

**Exchange-Traded Funds:
A Market-Based Solution to Mutual Fund Regulation
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Managed ETFs LLC**

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We would like to thank the American Enterprise Institute for the opportunity to meet with you today. Our topic is exchange-traded funds – a market-based solution to mutual fund regulation.

It is no secret that there has been enormous growth in exchange-traded funds. This slide shows mutual fund assets and ETF assets at their approximate levels at the end of 2005. It took the mutual fund industry nearly 70 years to get to \$300 billion in assets. It took the ETF industry less than 13 years. Obviously, without the mutual fund industry showing the way, the recent growth in ETF assets would not have been possible. Nonetheless, the dramatic growth in ETFs in a market space dominated by mutual funds suggests that investors recognize the benefits of ETFs. Our objective today is to explain why the ETF structure is compelling for investors – and for regulators.

On this slide we show the way investors enter and leave a conventional mutual fund. The shareholders of the fund pay the transaction costs caused by investors entering and leaving the fund at net asset value. Investors pay cash when they invest in a mutual fund. They receive fund shares priced at net asset value in return for their cash. They receive cash when they redeem their mutual fund shares at

net asset value. All the transaction costs associated with investing incoming cash in portfolio securities and raising cash through the sale of portfolio securities when fund shares are redeemed are borne inside the mutual fund portfolio. Just so there is no misunderstanding what we mean by transaction costs, they include not only commissions, but the bid-asked spread and the market impact of the transaction.

During the rest of our presentation, we are going to be critical of the mutual fund investor entry and exit process. Please do not interpret this as criticism of the mutual fund industry. It is not. Our position is simply that this entry and exit process is an artefact that the industry and its regulator need to change. The exchange-traded fund structure is the most efficient and least painful way to change the way mutual funds accommodate entering and departing investors.

Market timers have exploited the mutual fund investor entry and exit system to move in and out of the market by moving in and out of funds. The timer essentially trades for free. Unless the timer benefits from price momentum not fully reflected in the fund's net asset value, trades initiated by a market timer or by an ordinary investor are equally costly to the shareholders of the fund. The cost of the most innocently motivated mutual fund share transaction is borne by all the shareholders of the fund, not just by the investors who are entering and leaving the fund.

The Securities and Exchange Commission is in the middle of a major effort to change mutual fund sales and redemption practices. This effort comes largely in response to the market timing and late trading

scandals of 2003 and 2004. At the risk of oversimplifying their proposal, the SEC plans to require:

- 1) an irrevocable notice that an investor is buying or redeeming fund shares by 4:00 p.m. and
- 2) most equity funds to impose a 2% redemption fee if an investor redeems fund shares within a week of purchase.

Everyone agrees that market timing hurts fund shareholders, but market timers account for only a small part of the transaction costs associated with the flow of investments into and out of mutual funds. Even if all mutual fund market timers could be shut down, the fund industry and the SEC still need to address the transaction cost problem inherent in the structure of mutual funds. This problem and the market-timing problem can be solved simultaneously by the exchange-traded fund structure – by extending that structure to improved index funds and to actively-managed funds.

The SEC redemption fee proposal would permit free trading of mutual fund shares as long as the trader stayed in the fund for more than a week. If a fund collects a redemption fee, a 2% fee should cover most of the cost of providing entry and exit liquidity to the trader. If the redemption fee can be avoided by redeeming on or after the eighth day, the cost of the fund share trade will be a permanent drag on the fund's performance record. The cost will not disappear or dissipate as time passes.

In this next diagram, we illustrate how ETF shares are created and redeemed by in-kind exchanges of portfolio securities for fund shares. Each exchange-traded fund posts a portfolio composition file – a

creation/redemption basket – each day. In the case of today's index ETFs, the basket essentially replicates the fund portfolio. Market makers assemble the basket of securities and create ETF shares by exchanging the basket, a small cash balancing amount and a small administrative fee for shares in the fund. In contrast to the mutual fund example, ETF market makers pay the transaction costs of assembling the basket of stocks they deliver in a creation and the transaction costs of disposing of the basket of stocks they receive in a redemption. The market makers pass these costs on to investors who buy and sell ETF shares in the secondary market, so that all the transaction costs associated with increases and decreases in the size of the ETF portfolio are ultimately borne by shareholders who are entering or leaving the fund.

Individual shareholders buy and sell ETF shares like they buy and sell stocks. Market makers create and redeem ETF shares in large blocks called creation units – 50,000 shares per creation unit in the case of the SPDRs, the oldest and the largest of the existing ETFs. The value of a SPDR creation unit is about \$6.5 million today. I want to stress that the important point in this illustration is that ongoing shareholders in an ETF are structurally protected from the cost of investor entry to and exit from the fund.

Last year, my partner in Managed ETFs LLC, Todd Broms, and I filed a request for an exemptive order from the SEC to permit our firm to offer actively-managed ETFs and improved index ETFs that will provide a full range of funds comparable, in terms of investment objectives, to the widely varied offerings of the mutual fund industry. Because these funds will use the ETF structure and the ETF creation and redemption

process, the costs associated with increases and decreases in the number of fund shares outstanding will be borne by the investors entering or leaving the funds, not by the ongoing shareholders of the funds.

There are enormous advantages to this structure, not only in terms of a more appropriate allocation of transaction costs, but in terms of virtually automatic regulation of fund share purchases and redemptions. A small number of dealers create and redeem ETF shares in large standardized blocks at net asset value. There is an extraordinarily transparent record-keeping system for these large transactions. The time at which an order arrives is carefully recorded. For actively-managed and improved index funds, the order cutoff time will be earlier than the 4:00 p.m. cutoff time for today's index ETFs.

There are some modest fund expense reductions with ETFs, but they are not a significant factor in the comparative economics of mutual funds and ETFs. Management fees for actively-managed ETFs will be comparable to management fees for actively-managed mutual funds. There is, however, another feature of ETFs that is important to taxable investors. Shareholders in a well-managed ETF will pay capital gains taxes only when they sell their fund shares.

This slide indicates the range of economic advantages that ETFs have over conventional funds. There is little agreement on how much the flow of money in and out of mutual funds costs fund shareholders. The only formal study of the cost of flow to shareholders of a large number of mutual funds came to the conclusion that the cost of flow measured as a reduction in shareholder performance was about 143 bps or 1.4%

per year. This study examined a sample of 166 equity and hybrid funds using data from 1985-1990.¹

The annual cost of flow of investors' cash in and out of the average mutual fund might be less than 1.4% today. It is certainly clear that the cost of accommodating investor flow varies greatly from one fund to another. For example, a very large, large-cap fund where shareholder flow is small relative to the total number of fund shares outstanding will have much lower flow costs than a small-cap fund. Transaction costs and performance penalties are inherently higher in the small-cap segment of the market and in funds where investor flow in and out of the fund is greater.

If the ETF-type of shareholder protection from the cost of fund share trader entry and exit improved investor performance by 1% a year in the average equity fund, switching all mutual funds to the ETF structure would add \$50 billion per year to the pre-tax performance experienced by US stock mutual fund investors who do not trade their shares during the year. Each one-tenth of one percent (0.1%) cost of flow per year, costs US stock fund investors \$5 billion per year in lost performance. Whatever the cost of flow is per dollar of fund assets, continuing growth in the fund industry makes it increasingly important that these costs be borne by entering and leaving fund shareholders, not by shareholders who do not trade.

The market timing and late trading scandals of 2003 and 2004 led to the SEC's current efforts to protect shareholders from the predations of market timers and late traders. To our knowledge, no one has

¹ Edelen, Roger M., "Investor Flows and the Assessed Performance of Open-End Mutual Funds," *Journal of Financial Economics* 53, 1999, pp. 439 – 466.

suggested that the costs associated with late trading and market timing could approach \$50 billion a year. In fact, the highest published estimate we have seen for the cost of market timing was less than \$5 billion per year.² The Commission's own estimate of the cost of implementing the original version of its redemption fee proposal was over \$1 billion per year for the first three years. The cost estimate for the revised version of the redemption fee proposal is substantially smaller, but the cost is still material relative to the cost market timers impose on other fund shareholders.

A key feature of the ETF structure is that the problems of market timing and late trading are solved for "free" by market forces when costs associated with entering and leaving the fund are transferred from the fund portfolio to the investors who enter and leave the fund.

We have presented a relatively simple explanation of exchange-traded funds. We have not attempted to describe the approach we would take to delivering actively-managed and improved index funds through the exchange traded fund structure. To do that subject justice requires far more time than we have today, but a few comments on the effect a move to ETFs will have on some small investors seems appropriate.

We do not argue that *every* investor will be better off if the cost of accommodating flow into and out of funds is borne by entering and leaving shareholders. Frequent traders and small traders may still prefer mutual funds.

² See, Zitzewitz, Eric. 2003, "Who Cares about Shareholders? Arbitrage-Proofing Mutual Funds." *Journal of Law, Economics, & Organization*, vol. 19 (October):245–280 and Zweig, Jason. 2003, "The Great Fund Rip-Off." *Money* (October):51–60.

A common criticism of ETFs is that they are costly to use in applications where a small amount of money is invested periodically, such as in 401(k) and 403(b) contributions deducted from the paychecks of investors saving for retirement. The share transfer mechanism of ETFs is being modified in a variety of ways to accommodate fractional share positions and to spread costs over a large number of small accounts. Systems are under development to reduce the cost of using ETFs in retirement accounts. A new trading mechanism we have developed can make ETFs available in small lots at a cost competitive with conventional mutual funds traded at net asset value.

Over the next few years, you will hear much more from us and from others about ways to make ETF shares more attractive to small lot traders. The fact that small transactions have been subsidized by the fund industry – and by other fund investors – will make it difficult to serve small investors at the low costs they have come to expect. Nonetheless, we believe that innovations in the ETF trading process will reduce transaction costs for investors buying and selling a few fund shares at a time. Ultimately, we expect all but the very smallest periodic investment plan investor will be better off with ETFs than with today's mutual fund structure.

In closing, I would like to share something I found on the SEC's website. The SEC solicits comments from interested parties on most of its rule proposals. I hope that the people who have to read all of these comments get paid extra for this task, but there are occasional gems. In going over the comments associated with the SEC redemption fee proposal, I found a remarkable comment from an investor:

“Investors should pay the cost of the transactions they cause. If I invest a lump sum in a fund for 10 years, I should pay for twice only – the purchase and the sale. If I buy and sell monthly, I should pay for lots of transactions...

“So, every day that the fund has a change in total fund shares, figure out the cost of trading the stocks and bonds that must be bought or sold to match the change in fund shares. Divide that cost among the new investors. Don't make buy-and-hold investors pay for these transactions, and don't subsidize them by penalizing these transactions...

“Just have people pay for the costs they generate.”³

This investor may not have realized it, but he asked the SEC for the cost structure of exchange-traded funds.

³ See <http://www.sec.gov/rules/proposed/s71104/dmoore9121.htm>