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FOCUS
Asset Management Company

Driving Down the Costs of Investing

When you shop for a new car, you probably look at both the total sticker price and the price of each option. Likewise when selecting investment vehicles, it is important to understand all the costs involved, so that you can be sure you're making appropriate comparisons between different fund "models." Let's look at the following costs of investing, which, left spinning out of control, can steer you down the wrong path.

Operating Expenses: 1%
Costs of Cash: 1%
Trading Expenses: 1%
Market Impact Costs: 1%
Taxes: 1%

Operating Expenses

Operating expenses are those expenses that are listed in a fund's prospectus. As such, they have a direct and relatively obvious effect on your returns. According to Morningstar data, the average operating expense ratio for equity funds is now 1.53 percent.[1] For the typical domestic index or passive asset class fund, the expense ratio is between 0.2 percent and 0.5 percent. For their international counterparts the expense ratio might be slightly higher. Thus actively managed funds begin the game with a cost hurdle of about one percent that they must clear before they can add value.

Cost of Cash

The cost of cash is the expense incurred when the mutual fund holds investable cash, typically to meet redemptions or awaiting a change in market conditions. Unlike operating expenses, the cost of cash is not directly reported nor listed in a prospectus, and thus it is easy to overlook … until it shows up in reduced returns.

Let's assume that the typical actively managed fund maintains an average cash position of about 10 percent. (In other words, if you invest $1,000 in a fund, the fund retains about $100 of your investment in a money market account.) For the 15 years ending 1998, the S&P 500 Index provided total returns of about 18 percent. During that same period, one-month treasury bills — a good proxy for the return earned on invested cash — yielded about six percent. We can thus calculate the "cost of cash" for actively managed funds to be 1.2 percent per annum, or 18 percent minus six percent, multiplied by 10 percent. For a passively managed fund, which is typically 99 percent invested, cost of cash is only 0.12 percent.

Trading Expenses

Investors should also consider the hidden cost of trading expenses, or the commissions and bid/offer spreads that are incurred when fund managers buy and sell holdings. The average actively managed fund has an annual portfolio turnover of about 80 percent. In other words, 80 percent of a fund's total holdings are replaced during the course of a year with new holdings. The cost of trading these holdings is

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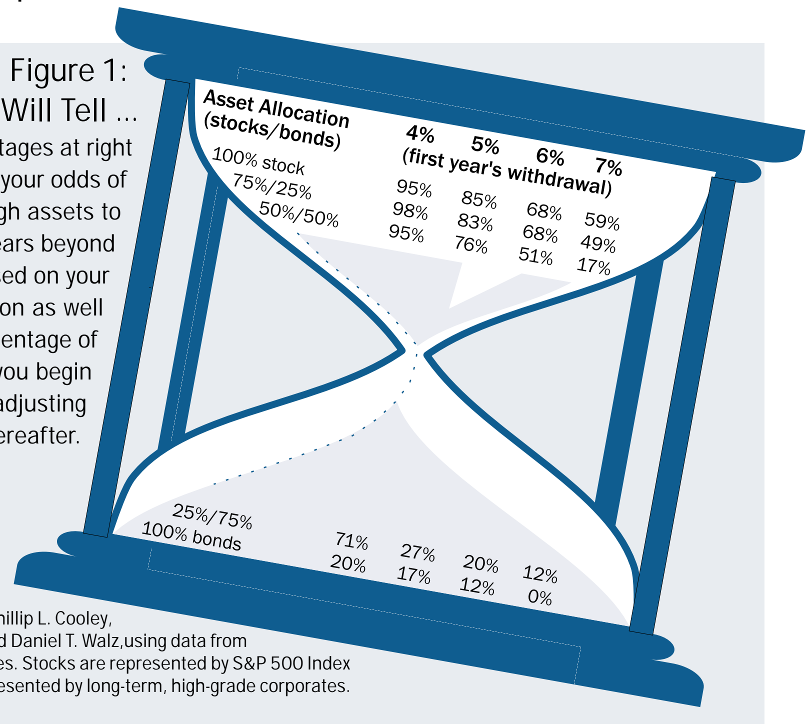
Retirement Planning: Live Long and Prosper

Do you know how much money you will need to retire? If you don't, you're not alone. To develop a full understanding of this multi-faceted issue, it is a good idea to discuss retirement planning with your investment advisor. However, it's not as difficult as you might think to obtain a ball-park figure for how much is enough to bid farewell to your working days.

Figure 1:
Time Will Tell ...

The percentages at right represent your odds of having enough assets to last 30 years beyond retirement, based on your asset allocation as well as the percentage of your portfolio you begin to withdraw (adjusting for inflation thereafter.



Source: Study by Phillip L. Cooley, Carl M. Hubbard and Daniel T. Walz,using data from Ibbotson Associates. Stocks are represented by S&P 500 Index and bonds are represented by long-term, high-grade corporates.

Step One: What Percentage Do You Wish to Withdraw?

Figure 1 serves as a guideline to begin your estimations. Combining data from 42 separate 30-year time periods, 1926-1996, it represents the odds of having enough assets to last 30 years beyond retirement — based on a withdrawal beginning at various percentages of your portfolio and adjusting the withdrawal amount for inflation thereafter. While past performance does not guarantee future returns, the numbers indicate how the approach has worked during a 70-year timespan. They also demonstrate the impact that portfolio mix has, and why it is so critical, even in retirement, to keep equities within your portfolio! For example:

- If you owned a 75% stock/25% bond portfolio and began to withdraw from your portfolio four percent per year for 30 years, odds were 98 percent in your favor that you would not run out of assets.
- If you maintained a 75% stock/25% bond portfolio but instead decided to withdraw from your portfolio beginning at seven percent per year, your odds dropped to about 49 percent.
- If your portfolio had been 100 percent bonds, you would have had only a 20 percent chance of having enough money had you begun withdrawing at four percent, and **no** chance had you begun withdrawing seven percent.

If you anticipate your retirement will be considerably more or less than 30 years, the numbers would need to be adjusted.

Step 2: How Much Should Your Total Portfolio Be?

To decide how much you should amass prior to retirement, a rule of thumb is to take the amount you wish to spend each year and divide that figure by the percentage of your portfolio that you plan to begin withdrawing. For example, if you wish to have spendable income of $100,000 per year during retirement — before taxes and adjusted for inflation — and you have decided to begin your withdrawals at four percent, you would need a portfolio of $2.5 million ($100,000 divided by four percent) before you can plan that retirement party. If your risk tolerance is higher, you could consider quitting at about $1.4 million by beginning your withdrawals at seven percent ($100,000 divided by seven percent). However, be prepared for significantly lower odds that you will have enough funds to last through your retirement. (For example, 49 percent for a 75/25 stock/bond portfolio.)

In short, do be careful which percentage you choose. The percentage of withdrawal at which you are likely to be most comfortable is determined by the following issues:

- How prepared are you to adjust your lifestyle downward if you outlive your odds or if your investment results are lower than expected?
- How much longer are you willing and able to work before you retire?

Step 3: Talk To Your Advisor

As you can see, even a brief discussion of retirement planning raises many questions and considerations. During your working life, you can overcome a few bad inflation or investment years by adding to your savings or working a bit longer. In retirement, however, you withdraw money every year — the good and the bad. Proper planning and execution of your retirement goals is an area where your investment advisor can add even more value.

From the Outside Looking In

Each week, *Business Week* magazine runs a column called "Inside Wall Street," making recommendations on stocks that it believes are undervalued based on little-known information. The column purports to glean information from a variety of special sources — including big investors, money managers, security analysts, and even corporate insiders — to provide investors with tantalizing hints about potential mergers or takeovers, exciting new products, changes in earnings, etc.

In its August 9, 1999 edition, the magazine provided a report card on the success of 183 of its own "Inside Wall Street" stock recommendations in 49 of its 1998 issues. The returns of the stock picks were compared to the returns of the S&P 500 Index, the Dow Jones Industrial Average and the Russell 2000 (since many of *Business Week's* picks are small stocks).

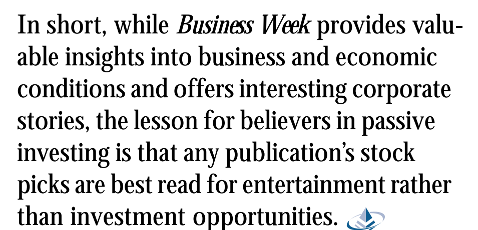
At a glance, *Business Week's* picks look great … if you look at their one-day returns. The magazine is first available Thursday nights, and the company used the closing prices of that evening to determine the investment results of its picks. In the first day, their choices rose almost five percent on average, compared to 0.2 percent - 0.3 percent for the three benchmarks.

Unfortunately those great results would have been unavailable to the average investor. Naturally, as soon as such stocks are given the "thumbs up" in *Business Week* (with its circulation of more than one million readers in 130 countries) demand for those stocks increases, as does the price at which the stocks are available. In other words, the first prices at which investors could have purchased the stocks were likely significantly higher than the previous night's close. *Business Week* actually commented on "the announcement effect" of its column, noting that first-day prices on its recommended stocks were up an average of 4.9 percent from Thursday's close.

Business Week also compared returns for its "Inside Wall Street" picks against the three benchmarks for three- and six-month periods. For the three-month holding period, its average returns were a minus 0.1 percent. This compares to the returns of the three benchmarks of 6.3 percent, 4.2 percent and minus 0.8 percent. For the six-month holding period, the returns for its picks were a minus 2.2 percent, compared with benchmark returns of 11.2 percent, 8.9 percent and minus 2.9 percent.

So its picks did slightly outperform the Russell 2000 Index. However, *Business Week's* numbers assume that an investor could have bought at the pre-publicity price. Also critical is that the numbers do not include any transactions costs, assuming that investors could buy and sell the stocks for free. (If anyone knows how to accomplish this, please give us a call right away.)

In short, while *Business Week* provides valuable insights into business and economic conditions and offers interesting corporate stories, the lesson for believers in passive investing is that any publication's stock picks are best read for entertainment rather than investment opportunities.



Worth Repeating

Worth Repeating

"It's better to be dull and boring and a successful investor than it is to be loud and obnoxious and unable to retire."

— Bill Schultheis
The Coffeehouse Investor

For Your Reading Pleasure

- **Why Smart People Make Big Money Mistakes,** by Gary Belsky and Thomas Gilovich — Each of us will recognize a bit of himself or herself in this book. Enjoy and learn, as the authors explain the behavioral psychology behind the quirks we all share regarding the way we think of money.
- **The Coffeehouse Investor,** by Bill Schultheis — Described as "simple and inspirational," Schultheis little handbook summarizes elegantly the advantages of a passive investment approach. Best read relaxing with a steaming mug of coffee and a generous slice of your favorite pie. (His is pumpkin.)

Driving Down the Costs of Investing, *cont.*

approximately one percent to buy and one percent to sell. (For very large-cap stocks the bid/offer spreads are somewhat lower and for very small-cap stocks the spreads are much wider.) The result is that the average actively managed fund incurs trading costs of about 1.6 percent (one percent x two transactions x 80 percent).[2] Depending on the index it is attempting to replicate, the typical passively managed fund will have turnover of between three and 25 percent (lower for passive large-cap funds and higher for passive small-cap funds). If we assume an average turnover of about 15 percent, then we can estimate the cost of trading at 0.3 percent (one percent x two transactions x 15 percent). For active managers the hurdle of trading costs is therefore 1.3 percent (1.6 percent minus 0.3 percent).

Market Impact Costs

Particularly easy to overlook are market impact costs, which occur when a mutual fund manager wants to buy or sell a large block of stock. The fund's large purchases or sales actually cause the stock to move beyond its current bid (lower) or offer (higher) price, increasing the cost of the purchase or the sale. Barra, Inc., a research and consulting firm in Berkeley, California, has developed a program that estimates by how much such costs can affect a portfolio's performance. In a recent article in the *New York Times*, Barra's Managing Director Nicolo Torre states, "… market impact creates a cost that funds have to overcome before they can add any value. … The lower the hurdle, the more likely that they will be able to do that."[3]

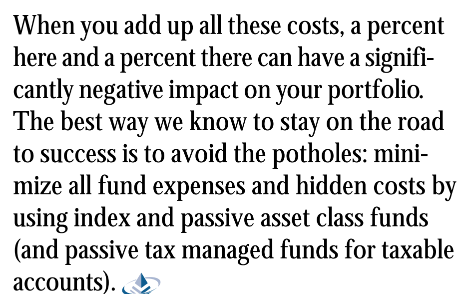
Torre estimates that a fairly typical small- or mid-cap stock fund with $500 million in assets and an 80-100 percent portfolio turnover could lose three to five percentage points each year;[4] thus, estimating a one percent expense for this cost is probably conservative. This is especially the case when you consider international funds. Not only are commissions, custodial fees, bid/offer spreads and market impact costs generally much higher, but there are also additional costs such as stamp duties.

As with the other four costs of investing, we believe actively managed funds, given their significantly higher turnover, typically will incur much higher market impact costs.

Taxes

Finally, there is the burden of fund distribution taxes that end up on investors' 1099 tax forms at year-end. The average actively managed fund provided pre-tax returns of 13.6 percent and after-tax returns of just 10.8 percent during the 15-year period ending June 30, 1998, losing 2.8 percent per annum to taxes. The Vanguard 500 Index Fund returned 16.9 percent before taxes and 15 percent after taxes for the same period, losing 1.9 percent per annum to taxes.[5] The hurdle of taxes for the average actively managed fund was almost one percent higher per annum (2.8 percent minus 1.9 percent).

When you add up all these costs, a percent here and a percent there can have a significantly negative impact on your portfolio. The best way we know to stay on the road to success is to avoid the potholes: minimize all fund expenses and hidden costs by using index and passive asset class funds (and passive tax managed funds for taxable accounts).



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[1] *Business Week*, "Why Fund Fees Are So High," November 30, 1998.
[2] Charles Ellis, *Winning the Loser's Game: Timeless Strategies for Successful Investing* (McGraw Hill, Copyright 1998), page 5.
[3] *New York Times*, "It's Gnawing at Your Fund, And Now It Has a Gauge," July 11, 1999.
[4] Ibid.
[5] John Bogle, *Common Sense on Mutual Funds*, page 286.

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