of course, is clearly a trading abuse, not a pricing problem, and can only be dealt with through restrictions on post-4 p.m. trading.

[9] For reasons I discuss in Zitzewitz (2003), attempting to combat NAV arbitrage via trading restrictions or redemption fees suffers from both limited effectiveness and the fact that they selectively applied (or not applied) to certain investors. Simply put, if you are known to be in the habit of predictably mispricing financial assets, lots of people are going to want to trade with you – the key is to eliminate the mispricing to the extent possible.

[10] A 1981 no-action letter to Putnam discussed these issues, suggesting that SEC understanding of them issues dates at least to 1981.

[11] I am referring to the letters of 12/8/1999 and 4/30/2001 from Douglas Scheidt of the SEC to Craig Tyle of the Investment Company Institute (available at http://www.sec.gov/divisions/investment/guidance/tyle120899.htm and http://www.sec.gov/divisions/investment/guidance/tyle043001.htm).

[12] See, for example, a 2001 letter to the SEC from the Bar Association of New York and a 2002 white paper by the Investment Company Institute (cited and quoted from in Zitzewitz, 2003). It is worth noting that since this time period, there has been a complete turnover in the top management of the ICI.

[13] Surveys of valuation practices by Deloitte and Touche, PriceWaterhouseCoopers, and Capital Market Risk Advisors also revealed that many fund firms were either not fair valuing or using extremely wide thresholds. See also Sahoo, Alison, "Fund Firms Lagging When It Comes to Valuation," *Ignites.com*, 10/18/2001 and Sahoo, Alison, "Funds Still Not Up to Snuff on Valuation," *Ignites.com*, 11/19/2001. I did hear in early 2003 that the SEC was placing more emphasis on fair value in its compliance visits to funds,

Even since September 2003, there has been in some cases a striking similarity between what the industry has asked for and what the SEC has proposed.[14] The primary direct fix for the market timing problem proposed by the Investment Company Institute in October 2003 was a mandatory 2% fee for redemptions within 5 days of purchase. As I and others pointed out at the time, a severe limitation of this fix is that arbitrageurs could just hold their shares until day 6; even if enforcement of the rule were perfect, it would only reduce the excess returns available to arbitrageurs by a factor of roughly 2 (i.e., from about 48% per year to 24%, assuming no accompanying increase in fair value pricing).[15] Despite this limitation, this exact proposal became the primary direct fix for the market timing problem proposed by the SEC.

What I and others argued at the time would be a better first step is for the SEC to set and enforce standards for fund valuation that would substantially eliminate any arbitrage opportunity.[16] Doing so would largely eliminate the need for measures such as monitoring and short-term-trading fees, it will also eliminate the component of arbitrage that these measures will never be able to address.[17] While the industry has made progress in improving the valuation of international equity funds, there is still scope for further improvement. In other asset classes, such as illiquid bonds and small-cap equity, substantial arbitrage opportunities still exist. This is possibly because the industry is waiting for guidance on these asset classes from the SEC. There have been rumors for some time that the SEC is planning to issue such guidance, but there appears to be a

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and my analysis of the public NAV data reveals a slight increase in its use in early 2003 (see "Update on the Pricing and Dilution of Mutual Funds").

[14] Of course, in other cases, the SEC has proposed and approved rules that the industry opposed, such as the requirement that fund trustee board chairpersons be independent.

[15] See my 11/6/2003 testimony to the House Committee on Financial Services, Subcommittee on Capital Markets, Insurance, and Government-Sponsored Enterprises (available at http://financialservices.house.gov/media/pdf/110603ez.pdf).

[16] See, for example, the academics quoted in "A Band-Aid for the Fund Industry's Broken Leg?" *New York Times*, 11/21/2003, 1. It is likely impossible to completely eliminate all predictability from mutual fund NAVs, but we can come a lot closer to doing so than we do currently.

[17] For example, an arbitrageur in a stale-priced international fund can earn abnormal returns of 5 percent of year even while always observing holding periods of at least 90 days. Even longer-term shareholders with a knowledge of the details of mutual fund pricing can make their purchases and sales on days when pricing inefficiencies are in their favor.

delay. Regardless, the question remains why fixing the valuation of funds is the last step being taken, as opposed to the first.

This brings me to my only substantial critique of the second report, which is also about the report's scope more than its content.[18] The second report focuses on one form of regulatory capture, while neglecting one potentially more important. The report is concerned with firm-level capture, where a prosecutor might settle on attractive terms with a specific fund advisor, and then go work for that advisor (or, as the report does not consider directly but perhaps should, for a professional services firm that serves that advisor). My suspicion is that this scenario is fairly unlikely, particularly in the current climate.

A more likely, and difficult to address, form of capture is industry-level capture, in which a prosecutor settles on attractive terms out of fear that aggressive prosecution of a member of the industry will limit his or her subsequent career throughout the industry. Or, alternatively, in which a policy maker is reluctant to push a policy that an entire industry opposes, for the same reason.

Is this type of capture a problem? The experience with pre-2003 policy making suggests that it might be, while the scale of the penalties summarized in the second GAO report suggest that it is not.[19] The important question, of course, is not about what happened in the past, but what we can expect in the future. The extent to which the changed regulatory environment in 2003-4 turns out to temporary or permanent remains to be seen.

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[18] To the extent that the scope was given in advance, my comments are not really critiques so much as suggestions for future work.

[19] One caveat: while the GAO compares the size of the penalties to those in previous enforcement actions, an additional relevant comparison would be to the magnitude of shareholder dilution in each case. In Canada, the Ontario Securities Commission made public its estimate of shareholder dilution when each settlement was announced (it was generally about twice the settlement figure). It would seem reasonable to ask that the SEC do the same. Note that doing so would presumably not influence the outcome of any private litigation, since the litigants are very likely to obtain this information, if they have not already. It would, however, inform the public's evaluation of the fairness of the settlement process.

How does one address this form of capture? The economist's answer would be higher salaries and longer employment tenures at the SEC, to reduce the importance of post-SEC income. Personally, I am a little more optimistic about my guess as to what the sociologist's answer would be: to collectively recognize that capture is a problem and that attempting to influence policy in this manner, as opposed to winning arguments based on facts, is not something that should be rewarded.

A more radical suggestion would be to revisit the organization of the SEC. Currently, the policy-making divisions of the SEC (Corporation Finance, Investment Management, Market Regulation) are largely organized around the industries they regulate. A well-known empirical regularity is that single-industry regulators are typically more prone to capture than multi-industry regulators. The reason is straightforward: a DOJ lawyer prosecuting a case against a vitamin cartel need not seek future employment in the vitamin industry, whereas this is less true for an airline pricing specialist at the Civil Aeronautics Board seeking to limit a requested airfare increase. In this sense, the current organization of the SEC may be exacerbating the influence of industry. If a formal reorganization is viewed as too costly, then a positive step may be to simply institutionalize the cross-functional involvement that the second GAO report notes was a favorable feature of the SEC's work on fund settlements.

In conclusion, thank you again for the opportunity to share with you my thoughts on these issues. I look forward to your questions.