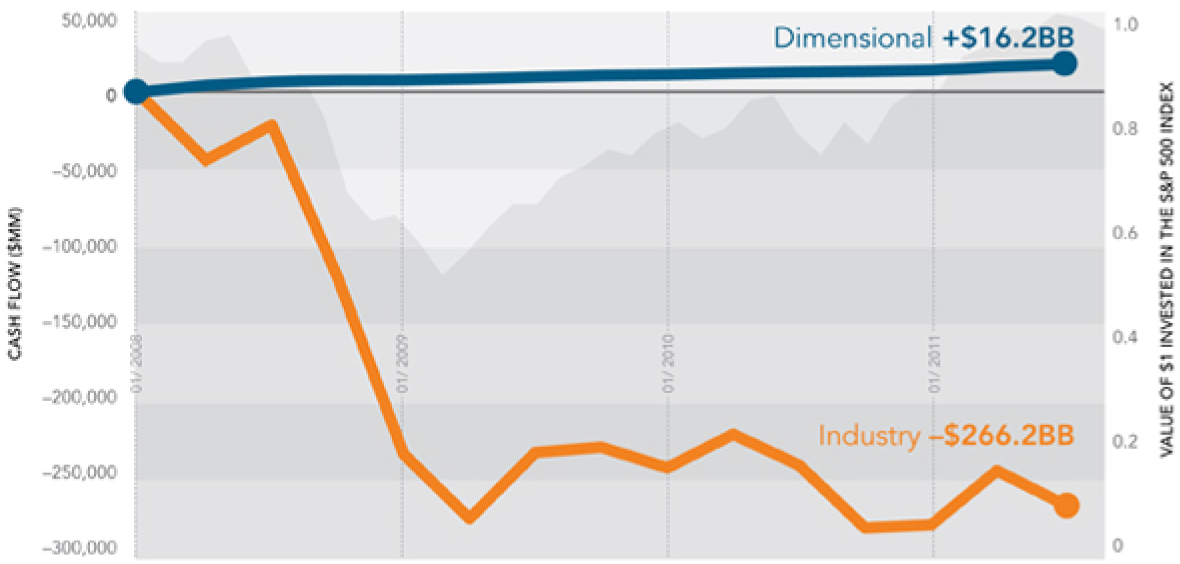
# Lessons in Mutual Fund Flows

Since 2008, economic uncertainty and market volatility have tested the staying power of investors around the world. Many people fled equities during the worst months of the global financial crisis, while others waited for signs of a turnaround before investing more. Their emotional reactions may have exacted a large price on their wealth.

The graph below documents investor behavior during the stock market downturn in 2008 and subsequent market rebound. It offers a few key lessons about investing in turbulent markets.

Figure 1: Quarterly Equity Mutual Fund Flows
Industry vs. Dimensional Relative to S&P 500 Index Performance
January 2008–June 2011




For illustration purposes only. Industry net new cash flow data for US-domiciled equity funds provided by Investment Company Institute ©2011. Quarterly cash flows are estimates that are adjusted to represent industry totals, based on reporting covering 95% of industry assets. Dimensional's figures are based on net new cash from financial advisors in US-domiciled funds. Industry and Dimensional data reflect investment in US and international equity markets and do not include funds of funds. S&P 500 Index performance is based on monthly returns data. The S&P data are provided by Standard & Poor's Index Services Group. The S&P 500 includes 500 US stocks chosen for market size. Past performance is no guarantee of future results.

## Reading the Graph

First, look at the shaded graph in the background, which plots the performance of the S&P 500 Index (measured by growth of a dollar) over this three-and-a-half-year period. The market began falling in late 2008 and hit bottom in early March 2009. It then reversed sharply and began a long climb through June 2011.

Now consider how mutual fund investors responded to the stock market's downturn and recovery. The orange line plots quarterly net cash equity flows for the US mutual fund industry over the same period. (Net cash flow is the difference between redemptions and purchases of shares in a mutual fund. A net cash outflow occurs when redemptions exceed purchases.) Equity fund flows were cumulatively negative over the period. Investors were redeeming more shares than they were buying, and on a net basis, capital was leaving mutual funds.[1]

Note that these fund industry outflows followed the stock market downturn, and net flows stayed negative even after the market rebound. Investors were reacting to the falling stock market by either redeeming their fund shares or delaying the purchase of additional shares.[2] When the stock market suddenly rebounded in March 2009, investors who had reduced their exposure to equities missed a good part of the recovery.

This apparent lack of discipline is well established over longer time periods too. Industry analyses and academic research suggest that investors tend to focus on recent performance and make decisions that compromise long-term returns in their portfolio.[3]

Recent history illustrates why the average fund investor may fail to earn returns comparable to those of the average fund or market index. Markets change quickly, and investors must be in their seats to capture returns. Unfortunately, many investors let their emotions get in the way of participating in long-term market performance.

Now consider the upward-sloping blue line, which plots quarterly net flows into equity strategies offered by Dimensional Fund Advisors. These flows were cumulatively positive throughout the entire period, suggesting that shareholders in Dimensional's funds continued to purchase shares during the 2008–2009 market decline and after the March 2009 rebound.

As a group, these investors did not flee stocks en masse. In fact, they did the opposite by adding to their portfolios. Their discipline positioned them for the market rebound.

A mutual fund's net cash flows also may reveal the collective discipline—or lack of discipline—among its shareholders. In fact, the direction of net flows can impact portfolio management and performance, especially for funds invested in less liquid markets. Large net redemptions typically increase the direct and indirect costs of a mutual fund, which compromise fund returns.[4] The assorted costs are not borne by redeeming shareholders but by the shareholders who remain in the fund.[5] Therefore, consistently positive net cash flows are helpful to a fund's expenses, strategy, and performance.

Summary

The large net cash outflows from US-based mutual funds since 2008 document investor reaction to market volatility, while Dimensional's stable and positive net fund flows suggest disciplined behavior. So why would shareholders in Dimensional's funds behave differently? One reason might be the education, encouragement, and discipline offered by their financial advisor at that difficult time, underscoring the value of sound investment advice.

An advisor's steady hand helps investors apply discipline in all types of markets, which can positively impact individual performance over time. Moreover, when advisors influence the collective decisions of shareholders in a fund, the greater cash flow stability can prove beneficial to the fund's strategy, cost management, and returns.



## End notes

1. Mutual fund investors redeem their shares by selling them back to the mutual fund and receiving cash proceeds based on the net asset value (NAV) of the shares at day's end. Redemption is a normal activity in a mutual fund, and liquidity is one benefit of owning fund shares. A fund manager may use inflowing cash to cover the redemptions or keep cash in a "liquidity reserve" for this purpose. When cash balances do not suffice, the manager may execute trades to raise the cash.

2. According to the Investment Company Institute, mutual fund flows do not offer a good measure of total demand for equities since funds hold only about 20% of the total US equities outstanding, with the balance held directly by individuals, institutions, and governments. Academic research offers some evidence that mutual fund flows do not drive market returns but reflect investor reaction to markets.
Roger M. Edelen and Jerold B. Warner, "Aggregate Price Effects of Institutional Trading: A Study of Mutual Fund Flow and Market Returns," *Journal of Financial Economics* 59, no. 2 (2001): 195–220.

3. A Morningstar study compared the dollar-weighted returns of the average investor in a fund with the fund's published total return for the ten-year period ending Dec. 31, 2009. In US equities, the average investor in all funds earned 0.22% annualized, compared with 1.59% for the average fund.
Russel Kinnel, "Bad Timing Eats Away at Investor Returns," Morningstar.com, February 15, 2010.

Lack of investment discipline also is documented among individual investors who hold common stocks directly. Those who trade frequently pay a tremendous performance penalty for their actions. (Brad M. Barber and Terrance Odean, "Trading is Hazardous to Your Wealth: The Common Stock Investment Performance of Individual Investors," The Journal of Finance, April 2000.)

4. Direct transaction costs include commissions, bid-ask spreads, and price impact incurred when a fund makes trades in response to shareholder redemptions. Net outflows also may generate indirect costs on a fund by forcing its manager to alter the target asset allocation or make disadvantageous, uninformed trades to raise cash. See Qi Chen, Itay Goldstein, and Wei Jiang, "Payoff Complementarities and Financial Fragility: Evidence from Mutual Fund Outflows" (white paper, February, 2007).

5. Mutual funds typically meet a redemption based on the NAV at day's end but may execute a trade to raise cash on the following day. The redeeming shareholder cashes out at an NAV that does not reflect the trade, and the resulting costs are borne by remaining shareholders. See: "On the Run: Examining Patterns in Mutual Fund Redemptions," Knowledge at Wharton, http://knowledge.wharton.upenn.edu/article.cfm?articleid=2133, accessed September 27, 2011.