



NORTHWEST CRITERION ASSET MANAGEMENT, LLC

114 Commons Way, Princeton, NJ 08540 • 609-924-4488 • Fax 609-924-1155 • www.nwcrriterion.com

How to Invest in Mutual Funds

SEPTEMBER 9, 2013 / updated March 7, 2024

WHY INVEST IN A MUTUAL FUND?

The main reason for investing in a mutual fund is to be able to invest in a diverse, professionally managed portfolio of stocks or bonds, perhaps with a limited amount of money. While mutual funds are especially advantageous for small investors, large investors use them, too; and both expert and novice investors use them. At one time, because commissions for buying or selling small amounts of stock were very large relative to the amount invested, it was extremely expensive to put together a diversified portfolio of stocks with a small investment. Mutual funds helped to overcome this problem, but transaction fees have come down over the years to the point where this is not nearly the consideration it once was. Professional management and convenience are now the primary reasons for investing in mutual funds. Of course, this assumes that investing in stocks or bonds is a good idea in the first place.

Investing, especially in stocks, is a great way to build a nest egg. Jeremy Siegel estimates that \$1 invested in the stock market in 1802 would have been worth \$12.7 million at the end of 2006. That is a return of 8.3% per year—6.8% per year after adjusting for inflation. We all know that the last few years have been terrible for stocks, but how bad have they been? Let's look at a couple of examples. The market reached an all-time high in March 2000, just as the tech bubble was ready to burst. Suppose you had had the very bad luck to invest \$10,000 in the stock market (actually, in the S&P 500 index) at that time (March 31, 2000). Since then, the tech bubble has burst, the financial crisis has hit, and we have endured the Great Recession. The World Trade Center was leveled, and Enron, Lehman Brothers, and a number of other firms have failed. AIG, GM, and Chrysler have been bailed out. We have experienced the BP oil spill and hurricanes Katrina and Sandy. After all that, your investment would have been worth \$14,065 at the end of August 2013, assuming you had reinvested the dividends in the index. That represents a total return of 40.65% when total inflation for the period was about 32%. Even during a rather bad period for the economy you would have come out ahead, beating inflation, by investing in the stock market.

This is not to deny that stocks are risky. Your \$10,000 invested in March of 2000 would have grown to \$11,715 by October of 2007. From there your investment would have fallen sharply until March of 2009, getting down to \$6,257 before reaching the final value of \$14,065. When it comes to individual companies, not only do share prices sometimes go down, sometimes they go all the way to zero. Companies that appear sound at one time may go out of business, wiping out the investment of the stockholders, a few months later. In addition to Enron, Lehman Brothers, GM, and Chrysler, some other major companies that

have failed since 2000 are Washington Mutual, WorldCom, CIT, Consec, and MF Global. Finding good stocks to buy is serious business. There are thousands of publicly traded stocks, and there is a mountain of available information on each one. Weighing that information to make wise decisions is difficult for experts and may be overwhelming for others.

Mutual funds provide an excellent means for reducing risk through professional management, diversification, or both. How to choose good mutual funds, and especially equity mutual funds, is what this article is about.

WHAT IS A MUTUAL FUND?

A mutual fund is a special type of corporation formed for the express purpose of investing in various kinds of assets. The mutual fund issues shares and sells them to investors, either directly or through a broker. The money paid for shares is used by the fund to invest, usually in the stocks and bonds of other corporations, or possibly in government bonds, real estate, or other types of assets. The kinds of investments a mutual fund makes are specified in the fund's prospectus and limited by law. The fund hires a management company to manage the fund's assets, that is, to make decisions about buying and selling assets for the fund.

The value of all the assets, including cash, owned by the fund, net of all its liabilities, is called the net asset value ("NAV") of the fund. When someone buys shares in a mutual fund, the price paid for the shares is equal to the net asset value ("NAV") of the mutual fund per outstanding share, plus any sales charge. An investor who owns shares in a mutual fund may sell them back to the fund ("redeem them") at the NAV per share (minus, in some cases, a fee).

HOW TO CHOOSE A MUTUAL FUND

Choosing a mutual fund to buy is fundamentally different from choosing a stock to buy. In the case of a stock you are trying to find a stock whose price is going to rise. What causes a stock's price to rise is people bidding for the stock. Presumably, people bid for it because they *think* the price will rise. There may be many reasons why people think this. They may see good prospects for a new product, or they may foresee increased demand for a current product, or they may believe the company will be able to cut its costs, or they may see a favorable pattern in charts of the stock's price. The factors that influence the price of a stock can vary greatly from industry to industry, and from company to company within an industry. Evaluating the prospects for Apple's latest iPhone is quite different from evaluating Pfizer's pipeline of new drugs or China's future demand for coal. Because a stock's price depends on what people *think* its price will do, based on many factors, and because what people think is not necessarily even rational, picking stocks can be very difficult and frustrating.

In selecting a mutual fund we are actually choosing a portfolio manager. Compared to selecting a stock,

this is straightforward. The portfolio manager is faced with evaluating individual securities according to a multitude of considerations, but we do not need to get involved in the details of how he does it. What we are concerned with is how successful he is likely to be. Some of the best information we can get about how successful a manager will be in the future is how successful he has been in the past. It is, of course, true that success in the past does not guarantee success in the future, but past performance does give us very useful information.

In evaluating a manager's past performance we are primarily interested in two things, the average return and the variability of the returns from one period to the next. Why we are interested in the average return is obvious, but why are we interested in the variability? Consider the following example. A and B are two portfolio managers. Each starts with \$10,000. At the end of ten years each ends with \$18,771. Thus, both have averaged a return of 6.5% per year, compounded.

YEAR	PRINCIPAL AMOUNT		ANNUAL RETURN	
	FUND A	FUND B	FUND A	FUND B
0	\$10,000	\$10,000		
1	\$11,147	\$16,800	11.5%	68.0%
2	\$12,396	\$27,570	11.2%	64.1%
3	\$12,455	\$16,403	0.5%	-40.5%
4	\$13,268	\$17,515	6.5%	6.8%
5	\$14,709	\$27,867	10.9%	59.1%
6	\$15,273	\$23,041	3.8%	-17.3%
7	\$16,049	\$21,457	5.1%	-6.9%
8	\$16,366	\$14,802	2.0%	-31.0%
9	\$16,611	\$9,743	1.5%	-34.2%
10	\$18,771	\$18,771	13.0%	92.7%

It is obvious that any sane person would rather trust his money to Steady-Eddy A than to Wild-Man B. The example is extreme, but the principle holds generally: if two managers can be expected to produce the same average return over a period years, the one whose returns are less variable from year to year is to be preferred. There are several reasons for this. The first is that if a manager's returns have been wildly up and down, it is hard to have much confidence in his ability to continue past success into the future. In the example above, even though manager B finished the ten-year period in a tie with manager A, he was actually under water at the end of nine years. It took an amazing 92.7% return in the last year in order to catch up. A second reason is that if your portfolio suffers large draw-downs, it may happen that you need cash and have to sell some of it at a time when it is at a low point. A third reason is related to the first two. If you suffer a large draw-down, you may lose your nerve and cash out at the worst possible time.

How do we compare two mutual funds? If two funds have the same variability, then the one with the greater expected return is better. If two funds have the same expected return, then the one with the less

variability is better. What if the variability and expected return are both different? The answer is the fund with the better Sharpe ratio is to be preferred. **The Sharpe ratio is essentially the ratio of the expected return to the variability of the fund.** (To be accurate, we should say the “expected excess return,” which is the expected return minus the return one could get from owning a risk-free asset like Treasury bills. There is no justification for taking any risk at all unless you can expect to do better than Treasury bills. It makes the discussion easier to follow if we ignore the return on Treasury bills or assume it to be zero.) To understand the rationale for the Sharpe ratio, think of two funds, fund A that is expected to return 8% a year, and fund B that is expected to return 16% a year. Suppose fund B is twice as variable as fund A. In this case the two funds have the same Sharpe ratio and are in a sense equivalent: putting \$5,000 into fund B and keeping \$5,000 in cash would give an expected return of 8% a year (on the entire \$10,000) with the same variability as fund A. Conversely, if we borrowed \$10,000 and invested that plus \$10,000 of our own money in fund A, then the expected return of 8% on the entire \$20,000 would represent a return of 16% on the \$10,000 of our own money that we invested. The variability would also be doubled. In this way we could get returns on fund A that would look the same as returns on fund B. This last example assumes, of course, that we can borrow—a substantial practical difficulty.

The first step in finding a good mutual fund is to look for a fund with a high Sharpe ratio

How to calculate the Sharpe ratio

To calculate the Sharpe ratio you need three numbers: the expected return of the fund, the standard deviation of returns, and the yield on Treasury bills. Ideally, we need those numbers for the *future* of the fund. Because we can't know the future, we have to estimate each of those numbers.

1. For the expected return, I suggest you use the average return for the last ten years. This is obviously not a great estimate, but it may be about the best you can do. Three-year and five-year returns are commonly used, but I believe you are much better off using ten years. On the other hand, it probably doesn't pay to go much farther back than ten years because conditions change, and there is reason to doubt whether data from the distant past are relevant.
2. For the standard deviation, I suggest calculating the standard deviation of weekly or monthly returns for the last ten years. To annualize the standard deviation, multiply the standard deviation of weekly returns by the square root of 52, and for monthly returns multiply by the square root of 12.
3. Even the yield on Treasury bills is uncertain. You may want to use the rate for 3-month bills, 6-month bills, or possibly year bills.

Because of the uncertainty attached to all three numbers, the Sharpe ratio is an imperfect measure; but it is the best single measure of the quality of a fund. The calculation is as follows:

$$\text{Sharpe ratio} = (\text{expected return} - \text{yield on T-bills}) / (\text{standard deviation})$$

A terrible strategy for choosing a mutual fund One method you might consider for picking a mutual fund is to look among the funds that had the highest return for the past year. The problem is that in years when the stock market goes up a lot the most volatile funds are likely to go up the most, and years when the market goes down a lot the most volatile funds are likely to go down the most. This will hold almost without regard to the expected long term returns of the fund. Therefore, using this strategy you are likely to pick very volatile funds after an up year in the stock market and to pick less volatile funds after a down year. You are not likely to pick the best funds this way. Taking account of relative volatility through the Sharpe ratio helps to overcome this problem.

BEYOND THE SHARPE RATIO

Beyond the Sharpe ratio there are other considerations for choosing a mutual fund. Remember that you are actually choosing a manager. Therefore, you should look at manager tenure. If the manager has managed the fund for many years, that is very good. If he is new to the fund, you must question whether the whole ten-year history of the fund is still relevant. On the other hand, if the manager has been with the fund in some other capacity, such as co-manager or analyst, that is a good sign. If the management company has a well-developed, systematic process for choosing stocks, that is also a good sign. Another thing to pay attention to is whether the strategy the fund uses makes sense to you. These are qualitative and somewhat subjective considerations, but important.

Risk management The best advice I have to offer regarding risk is don't bite off more than you can chew. Remember that while the market has always gone up over long stretches of time, it can go down as much as 20% or even 40% over a shorter period. Because the market generally does go up, you want to put as much money to work as you can (and for as long as possible), but you don't want to risk so much that you can't stand a significant decline. You do not want to fall into a pattern in which you start out very optimistic and commit much of your wealth to the market and then, when the market declines and the world seems very uncertain, you recognize that you have taken too much risk and sell--only to regain your confidence after the market has gone up again. You are much better off to start by taking less risk than you think you can handle. As you gain experience and confidence, gradually take more risk until you have reached the right level for you.

One way, then, to control risk is to limit the amount of money you invest. Another very important way is to

choose your investments carefully in such a way as to moderate the variability of your portfolio's value. The more variable a portfolio, the more likely it is to experience a large loss (or gain). If you have a choice between two funds that have the same expected return but differing variability, you can invest more money, and make a higher return for a specific amount of risk, by investing in the less variable fund than in the more variable one. This, of course, is what the Sharpe ratio is about. Of the two funds, the one with the less variability is the one with the higher Sharpe ratio. In general, you can achieve the highest return for a given amount of risk by choosing the investment with the highest Sharpe ratio.

The strategy I recommend for managing risk is:

1. Try to quantify the amount of risk you are comfortable with,
2. Find an investment with a high Sharpe ratio and other favorable qualities, and
3. Put as much money as you can into that investment without exceeding the level of risk you have chosen.

That, at least, is the goal. There are obvious difficulties: it is difficult to quantify precisely your level of risk, and it is impossible to have more than an informed opinion, or estimate, of the Sharpe ratio.

Diversification is a tool for managing risk. Two funds (or stocks or other instruments) are not likely to go up and down in lockstep. To some extent the ups of one will offset the downs of the other. By diversifying between two or more funds, you can reduce the variability of your portfolio. Diversification is an important tool, but it has two important limitations. First, stocks have a great tendency to go up or down, not in lockstep, but together. If you watch what the Dow Jones Industrial Average or the S&P 500 Index does on any particular day, you have a pretty good idea what your particular portfolio did on that day. Therefore, the extent to which the ups and downs can offset each other is definitely limited. Second, if you include more funds for the sake of diversification, you may be including funds with lower expected returns. While you may be decreasing the variability of your portfolio, you may be at the same time decreasing its return. To do a really good job, you need to calculate the Sharpe ratio of various diversified portfolios, not just individual funds, to see which portfolio of funds has the highest Sharpe ratio.

Another consideration is the fact that a mutual fund comprises a number of stocks. A mutual fund is itself already a diversified investment. That is one of the reasons for investing in a mutual fund in the first place. If you are investing in mutual funds, it is not a bad idea to invest in more than one, but you should be able to achieve your objective with a relatively small number.

Style box The style box is a way of categorizing mutual funds. Many firms and commentators classify mutual funds in this way, but it is originally due to Morningstar. There is a style box for equity funds and one for fixed-income funds. Each is a two-way classification.

In the case of equity funds, one classification is based on the size (market capitalization) of the companies owned by the fund, and the other is based on whether the fund’s strategy is more value oriented or more growth oriented. The categories on one scale are large-cap, mid-cap, and small-cap. The categories on the other scale are value, blend, and growth. Thus, there are nine categories: large-cap value, large-cap blend, large-cap growth, mid-cap value, etc.

Equity Style Box

	VALUE	BLEND	GROWTH
LARGE-CAP			
MID-CAP			
SMALL-CAP			

In the case of fixed-income funds the classifications are based on credit quality (high, medium, low) and maturity or duration (short-term, medium-term, long-term).

Fixed-Income Style Box

	SHORT-TERM	MEDIUM-TERM	LONG-TERM
HIGH-QUALITY			
MEDIUM-QUALITY			
LOW-QUALITY			

There are two ways to use style boxes. The first is strategic: There are times when value stocks do better than growth stocks, and vice versa. Similarly, there are times when large-cap stocks do better than small-caps, or high-quality bonds do relatively better than low-quality bonds, etc. If you hold an opinion that can be expressed in these terms, you may wish to concentrate your investments in one part or another of the style box. Considerations of this kind are particularly useful in choosing fixed-income mutual funds. Fixed-income risk is rather closely associated with both credit quality and maturity or duration. Bonds of long maturity or duration are more sensitive to interest rate movements than those of short maturity or duration. If you believe rates are going to rise, you might want to avoid bonds of long maturity or duration.

The second way has to do with diversification: There are those who advocate allocating a certain amount to each of the various cells in the style box as a method of diversification. My advice is to remember what the purpose of diversification is. It is to reduce risk. In the case of fixed income the way to reduce risk is to choose bonds of high credit quality and low duration. Spreading your investment across the fixed-income style box is not an effective way to reduce risk. In the case of equities, it is not very effective, either. The way to reduce risk is to reduce the variability of returns, but spreading your investment across the style box does not necessarily accomplish that. In the case of equity funds, the way to manage risk is first to choose a fund (or small group of funds) with a good Sharpe ratio and then to make sure you invest only

so much money as will allow you to sleep at night. Style boxes are of limited help with that.

For equity funds I emphasize the Sharpe ratio and advise not to worry much about the style box. For fixed-income funds you should consider the style box first; then use the Sharpe ratio to find the best funds within a particular cell. If you are confident of your understanding of the fixed income markets, use your own judgment to pick the appropriate cells. If not, and you wish a fixed-income allocation, stick to the high-quality, short duration cell.

Actively managed funds vs Index funds Most mutual funds are actively managed: the manager chooses which securities (and other assets) the fund should own. The word “active” does not imply that the manager makes frequent changes, although he may. While the manager has discretion to pick and choose, his discretion is not unlimited. A fund’s investments may be concentrated in stocks, in bonds, or in some combination of stocks and bonds. It may be concentrated in large-cap stocks, small-cap stocks, or stocks of companies in a particular industry, like health care or real estate. It may have as an objective capital appreciation, income, or income with some capital appreciation, for example. A fund’s objectives and constraints are disclosed in its prospectus.

On the other hand, index funds are not actively managed. An index fund does have a manager, but the job of the manager is to track the performance of an index. He does not pick and choose stocks to buy or sell, but he essentially buys all the stocks in the index. The success of the manager is measured by how well the fund tracks the index. The index might be a broad index like the S&P 500, an index for an industry like health care or energy, or an index of small-cap stocks, for example. When index funds were first introduced in the 1970’s, many people scoffed at the idea. It was the job of professional portfolio managers to beat the market, as measured by appropriate indexes, and it did not make sense to settle for average returns. John Bogle, however, argued that most professional managers don’t beat the market. If professional managers don’t beat the market, why not just invest in a broad portfolio that is representative of the market? Before John Bogle started the Vanguard 500 Index Fund in 1976, there was not a practical way for a small investor to invest in such a portfolio. Now there are many index funds open to small investors, and today the Vanguard 500 Index Fund has over \$8 billion in assets. There are now many other index funds designed to track the S&P 500 index, and there are many funds designed to track other indexes.

Is investing in an index fund a good strategy? It can be. The Vanguard 500 Index Fund has returned an average of 10.8% a year (assuming dividends were reinvested in the fund) from September 30, 1976, through August 30, 2013.

Is investing in managed funds a good strategy? It can be. While most managed funds may underperform the market, many managed funds do outperform. It is relatively easy to find funds that outperformed the S&P 500 Index over almost any period. For example, I have just run the Morningstar (premium) fund screener and found over 300 no-load mutual funds, open to new investment, that have achieved an average annual return of over 10% for the last ten years. They all beat the Vanguard 500 Index fund, which

has returned 8.3% over the same period. It is very easy, of course, to find a fund that outperformed the market in the past. The question is whether you can find one that will outperform the market in the future. John Bogle would probably say you may be able to, but only by luck, and the odds are against you. I say that if you choose among funds with a good ten-year Sharpe ratio, and that have some other good characteristics, the odds are in your favor of finding funds that beat the market in the sense of having a higher return for the amount of risk taken.

Fund families Most funds are part of a mutual fund family. Roughly speaking, a fund family is a group of funds marketed by a single firm under a single name. Often the funds in a family will also be managed by a single management company. Once you have experience examining and evaluating funds you will likely find that there are families that offer a number of excellent funds and others that do not offer any really good ones. Knowing the family a fund belongs to can give you worthwhile information about the quality of the fund.

Sales Charges–Share Classes–Load vs. No-load When people talk about load and no-load funds, they are talking about types of sales charges. The situation is actually a little more complicated than that. There are various types of mutual fund shares, known as share classes, with different types of loads. The three main share classes for funds with sales charges are A-shares, B-shares, and C-shares. If you buy a mutual fund through a brokerage firm, especially if it is a full-service firm, you will typically buy either A-, B-, or C-shares. The same essential fund can have shares of one or more classes. You might find a fund with A-, B-, and C-shares, or you might find a no-load fund that also has Advisor shares, for example. The share class determines the type of sales charge.

A-shares have a typical front-end load. This is usually around 5% or 6%, but it can be higher or lower. If you decide to invest \$1,000 in the A-shares of a fund with a 6% load, \$60 will go for the sales charge, and the remaining \$940 will buy shares in the fund at the NAV. In effect, your \$1,000 investment drops to \$940 the first day. The sales charge is often discounted according to a schedule for large investments. Under some conditions the entire sales charge can be waived.

B-shares have what is known as a back-end load. This is a bit of a misnomer. The term “back-end load” suggests that you don’t pay a sales charge until you eventually sell the shares. The way B-shares actually work is somewhat different. If you buy B-shares of a fund with a 6% sales charge, you will pay 1% a year for the first six years you own the fund. If you sell before six years are up, you will pay the rest of the sales charge when you sell. For example, if you keep the shares for two years and sell, you will pay 1% each of the first two years and pay 4% when you sell. If you own the shares longer than six years, the sales charge is paid up after six years and you no longer pay any sales charge, either while you own the shares or when you eventually sell. B-shares used to be very common. Registered reps (commonly known as “stockbrokers” or “financial advisors”) liked them because the customer did not see his investment drop by 6% the first day, but the registered rep got credit for his share of the full 6% sales charge immediately. B-shares have essentially the same sales charge as A-shares, but the payment is spread out.

C-shares are sometimes called “level” load. They typically charge a 1% sales charge for as long as you own the shares. They differ from B-shares in that there is no additional sales charge when you sell (unless you sell within a year, in which case there may be an extra fee, typically 1%), but the sales charge continues for as long as you own the fund. If there is a good chance you will sell the fund within six years, C-shares may be a better deal than either A-shares or B-shares.

No-load funds usually are not classified in a share class. No-load funds have no sales charge. They are typically bought directly from a mutual fund company or through a discount brokerage firm. They are usually not offered through a full-service brokerage firm.

Advisor shares are a class of shares that are sometimes associated with a no-load fund. Shares of a no-load fund that are sold directly by the fund company may also be sold as Advisor shares through a brokerage firm. They have an extra fee built in that is paid to the brokerage firm as an incentive to offer the fund.

Investor class is a class of shares that usually requires a high minimum investment, say \$250,000 or \$1,000,000. Investor class shares usually have lower fees than other classes.

Fees and expenses There are a number of different kinds of fees associated with mutual funds. The two main ones are the management fee and the 12b-1 fee. The management fee is the fee paid by the fund to the manager for managing the fund. A 12b-1 fee is also sometimes charged to the fund and paid to a brokerage firm or other company for expenses related to marketing and selling the fund. The fund can also have other expenses, such as legal expenses. The annual fees and expenses of a fund are often reported as a fraction of the net asset value and called the expense ratio.

CDSC stands for “contingent deferred sales charge.” This is a sales charge you may have to pay if you sell your shares in a fund within a specified time. In the case of B-shares, the back-end load is a CDSC. If you sell C-shares within one year you may have to pay a 1% CDSC. Some other funds require you to pay a CDSC if you sell your shares within a short period of time, say 90 days, for example. This is to penalize short-term trading.

Taxation If you own mutual funds in your 401(k) or in an IRA, you do not need to worry about the taxation of mutual funds. Otherwise, there is one taxation issue, in particular, you should be aware of. I do not wish to discuss taxation of mutual funds comprehensively but merely to outline this issue. Mutual funds buy and sell stocks and bonds. From time to time they receive dividends and interest and recognize short-term and long-term capital gains. Mutual funds are required to distribute income from these sources (after certain offsets and netting out) to their shareholders. Shareholders must pay income tax on these distributions. It is possible for the owner of shares in a mutual fund to have to pay taxes on distributions from a fund even if he has losses in the fund. One way this can happen is as follows: Years

ago the fund bought stock in a company for a price of \$20 per share. This year the fund sells some of those shares at \$80 per share, recognizing a long-term capital gain. Your pro-rata share of the gain is distributed to you, who bought shares in the fund just a few days before the distribution. The market has gone down since you bought the fund, and overall you have experienced a loss in the fund. Nevertheless, you must pay tax at the long-term capital gains rate on the capital gains distribution that you received. Sometimes the amount of the capital gains distribution can be significant. This is most likely to happen in a year when a fund has had large redemptions and must sell assets in order to raise cash to buy back its own shares. This, in turn, is most likely to happen when the stock market has gone down and there is much pessimism. Usually capital gains distributions are made near the end of the year. To avoid receiving them you can wait until after the distribution has been made before you buy a fund. In some cases, you may wish to sell a fund you already own before an anticipated distribution is made.

TIPS:

1. The Sharpe ratio is the best single-number summary of an equity fund's track record. A good track record does not guarantee good performance in the future, but it makes a lot of sense to start your search among funds with good, rather than bad, records. Three-year and five-year Sharpe ratios (which are often presented) are not very reliable because three-year and five-year returns are not very reliable. Look for ten-year Sharpe ratios. One place to find them is on the Yahoo Finance web site.
2. Concentrate on funds that have been around for at least ten years.
3. Don't judge a book by its cover, but beware funds with "growth" in the name, and consider funds with "value" in the name. Growth funds tend to exhibit more variability than value funds, but they don't necessarily grow any faster over the long run.
4. Funds in Morningstar's "balanced" and "asset allocation" categories are often good. These funds typically have less variability than the broad stock market and respectable Sharpe ratios.
5. Funds that are designed to track a broad stock market index are hard to beat. Two common features of these are low fees and tax efficiency. The oldest of these is the Vanguard 500 Index Fund.
6. Morningstar's star ratings are very helpful but not infallible. Remember that star ratings reflect to a considerable extent how a fund ranks within its category. Being the best fund in a bad category may not be very good. Also, particularly in fixed-income, a good fund can, to its disadvantage, be put in a category which doesn't really suit it.
7. In this low-interest-rate environment beware medium- and long-term bond funds and funds

that use leverage. These funds may have excellent past performance, but if interest rates rise, as they very likely will, such funds will probably lose value. (This article is primarily concerned with open-end funds, which don't typically use leverage, but many closed-end funds do.)

8. Beware funds that are created to fit in a marketing niche. These are often created to respond to the latest "trend." One tipoff is a short track record. Another is that they are often found among large fund families, including those of broker-dealers.
9. Beware house funds of broker-dealers. These funds tend to have high fees, and they are often created to fill a marketing niche.
10. There is no reason to pay a sales charge. There are plenty of "no-load" funds to choose from, and many "load" funds are available at NAV (that is, with the load waived) through discount brokers. You can buy a fund either directly from the fund company or through a broker. Not all brokers offer all funds. Different brokers may charge different sales charges or transaction fees. Sometimes these can be negotiated.
11. Watch out for excessive fees and expenses, but recognize it is possible for a good manager to earn his management fee through good performance. That is a judgment you have to make. Don't simply look for funds with the lowest expense ratios. The returns reported for mutual funds are net of some fees such as fund expenses, management fees, and 12b-1 fees but not net of front-end loads or CDSCs.

Where to find information and data about mutual funds

There are a number of sources of information about mutual funds on the internet.

Information about individual funds is available on the website run by the fund companies. The information includes fund prospectuses.

The following are excellent sources of information:

- [Morningstar](#) This website offers much information for free and much more for an annual fee. On the premium part of the site you can get analysts' opinions of many funds. There is a free fund screener as well as a premium screener.
- [Yahoo Finance](#) This is a free site with much information. To get detailed information about a particular fund, enter the symbol or name in the search box. You can find much data, including the ten-year returns, standard deviations, and Sharpe ratio. To find these, click on "Risk." There is also a mutual fund screener.
- [Mutual Funds and Exchange-Traded Funds \(ETFs\) - A Guide for Investors](#) This page on the SEC website is highly recommended and it is free. Here is much information about mutual funds and how they work. Some of the topics include types of funds, risks, fees, and taxation.
- [The Wall Street Journal website](#) Much information is offered for free, including a fund screener. With a subscription you get much more.
- [Economic Research: The St Louis Federal Reserve Bank](#) This site has much useful historical economic data, including returns on the S&P 500 Index and on Treasury bills.