**BILL MILLER AND VALUE TRUST**

Teaching Note

**Synopsis and Objectives**

**Suggested complementary case in investment management and financial performance**: “Warren E. Buffett, 2005” (UVA-F-1483).

Set in the autumn of 2005, the case recounts the remarkable performance record of Value Trust, a mutual fund managed by William H. (Bill) Miller III at Legg Mason, Inc. The case describes the investment style of Miller, whose record with Value Trust had beaten the S&P 500 fourteen years in a row. The tasks for the student are to assess the performance of the fund, consider the sources of that success, and to decide on the sustainability of Miller’s performance. Consistent with the introductory nature of this case, the analysis requires no numerical calculations. The instructor should not be deceived, however, because the absorption of the capital-market background and the implications of the finance concepts in the case will fully occupy the novice. This case updates and replaces “Peter Lynch and the Fidelity Magellan Fund,” (UVA-F-0777) and “The Fidelity Magellan Fund, 1995” (UVA-F-1126).

The case is intended for use in the opening stages of a finance course. It provides a nontechnical introduction to the U.S. equity markets and sets the foundation for some basic concepts in finance. Specific teaching objectives are to:

* Motivate a discussion of the concept of capital-market efficiency.
* Impart some recent capital-market history—in particular, regarding the Internet bubble of the late 1990s and early 2000s, and the market crash of 1987.
* Convey a perspective on the role of large institutions (lead steers) in setting securities’ prices.
* Introduce the basic concept of value additivity. As illustrated by the net asset valuation of mutual funds, the value of a firm will be equal to the sum of the values of its parts.
* Affirm the notion of using market benchmarks to assess performance.

**Suggested Questions for Advance Assignment to Students**

1. How well has Value Trust performed in recent years? In making that assessment, what benchmark(s) are you using? How do you measure investment performance? What does good performance mean to you?
2. What might explain the fund’s performance? To what extent do you believe an investment strategy, such as Miller’s, explains performance?
3. How easy will it be to sustain Miller’s historical performance record into the future? What factors support your conclusion?
4. Consider the mutual fund industry. What roles do portfolio managers play? What are the differences between fundamental and technical securities analysis? How well do mutual funds generally perform relative to the overall market?
5. What is capital-market efficiency? What are its implications for investment performance in general? What are the implications for fund managers, if the market exhibits characteristics of strong, semi-strong, or weak efficiency?
6. Suppose that you are an advisor to wealthy individuals in the area of equity investments. In 2005, would you recommend investing in Miller’s Value Trust? What beliefs about the equity markets does your answer reflect?

**Collateral Readings**

Peter Lynch, the legendary former manager of Fidelity’s Magellan Fund, has written (along with John Rothchild) *One up on Wall Street: How to Use What You Already Know to Make Money in The Market,* (New York: Simon & Schuster, 2000). This book is an engaging exposition of Lynch’s investing style and could be used to supplement the discussion about the “Bill Miller and Value Trust” case in various ways. Lynch makes numerous statements about market efficiency and other theories of modern finance that stand in stark contrast to the standard textbook presentations.[[1]](#footnote-1) The case distills the two points of view: Lynch versus the theorists. Readings from this book could be assigned in a supplementary or a follow-on fashion and may be expected to stimulate a spirited discussion.

As a counterpoint to Lynch, the instructor may find it useful to review Burton Malkiel’s article surveying mutual fund performance from 1971 to 1991.[[2]](#footnote-2) This article is not targeted toward the novice in finance. Malkiel finds some evidence of “hot hands” and “cold hands,” but concludes that the evidence provides no reason to abandon the theory of capital-market efficiency. Another excellent book by Malkiel, *A Random Walk down Wall Street* (New York: W.W. Norton & Co., 2003), surveys the evidence for an efficient market in prose accessible to the novice.

Students who are new to the subject of finance may also find it useful to refer to one or more dictionaries of financial terms, such as *Barron’s Dictionary of Finance and Investment Terms,*6th ed., by John Downes and Jordan Elliot Goodman (Hauppauge, New York: Barron’s Educational Series, Inc., 2002), or *The New Palgrave Dictionary of Money and Finance,* ed. Newman, Milgate, and Eatwell (New York: Stockton Press, 1992).

**Hypothetical Teaching Plan**

Assuming the case is taught early in an introductory finance course, the teacher’s classroom strategy can begin with the coin-flipping exercise suggested by Malkiel. All students are asked to stand up and to prepare to flip a coin. At the first and subsequent rounds, those who get tails are asked to sit down. Usually cheers and humor accompany the final rounds.

1. Question for the student who won the coin-tossing game: *The case mentions that Burton Malkiel suggests this example. What concept is he trying to illustrate, and how does this exercise illustrate it?*

This question provides an entry into the theory of efficiency, and especially the arguments of its proponents like Malkiel.

2. *What is the efficient-markets hypothesis? What does it imply for the performance of mutual funds?*

This question builds on the first question and aims to establish the null hypothesis against which the performance of Bill Miller and Value Trust can be evaluated. If students have not encountered the difference between strong, semi-strong, and weak forms of efficiency, here would be an opportune moment to discuss it.

3. *What would Miller say in response to the claim that his success is luck? What is his investment style?*

With this question, the discussion turns to the other side of the debate. The instructor can list the descriptors of Miller’s investment style on the board. In that segment, the instructor can distinguish between fundamental and technical analysts, and the different kinds of insights they seek. This segment of the discussion should seek to flesh out what active management means, namely, that one looks for pricing inefficiencies.

1. *Does anything about Value Trust surprise you? Why? How big a factor is the fund, or all of the equity mutual funds, in the stock market today?*

Here the discussion turns to the significant role that large institutional investors play in the equity markets. The bulk of trading takes place among institutions—individuals are not significant in setting equity prices.

5. *What does it mean to beat the market? How do you define excellent performance?*

In this stage of the discussion, the instructor could introduce a notion of the investors’ opportunity cost—the ability to invest in an index fund that aims to match the performance of a broad equity market index. Against this benchmark, students should be nudged to consider the risk-return characteristics of an actively managed fund like Value Trust.

6. *What is Legg Mason, Inc.? What is its relationship to Value Trust? What are Legg Mason’s core competencies?*

This segment of the discussion turns to consider the economic justification of mutual funds in a world of efficient markets. The possible justifications include research (that is, the effort to identify pricing inefficiencies), goal-setting, monitoring of managers, and convenience for the investor.

1. *Would you invest in Value Trust, as of autumn 2005, given the information in the case?*

Many students are attracted by the stock-picking skill (or hot hand) of Value Trust’s Bill Miller. Other students will be impressed by the coin-flipping exercise.

The instructor could close the discussion with a vote on the investment recommendation, and then discuss the performance of Bill Miller and Value Trust since the date of the case. The instructor could use the update as a springboard for closing comments on capital-market efficiency. Web sites for Legg Mason and Morningstar are highly recommended as sources of updated information. See http://www.leggmason.com and http://www.mfb.morningstar.com.

**Case Analysis**

This note assumes that the instructor is familiar with the efficient-markets hypothesis and the academic research surrounding it. The discussion that follows will focus on other teaching opportunities in the case discussion.

**Large institutional investors and the structure of U.S. capital markets**

An important objective of the case is to introduce the novice to the structure of the U.S. capital markets. Later, this foundation is useful for the student when he or she encounters concepts founded on capital-market efficiency, investor rationality, and perfect competition. The case conveys the role of arbitrage driven by huge volumes of money (managed by institutional investors) that set prices in the markets.

**Discussion questions 2, 3, & 4**

Simple demographics are an important descriptive element. The capital market can be segmented into the stock, bond, and money markets. Within the stock market, there are major segments by type of player: pension funds, mutual funds, hedge funds, and individuals. The mutual-fund segment, in turn, can be broken down by investment objective: growth, income, etc. The magnitude of the market (in terms of dollars and people) and the heterogeneity of investors underscore the difficulty of achieving superior performance consistently.

The case indicates several important trends in the capital markets:

* An 11% compound average growth rate in dollars under management by all mutual funds between 1995 and 2005.
* 9% compound average growth rate in number of mutual funds.
* 20% of the outstanding stock in all U.S. companies was owned by mutual funds.
* Domination of trading by lead steers, which is reflected in the trading characteristics of those institutional investors, such as higher trading volumes, bigger size of trades, and block trading.

Increasing liquidity in the market, increasing investor demand for mutual funds, segmentation of the market by mutual funds, switching among funds by investors, increasing volatility, and increasing attempts to “time” the swings in the market—many of those are believed to be indicators of “hot money” in the stock market.

Another important descriptive element is recent capital-market history, especially the stock market bubble of the late 1990s and early 2000s, and the market crash of 1987. Here the novice confronts the dynamic nature of the market and the essential challenge to investors posed by changing conditions. Those conditions can motivate a discussion of market timing and technical analysis as investment strategies, and the relative significance of the basic buy-and-hold strategy.

A third descriptive element concerns the structure of the mutual fund management industry itself. One could characterize money management as a cottage industry—thousands of small firms and relatively easy entry—but such a view is misleading. It ignores the huge barriers that block entry into the group of large mutual-fund managers, including:

* Reputation (past success)
* Investment expertise
* Economies of scale in administration, trading, and research
* Some skill in market segmentation of investors.

Despite those barriers, sustaining a comparative advantage in the competition for the management of investors’ funds remains difficult. Key success factors are high-quality research and trading talent.

**Miller’s strategy and performance: the measurement issue**

Discussion question 5

The case relates the elements of Miller’s management approach:

* Lowest average cost wins. If the fundamentals are good, do not be afraid to buy a stock on its way down.
* Pick stocks based on their fundamentals, such as high intrinsic-value stocks.
* Buy low-expectation stocks. Take a contrarian’s perspective.
* Take the long view by avoiding high turnover.

With that strategy, Miller successfully beat the market (i.e., the S&P 500 Index) 14 years in a row. The encomiums quoted on the first page of the case (“off the charts,” “superhuman,” and “mortal genius”) suggest that Miller had a “hot hand,” the investment-management equivalent of a basketball player’s ability to score repeatedly.

The statistics from case Exhibits 1 and 5 are impressive. Value Trust beat the S&P 500 and the Russell 1000 indices on average for the past 1, 3, 5, 10, and 15 years. Since its inception, Value Trust had better average annual returns than all other equity finds in the Legg Mason fund family. Growth of Value Trust’s net assets over the 1994–2005 period was a compound rate of 26% (versus 11% for the S&P 500, and an inflation rate of about 3%). Yet Miller was able to achieve such stellar and consistent returns with relatively little trading: Value Trust’s turnover rate had not surpassed 30% since 1992, and had been as low as 4% in 2004. Morningstar gave Value Trust its top five-star rating.

Two other statistics from case Exhibit 1 invite caution, however. First, true to Miller’s strategy of choosing stocks that are trading cheaply relative to their intrinsic value, Value Trust’s portfolio at March 2005 included the stocks of a number of firms that were undergoing major turnarounds or restructurings, such as Tyco International and Eastman/Kodak. Concurrently, Value Trust also had relatively large positions in a number of high-fliers in the Internet sector, such as eBay and Amazon.com. Both of those investment areas were highly volatile, perhaps indicating that Value Trust was achieving its high returns by taking high-risk gambles. The fund’s beta of 1.31, however, suggests that the fund’s risk was not excessively high.

Second, as the commentary in Morningstar indicates, the size of Value Trust is not yet a major concern, “but we’re keeping an eye on the matter.” The larger a fund becomes, the harder it may be for the fund manager to adhere to his initial strategy because that fund may have already maximized its positions most likely to show strong positive returns. In addition, as a fund gets larger it starts acting like an index fund, which is representative of the market at large. Value Trust has not quite passed that threshold, but its growing size will invite concerns about the sustainability of Miller’s record.

**Miller and Value Trust’s core competencies**

**Discussion question 6**

If time permits, the instructor can invite students to reflect on the sources of excellent performance in money management. Two general groups of thoughts will emerge:

* *Information and speed to market*: Legg Mason (and Bill Miller, himself) employs a large staff of analysts and supplements its work with the insights of other analysts outside the firm. Moreover, portfolio managers such as Miller place great weight on personal research—visits, interviews, and the like. This is supplemented by a tendency to move quickly upon learning new information.
* *Reputation*: Typically, size denotes power in the marketplace. Yet while Value Trust is not the largest equity mutual fund, Bill Miller’s consistent record of success provides him with great market influence; other market participants pay close attention to his actions because of his reputation. Some students will claim that this influence may give Miller the bargaining power with which to squeeze brokers for new ideas and advantageous prices, and generally to lead and/or to manipulate the market.

The information argument is consistent with market efficiency—the entrepreneur, who first exploits the insights that the rest of the market does not have will generally earn supernormal profits. The reputation argument is debatable. While Miller may have certain influence, his actions are still small relative to the entire stock market. Past success has never been a guarantee of excellent future performance. The case, however, does not provide the data needed to gain closure on the debate about the value of Miller’s legendary reputation.

**Market efficiency and the anomaly of excellent performance**

**Discussion question 7**

Bill Miller’s apparent success with Value Trust seems to present an anomaly to the theory of capital-market efficiency. The instructor can use this to motivate a debate about efficiency. Novices may be quite ready to embrace the concept of efficiency (especially with the instructor standing in front of them, or if they have just finished reading about the theory in textbooks or other readings). The instructor may need to play the devil’s advocate on the behalf of Miller in order to stimulate debate. A key insight to emerge from such a debate must be that efficiency is assured only if there are investors who seek to arbitrage information asymmetries in the capital markets. In other words, the existence of Bill Miller is no mark of market inefficiency.

1. For instance, “It seemed to me that most of what I learned at Wharton, which was supposed to help you succeed in the investment business, could only help you fail,” (*One up on Wall Street*, 34) [↑](#footnote-ref-1)
2. Burton G. Malkiel, “Returns from Investing in Equity Mutual Funds, 1971 to 1991,” *Journal of Finance* 50 (June 1995): 549–572. [↑](#footnote-ref-2)