Investment Planning Answer Book by Jay L. Shein, Mutual Funds

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Mutual Funds can be an important investment vehicle for investor portfolios. While this chapter is titled Mutual Funds which is the focus, some of this information is also applicable to Separately Managed Accounts (SMAs), Private Accounts, Unified Managed Accounts, (UMAs), Closed End Funds CEFs), Alternative Investment managers such as hedge funds or other investment vehicles

Investment Planning Answer Book by Jay L. Shein, Q 10:1, What are some of the basic categories of mutual funds?

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A mutual fund is a regulated investment company that "pools" money from investors in order to create a diversified investment with professional management. Millions of Americans invest in mutual funds. By some estimates, there are thousands of different mutual funds available in the United States and thousands more available worldwide.

There are various types of mutual funds. The basic categories are stock mutual and bond mutual funds. Additional fund categories are hedge funds, index funds, and funds that invest in narrower market segments. The understanding of the different types of funds will give the advisor a starting point with which to discuss investment strategy with their clients and the ability to initially direct a client to those types of investments that fit the client's investment style.

Investment Planning Answer Book by Jay L. Shein, Q 10:2, Who are the typical mutual fund participants?

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There are several main participants involved in mutual funds. Depending on the nature of the fund many individuals may be involved, such as a board of directors or trustees, fund managers, an investment advisor, a principal underwriter, a custodian, and a transfer agent.

If a fund is established as a corporation, it will have a board of directors; if a fund is established as a business trust, it will have a board of trustee. The duties of each board are essentially identical. The board oversees the fund's management and operations, provides policy guidance, and, in the event of a conflict-of-interest, protects shareholder interests. Very little guidance is available in interpreting this standard. Many directors serve on the boards of multiple funds. Measuring the performance of a fund's board can be difficult. The board is not responsible for investment performance. The board negotiates management fees on behalf of the shareholders.

The investment manager selects fund portfolio investments according to the fund's investment objectives and policies. Some investment managers provide administrative services as well. The fees of the investment managers are usually based on the fund's net asset value.

The principal underwriter distributes fund shares to the public. Since the ability of mutual funds to hold their own assets is limited, fund assets are typically held by a custodian, such as a bank custodian. In addition to safeguarding assets, the custodian pays for purchases of securities by the fund and receives payment upon sale of securities by the fund. The transfer agent records shareholder transactions and distributes dividends and capital gains to fund shareholders.

Investment Planning Answer Book by Jay L. Shein, Q 10:3, What are stock funds?

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Within the stock fund type of mutual funds there are various different types of mutual funds. Equity income funds tend to be a more conservative investment, as they purchase income-producing stocks with above-average dividend yields relative to the Standard & Poor's 500 Index (S&P 500). Aggressive growth funds can be very volatile, as they seek to maximize return by investing in high-potential stocks and place very little emphasis on dividends or interest income.

Value funds, also sometimes known as "growth and income" funds, may invest in what is sometimes called "distressed" stocks and are not generally appropriate for buy and hold investors. Other value funds may just look for undervalued stocks typically paying dividends that are not distressed. Active managers of value funds seek companies that are currently priced low and will quickly appreciate in value as investors see the company's true value. Value funds may have a high level of turnover as the value stocks (hopefully) become growth stocks.

Growth funds seek capital growth by investing in well-established companies (mostly consumer stocks) expected to sustain above-average increases in earnings. Growth funds may seek securities with high price-to-earnings ratios and are generally not concerned with current dividends.

The performance of balanced funds may be more predictable, as they invest in a combination of stocks and bonds according to a percentage listed in the fund's prospectus.

Flexible funds, also known as "asset allocation" funds, often change their mix of securities in response to market conditions. The fund manager of a flexible fund could have wide discretion over the types of investments and allocation among those types.

Concentrated funds can be volatile and react very differently compared to the broad market, as these funds are nondiversified funds that invest in a relatively small selection of equities. The selection of equities (often less than 30-40 stocks) represents the "best ideas" of the fund manager.

Fund of funds offer instant diversification, as they invest in other mutual funds. However, the management fees of a fund of funds are usually an additional layer of expense.

Small cap funds purchase securities with a market capitalization (measured by multiplying the company's stock price by the number of shares outstanding) usually less than $1 billion and tend to be more volatile. A common benchmark for small cap stocks is the Russell 2000 Index (see www.russell.com). Small cap stocks tend to benefit from tax law changes that are favorable to small cap companies and from an unfavorable international environment.

International funds purchase securities of companies outside the United States such as securities of developed countries such as England, France, Italy, Japan, Australia, and Germany. Global funds are funds that purchase both foreign and U.S. securities.

Emerging market funds purchase securities from undeveloped foreign markets also referred to as developing markets such as Indonesia, Malaysia, Singapore, Chile, and Brazil. Frontier markets are a subset of emerging markets and typically have lower liquidity, market capitalization and may be subject to more political risk than developed or emerging markets. Frontier markets tend to be more volatile but most of the time have a lower correlation with other markets. Investors in Frontier markets hope that these markets will develop and grow over time and become more liquid. Some Frontier markets are Argentina, Vietnam, Nigeria, Tunisia, Serbia, and Estonia.

Utility funds, which invest in public utilities, electric power producers, natural gas providers, and telephone companies, are generally more attractive to conservative investors. Utility stocks tend to pay higher dividends and be more sensitive to interest rates. The deregulation of the 1990s has added some uncertainty to these investments.

Natural resource funds tend to hold their value during periods of inflation and currency devaluation. These funds invest in gold and precious metals, energy, forest products, and industrial metals.

Micro-cap funds typically invest in the 3,000 to 4,000 smallest securities in the market that are often defined as having a market cap of less than $250 million. Since they purchase the smallest securities, these funds are highly sensitive to size issues.

Investment Planning Answer Book by Jay L. Shein, Q 10:4, What are bond funds?

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Like stock funds, there are various bond mutual funds. These can range from the money market funds to emerging market debt funds, all of which carry different risks and compositions that the advisor needs to be able to explain to a client.

Money market funds purchase short-term investments in an attempt to increase current income. The price of the shares generally does not change. The difference between a mutual fund money market account and a bank money market account is that a mutual fund pays dividends and a bank pays interest.

Both U.S. government funds and corporate funds seek income and capital preservation. U.S. government funds purchase government securities such as U.S. Treasury securities. Corporate funds purchase corporate debt. The principal risk of U.S. government funds is interest rates; the risk of corporate funds is both interest rates and some credit risk.

Foreign bond funds invest in non-U.S. corporations and governments and thereby seek current income and capital appreciation. Funds that do not hedge currency risk back into U.S. dollars have a lower correlation to the U.S. markets. Global bond funds invest in debt securities of corporations and governments worldwide and thereby seek high current income.

High-yield bonds typically have less liquidity and act more like equity than fixed-income securities. The bonds purchased by high-yield funds are typically below investment grade or are nonrated.

Flexible income funds, also known as "strategic income" funds, allow their managers flexibility in investing in U.S., high-yield, and foreign bonds. These funds seek income and capital appreciation and involve credit, currency, and interest rate risks.

Mortgage-backed funds purchase mortgage securities backed by the Government National Mortgage Association (Ginnie Mae), the Federal National Mortgage Association (Fannie Mae), and the Federal Home Loan Mortgage Corporation (Freddie Mac). These securities typically pay higher yields. Mortgage-backed funds seek income and capital preservation. Mortgage derivatives known as collateralized mortgage obligations (CMOs) are often found in mortgage-backed bond funds; however, it is often difficult to assess the risk of these derivative products.

National municipal funds purchase municipal (state and local) bonds without geographic restrictions. They seek federal tax-exempt income and capital preservation. Realized capital gains are subject to federal and state taxes. High-yield municipal bonds invest in lower-credit-rated bonds such as those involving a not-for-profit organization or hospital or nursing home. Bonds subject to the alternative minimum tax (AMT) usually pay a higher yield and can be very beneficial to taxpayers who are not subject to the AMT. [IRC §§55, 57]

Emerging market debt funds purchase fixed-income securities of emerging countries. These bonds include Sovereign Debt, Corporate Debt, Eurobonds, performing and nonperforming loans, domestic hard currency instruments, and local currency investments. U.S. sanctions and other restrictions may limit or prevent U.S. investors from investing in the nonperforming loans of some countries.

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Federal law and historical experience have helped to define the structure of mutual funds. Participants include the board of directors or trustees to oversee the management and operations of the fund, the investment advisor to select the fund's investments, the principal underwriter to distribute shares to the public, the custodian to safeguard the fund's assets, and the transfer agent to record shareholder transactions.

Board of directors/trustees. Funds that are established as corporations have directors, while funds established as business trusts have trustees. The duties of directors and trustees are essentially identical. The role of directors and trustees in policing conflicts of interest is central to the regulatory scheme to which mutual funds are subject. Directors and trustees are required to oversee the management and operations of the fund, to provide policy guidance, and to protect the interests of fund shareholders in conflict-of-interest situations. These duties imposed on mutual fund directors and trustees are in addition to those imposed by state law.

Federal law generally requires that at least 40 percent of the fund's board be comprised of persons who are not affiliated with the fund, its investment advisor, or its principal underwriter. Typically most boards have a higher percentage of independent directors than required. These independent directors serve as watchdogs over the shareholders' interests and provide a check on the investment advisor and other persons affiliated with the fund. However, there is very little guidance in defining "independent," and many directors serve on the boards of 20, 30, or more funds in a single family. This can mean that boards sacrifice the interests of one fund's shareholders for those of another fund. Further, few fund companies require independent trustees to own shares in the funds that they oversee. Some requires independent directors to own some amount of each fund on whose board they serve. In most cases, if investors are unsatisfied with the fund and its board, they simply choose to sell the fund.

For the advisor, performance of the board is difficult to measure. Ideally, the advisor should identify funds with board members who are concerned with monitoring investment performance, expense and management fee control, compliance, and internal control.

While directors are not responsible for investment performance, one of their most difficult tasks is presented when performance exceeds expectations. This may be an indication that the fund manager is taking unexpected risk. For most fund expenses, the management has the same interest as shareholders—holding expenses to a minimum. This is not the case, however, for management fees, which are negotiated by directors on behalf of the shareholders.

Investment manager to the fund. The investment manager is responsible for selecting portfolio investments for the fund in accordance with the fund's investment objectives and policies. The investment manager is usually paid for these services through a fee based on the value of the fund's net assets. Many investment managers also provide administrative services to the fund and may, for example, oversee the activities of the other companies providing services to the fund to assure that the fund's operations comply with applicable federal and state requirements.

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Principal underwriter, custodian, and transfer agent. The principal underwriter arranges for the distribution of the fund's shares to the public. Mutual funds are limited in their ability to hold their own assets and therefore generally place their assets in the custody of a third party. Most mutual funds use a bank custodian, whose

functions include safeguarding the fund's assets, making payments for the fund's purchases of securities, and receiving payments for the fund when securities are sold.

The transfer agent performs shareholder record-keeping services. It maintains shareholder account records, issues new shares, cancels redeemed shares, and distributes dividends and capital gains to shareholders.

Investment Planning Answer Book by Jay L. Shein, Q 10:6, What some of the investment styles available to advisors and investors?

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Stock funds. There are many different mutual fund styles available to financial advisors. Often mutual funds are created to purchase only one type of investment style. These include equity income funds, which typically have high dividend payout ratios; aggressive growth funds, which seek maximum return; value funds, which purchase stocks with low p/e ratios and other criteria; growth funds, which have high p/e ratios; balanced funds, which buy both stocks and bonds; flexible funds, which can purchase either stocks, bonds, or a combination of the two; concentrated funds, which hold a limited number of security positions; fund of funds, which buy other mutual funds; small cap funds, which buy stocks with smaller market capitalization; international funds, which purchase stocks that trade on overseas markets; emerging markets, which purchase securities of smaller developing countries; utility funds, which purchase public utilities; natural resource funds, which purchase securities such as oil and gas, timber and commodities; and micro cap funds, which purchase the smallest market capitalized securities.

Equity income funds. Equity income funds purchase income-producing stocks with above-average dividend yields relative to the S&P 500. The higher the dividend yield over the S&P 500, the more conservative the fund is. History has shown that about one-half of the return on equities has come from the dividends. In addition, dividend income tends to be more stable than capital appreciation. Therefore, equity income funds tend to be a more conservative investment. These funds might typically use a universe of securities that includes the top 15 percent dividend payors or 11/4 to 11/2 higher dividend yields than the S&P 500. Traditionally, equity income funds will have a portfolio with significant holdings in utilities, energy companies, and real estate investment trusts (REITs). Fund managers can increase both the return and risk of equity income funds by holding a concentrated portfolio.

Aggressive growth funds. Aggressive growth funds seek to maximize return with a minimal emphasis on dividends or interest income by investing in high-potential stocks, which are often small emerging market growth stocks, new companies, or companies that have fallen on hard times with the opportunity for rapid capital appreciation. Aggressive growth funds can be very volatile. Some aggressive growth funds use aggressive strategies such as borrowing, short selling, options, and other speculative methods.

Value funds. Value funds, often called "growth and income" funds, invest in securities that are mature or appear to be depressed in price relative to their intrinsic value.

Value securities are not necessarily a "value." These stocks, sometimes known as "distressed" securities, may be priced low because they really are not worth very much due to an industry that is suffering or due to poor management. Value universes are usually created with stocks that have low price-to-book and price-to-earnings ratios and/or high dividends. Other value criteria may include private market value and liquidation value, as well as intangible values. Active managers seek companies that will quickly appreciate in value as investors become aware of a company's strengths. Value investing may have a higher level of turnover, as value stocks will, hopefully, become growth stocks; value investing is normally not for buy and hold investors.

Growth funds. Growth funds seek capital growth. Typically growth funds purchase well-established companies that are expected to sustain above-average earnings increases and whose earnings are expected to outpace both inflation and the overall economy. Growth funds usually seek securities that are growing faster and have higher price-to-earnings ratios than the S&P 500. Growth stocks historically tend to be consumer stocks. More recently, health care and technology stocks have had the fastest growth. Growth funds do not usually consider current dividends, making growth stocks more volatile than value stocks since dividends tend to be more stable than capital appreciation. An approach to buying rapidly growing growth stocks whose prices have declined and have fallen out of favor is called "growth at a reasonable price," or GARP, investing.

Balanced funds. Balanced funds typically have a combination of stocks and bonds. The stock allocation is commonly based on large cap stocks. The bond portfolio usually resembles high-quality investment grade debt. The percentages of stocks and bonds are usually listed in the fund's prospectus and the fund does not divert far from these percentages. Balanced funds are normally highly predictable.

Flexible funds. Flexible funds, called "asset allocation" funds, allow the fund manager wide latitude in deciding where to invest and can include stocks, bonds, or cash. Unlike a balanced fund, which commonly has a set mandate of the percentages of stocks, bonds, and cash, an asset allocation fund actively changes the mix of securities in response to market conditions. Many utilize additional asset class categories such as REITs), preferred shares, high-yield corporate debt, and convertible bonds.

CAUTION

Asset allocation funds are sometimes viewed as a single fund that offers diversification and therefore an appropriate choice in which to invest one's entire portfolio. However, asset allocation funds can be extremely aggressive. A stock fund could underperform the S&P 500 by, e.g., 8 percent in a year in which the market was very volatile. The fund manager could have made large bets on, e.g., emerging markets that did worse than the S&P 500.

Concentrated funds. Concentrated funds or focus funds are nondiversified funds that purchase a relatively small selection of equities, often less than 30-40 stocks, that are meant to represent the manager's "best ideas," thus allowing the fund's managers to have a deep appreciation and understanding of the portfolio's holdings. The fund portfolio has significant unsystematic risk, which means that it can be very volatile and can react very differently to the broad market. Advisors should assess whether the additional volatility will be rewarded with more than incremental returns.

COMMENT

A fund that does very well with a concentrated portfolio one year may have stellar performance in a one year period because of a few stocks, but the fund could have dismal returns over a longer period of time.

Fund of funds. Fund of funds are mutual funds that invest their assets in other mutual funds and offer instant diversification for small amounts of money and a reduction in paperwork. They may also be able to give you access to a fund that is closed to new investors. However, the manager of a fund of funds, much like a financial advisor, is another layer of expense to the ultimate consumer without the ability to tailor the investment program exactly to the needs of the shareholder. A few funds of funds do not charge these extra layer of fees.

Small cap funds. Market capitalization (cap) is measured by multiplying a company's stock price by the number of shares outstanding. Small cap funds are commonly defined as buying securities with a market capitalization of less than $1 billion. The majority of small cap stocks trade over the counter. The Russell 2000 Index is often used as the benchmark for small cap stocks. It consists of the 2000 securities below the 1000 largest ranked by market capitalization and other factors. For more information, see www.russell.com. Small cap stocks tend to be more volatile typically because they have a more concentrated product line and are less liquid than their large cap counterparts. Studies have shown that long-term small cap stocks have tended to outperform large cap stocks, although there may be long periods when this does not occur. Small cap stocks can also be broken into value and growth segments. Two factors that often affect small cap stocks differently than larger companies are changes in tax law that are perceived to be more beneficial to small cap stocks and an unfavorable international environment since most small cap stocks are not globally diversified and have little currency exposure.

International funds. International funds seek to purchase securities of companies outside the United States. They may buy "ordinary" shares, or shares listed and traded on foreign markets, or American Depository Receipts, which are foreign shares traded on U.S. exchanges. Global funds purchase both foreign and U.S. securities.

PLANNING NOTE

A major argument has been made for the benefit of international diversification based on the low correlation between U.S. equity markets and the Morgan Stanley Capital International European, Australia, Far East (EAFE) Index. However, many international funds do not look much like the EAFE due to underweighting in a country such as but not limited to Japan or Germany, which may have lower correlations to the United States. This has helped most fund managers' returns, but it also may negate the benefits of international diversification. During the 1987 stock market decline, the only major market moving up was Japan. Also, note the shifting nature of the EAFE Index. In 1988, Asia represented 69 percent of the Index. In 1993, Asia represented 52 percent, and as of May 1, 1998, Asia represented only 27 percent with Europe representing 74 percent. As of December 31, 2010 Asia represented over 30 percent.

Emerging market funds. Emerging market funds purchase securities from undeveloped foreign markets. They tend to invest in the three primary geographic areas of Latin America, Southeast Asia, and Central Europe. Many emerging market funds focus less on stock picking than on country selection.

Utility funds. Utility funds traditionally invest their assets in public utilities, electric power producers, natural gas providers, and telephone companies. These companies tend to pay high dividends and are often purchased by conservative investors. Utility stocks may be very sensitive to interest rates because utilities purchase large-scale plant and equipment that is often financed with debt. As interest rates rise, the debt service will also rise. Utility companies have been affected in the 1990s by legislative changes and deregulation, creating an uncertain environment and reducing the stability that many conservative investors have demanded. These factors have also led many utility funds to purchase many foreign-company, cable television, energy, and other stocks that traditionally have not been purchased.

Natural resource funds. Natural resource funds can include investments in gold and precious metals, energy, forest products, and industrial metals. These real assets tend to hold their value during periods of inflation and currency devaluation. In addition, they can participate in rapid growth of economies as the demand for raw materials increases.

Micro-cap funds. Micro-cap funds typically invest in the 3,000 to 4,000 smallest securities in the market that are often defined as stocks having a market capitalization of under $250 million.

PLANNING NOTE

Micro-cap funds are especially sensitive to size issues, as funds that grow too large will no longer be able to purchase the smallest type of security.

Bond funds. There are various types of bond funds. These include money market funds, which buy very short-term instruments; U.S. government funds, which buy securities of the U.S. government; corporate funds, which purchase corporate securities; foreign bond funds, which purchase securities of non-U.S. companies; high-yield funds, which purchase lower rated securities; flexible income funds, which purchase various types of fixed-income securities; mortgage-backed funds, which purchase mortgage securities; national municipal funds, which purchase municipal bonds without geographic restrictions; and emerging market debt funds, which purchase fixed-income securities of emerging countries.

Money market funds. A money market mutual fund attempts to increase current income to its shareholders by purchasing short-term investments. When a money market fund is liquidated, the proceeds equal the original investment because the price of the shares does not generally change. A mutual fund money market account is different from a bank money market account in that a fund pays dividends and a bank pays interest.

U.S. government funds. U.S. government funds seek income and capital preservation by purchasing U.S. Treasury and other government securities. Their principal risk is interest rates.

Corporate funds. Corporate funds seek income and capital preservation. They purchase corporate debt and their principal risks are interest rates and credit risk.

Foreign bond funds. Foreign bond funds seek current income and capital appreciation by investing in non-U.S. corporations and governments. These funds can expose investors to currency risk. As a result, a fund may seek to reduce the currency risk by hedging this risk back into U.S. dollars. The disadvantage of hedging is the loss of potential currency gains, higher costs to hedge, and, therefore, lower yields to the investor and higher correlation to U.S. bonds. If the fund were not hedged, the fund would have lower correlation to the U.S. markets.

Global bond funds seek a high level of current income by investing in debt securities of corporations and governments worldwide.

CAUTION

The financial advisor should recognize that foreign corporations that default are subject to their home country's bankruptcy laws. The fund manager's experience with defaults should be considered when purchasing funds that buy foreign corporate debt.

High-yield funds. High-yield funds purchase corporate bonds that are rated below investment grade, or BBB, or that are nonrated. Companies that issue high-yield bonds may be smaller companies that lack an operating history, firms that have borrowed heavily for an acquisition or buyout or to fend off a takeover, and foreign corporations whose government bonds are rated below investment grade. They may also be former investment grade bonds that have been downgraded ("fallen angels"). A foreign corporation is never rated higher than its sovereign government's debt. These bonds also have less liquidity than investment grade bonds. High-yield bonds normally act more like equity than fixed income securities.

CAUTION

Some believe that high yield is less attractive than equities. Bonds typically have a more limited upside potential than stocks. Although most high-yield bonds pay a hefty coupon, the total capital appreciation can be more limited than in stocks. This is because when the bond matures, the investor receives principal, but nothing more. When buying a junk bond, the investor is betting that a company's financial fortunes improve. Unfortunately, the bond may be called away by the company before the junk investor gets to participate in the upside.

Flexible income funds. Flexible income funds, also called "strategic income," seek income and capital appreciation by allowing their managers the flexibility to invest in U.S., high-yield, and foreign bonds. Their primary risks are credit, currency, and interest rates.

Mortgage-backed funds. Mortgage-backed funds seek income and capital preservation by purchasing mortgage securities backed by the Government National Mortgage Association (Ginnie Mae), the Federal National Mortgage Association (Fannie Mae), and the Federal Home Loan Mortgage Corporation (Freddie Mac). Their primary risks are prepayment and interest rates. The primary advantage of mortgage-backed securities is that they pay a higher current yield than other bonds. This is due to their unique feature, sometimes known as negative convexity. With mortgage-backed bonds, as interest rates decline, prepayments increase as homeowners refinance their mortgages. Therefore, there is little opportunity for capital appreciation. Conversely, if interest rates rise, homeowners tend to keep their existing mortgages longer. When interest rates rise, mortgage-backed securities decline more than similar straight bonds. Therefore, these types of funds operate best during periods of stable interest rates.

Derivatives are often found in mortgage-backed bond funds. Mortgage derivatives are known as collateralized mortgage obligations (CMOs). CMOs are derivative bonds created by splitting the mortgage pools into various cash flows. Some of these cash flows, such as interest only and principal only, can be extremely volatile and can involve principal loss even though the underlying mortgage securities are government or quasi-government guaranteed. Other derivatives are structured notes and floaters. It is very difficult for the financial advisor to analyze the fund's portfolio of securities and assess the risk of these derivative products.

National municipal funds. National municipal funds seek federal tax-exempt income and capital preservation by purchasing state and local government debt. Any capital gains that are realized are subject to federal and most state income taxes. Their primary risks are interest rates and some credit risk. Because their coupon interest is free of federal taxes, they usually pay a lower yield. High-yield municipal bonds invest in lower-credit-rated bonds. These are typically defined as bonds with ratings below investment grade or less than BBB and usually involve a not-for-profit organization such as a hospital or nursing home or public agencies such as airports or power authorities.

Most high-yield municipal bond funds also purchase investment-grade municipal bonds. About 20 percent of municipal bonds are subject to the alternative minimum tax (AMT). AMT applies to taxpayers who have substantial income from "tax preference items." [Code Sec. 55 and Code Sec. 57] Bonds subject to AMT usually pay a higher yield than non-AMT bonds. Since most taxpayers are not subject to AMT, these can be very beneficial securities to own. State municipal funds seek federal and state tax-exempt income and capital preservation by investing in state and local government debt of one state only. Their primary risks are interest rates and some credit risk.

Emerging market debt funds. The category of emerging market debt can be used for return enhancement and volatility reduction in international fixed income portfolios. One should note that the period of historical analysis is brief owing to the lack of available securities prior to 1990. The broad emerging market debt universe totals $1.1 trillion and is comprised of Brady Bonds, Eurobonds, performing and nonperforming loans, domestic hard currency instruments, and local currency investments. However, of the total, only $434 billion is currently available to U.S. investors who face restrictions on investing in the nonperforming loans of some countries due to U.S. sanctions and restrictions on local currency bonds and bills. Brady Bonds originate from defaulted sovereign loans and are the largest and most liquid sector of the U.S. tradable emerging market debt universe. Many of the local currency bonds are corporate bonds. However, the financial advisor will have the added task of trying to evaluate whether the fund manager has any experience with foreign bankruptcy laws.

PLANNING NOTE

Before the financial advisor considers adding emerging market debt to a portfolio, he or she must decide the most favorable forum for investment. Two aspects to consider are whether to seek (1) an active mandate or a passive, index-tracking mandate, and (2) exposure to emerging market fixed income via a portfolio segregated from existing global bond instruments or a more opportunistic basis.

Investment Planning Answer Book by Jay L. Shein, Fundamental Statistical Analysis

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Fundamental statistical analysis is a useful tool to evaluate a mutual fund. The objective of calculating the various statistics is to reduce a large amount of information about a mutual fund or investment to a manageable amount. Fundamental statistical analysis takes a large amount of information and reduces it to a few helpful numbers. It is important to recognize at the outset that statistics have limitations. A mutual fund portfolio is a constantly changing entity, not just a summation of statistics. Yet by performing a statistical analysis, the advisor will be able to quantify ambiguously employed investment terminology, such as "value investor," "good balance sheets," or "highly profitable companies."

The advisor must consider all the statistics of various funds when planning for a particular client. Depending on the client's current positions certain funds may be more appropriate than others and these will not be simply obvious from the self-described fund type. By a careful combination of the various statistical analyses the advisor can better recommend the appropriate funds for any particular client.

Investment Planning Answer Book by Jay L. Shein, Q 10:7, Why are portfolio characteristics important?

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Mutual funds have various portfolio characteristics that should be evaluated. These ratios calculated from the fund's portfolio holdings include the cash percentage, price-to-earnings ratio, price-to-book ratio, earnings growth rate, median market capitalization, number of positions, foreign holdings, gross dividend yield, mutual fund style boxes, and star ratings. The advisor should examine each of these fundamental characteristics and seek to interpret the results. By looking at all the characteristics the advisor should be able to identify the proper funds to help a client maintain the proper asset mixture.

Cash percentage measures the percentage of the fund invested in "cash equivalents"—highly liquid, short-term, interest-bearing investments. Value funds typically have higher cash percentages.

The price-to-earnings ratio of an individual security is the company's stock price divided by its earnings per share. This ratio indicates how much is paid for potential future earnings. Value funds typically purchase companies with low price-to-earnings ratios; growth funds typically purchase companies with high price-to-earnings ratios.

There is no generally accepted method for calculating a mutual fund's price-to-earnings ratio. Some fund companies base the price-to-earnings ratio on the past 12 months; other fund companies base it on analyst's predictions for projected earnings. The approach of most mutual fund rating services of multiplying the price-to-earnings ratio of each stock by the stock's weight in the portfolio does not work well for companies with negative (or zero) earnings or extreme price-to-earnings ratios. The most accurate method of calculating a mutual fund's price-to-earnings ratio is a share-weighted calculation that offsets the negative earnings by the positive earnings. Each company's earnings are multiplied by the number of shares held in the fund. The S&P 500 uses a share-weighted price-to-earnings ratio.

Share price divided by book value is the price-to-book ratio. One can think of the share price as being assigned by the market and the book value as being the current value assigned by an accountant. Value companies generally have low price-to-book ratios; growth companies generally have high price-to-book ratios.

The average annual rate of growth in earnings over the past three or five years for the securities held in the mutual fund is the earnings growth rate. Value stocks typically have a lower earnings growth rate; growth stocks typically have a higher earnings growth rate. Small cap growth funds are often listed by rating services as small cap value funds.

Market capitalization (cap) is the market price multiplied by the number of shares outstanding. The *median* market cap is the point where half of the stocks in the portfolio have a higher market cap and half of the stocks in the portfolio have a lower market cap. The *average* market cap is a weighted average that is usually much higher than the median market cap. Sometimes what is reported as median market cap will actually be the average market cap. Nonetheless, the rise of either one over time may be an indication that the manager is being forced to select from a narrow universe of securities because of the fund's size.

The number of securities held in the fund's portfolio is referred to as the number of positions. Funds with a lower number of positions are generally more concentrated and fund with higher number of positions tend to track the broad market averages. The average percentage invested in the 10 largest fund holdings is about 30 percent. As this percentage rises, the fund's returns will become more volatile because they will depend on fewer companies. If the size of a fund has affected the fund's strategy, this may be revealed by examining the number of positions over time.

The foreign holdings of a fund's portfolio indicate the percentage of net assets represented by stocks or American Depository Receipts of companies based outside of the United States.

The gross dividend yield, which is the amount of income or dividends received by the fund from the portfolio holdings, is often reported by rating services after fund expenses have been subtracted. This figure is more useful when expenses have not been subtracted. In equity funds, value funds will have a higher gross dividend yield than growth funds.

The most common mutual fund style boxes, or categories of investment style, are large cap value, large cap growth, mid cap value, mid cap growth, small cap value, small cap growth, and, sometimes, blends that have characteristics of both growth and value stocks. Sometimes the style that a fund claims to be may not be the true investment style of the fund.

Quantitative ranking systems calculated by some mutual fund rating services are called star ratings. These historical ratings, which should be carefully interpreted, use a bell curve and examine the risk-adjusted historical performance of funds.

Investment Planning Answer Book by Jay L. Shein, Q 10:8, What are Modern Portfolio Statistics?

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Modern Portfolio Theory (MPT) is a term that represents a body of investment theory initiated by Dr. Harry Markowitz. [See Chapter 3] In essence, the theory suggests that investment evaluations should focus on both risk and return. A number of statistics are useful to MPT. These include standard deviation, beta, r-squared, semi-variance, coefficient of variation, alpha, and Sharpe ratios. Although each of the statistical techniques can be useful, each is also flawed. The advisor should be aware of both the statistics and the potential misinterpretation of the statistics.

Standard deviation measures volatility of returns around an average return and is useful in comparing a mutual fund to another fund or to a market index. The data used to calculate standard deviation typically covers a 36-month time period. Standard deviation rewards consistency, because it gives equal weight to both negative and positive "deviations" from the mean. For example, a fund that consistently loses (or gains) three percent each month may have a standard deviation of zero. Since standard deviation assumes that returns are normally distributed, this statistic is not a good indication of the possibility of sharp movements in return.

The beta coefficient measures the volatility of a fund relative to something else, such as the S&P 500 for equity funds or the Barclays Brothers Aggregate Bond Index for fixed income funds. The data used to calculate beta typically covers a 36-month time period. Unlike standard deviation, which measures both the risk unique to an asset and the market risk that cannot be diversified away, beta measures only market risk. A beta of one (1.00) indicates that the fund moves directly with the market; a beta of greater than one (>1.00) indicates that the fund is more volatile; and a beta of less than one (<1.00) indicates that the fund is less volatile. The beta may provide false information, if the fund is compared to an inappropriate benchmark, such as comparing a fund investing in real estate to the S&P 500. Similar to standard deviation, beta does not distinguish between overperformance and underperformance.

R-squared, also known as the "coefficient of determination," is based on the fund's performance rather than its actual holdings and measures how closely that performance is influenced by the overall market. The data used to calculate r-squared typically covers a 36-month time period. One can determine how much of a fund's risk can be eliminated through diversification by subtracting r-squared from one. Index funds such as the S&P 500 should have an r-squared of 100 percent. A low r-squared may indicate that an inappropriate benchmark was used.

Semi-variance is calculated like standard deviation, except that semi-variance measures only downside deviations from the mean or some other target return. The coefficient of variation allows one to compare two different funds by a properly adjusted standard deviation and is calculated by dividing the standard deviation by the mean return.

Alpha measures risk-adjusted return and indicates whether the returns earned justify the additional risk taken by the fund manager. The data used to calculate alpha typically covers a 36-month time period. Alpha will be positive if the risk-adjusted performance is better than expected. Regardless of whether the fund outperforms the market, a negative alpha will indicate that, for the level of risk taken, the fund should have done better.

The Sharpe ratio was developed by Nobel Laureate William Sharpe. A high Sharpe ratio indicates a higher return per unit of risk taken. This statistic is useful in comparing two similar funds on a risk-adjusted basis.

Investment Planning Answer Book by Jay L. Shein, Q 10:9, Are fixed funds evaluated the same as equity funds?

Fixed income funds are usually evaluated differently than equity funds. When the advisor evaluates a fixed income fund, he or she pays particular attention to the fund's duration, yields, and quality ratings. A fund manager will often increase the risk of a fund dramatically. Only through careful analysis will the advisor be able to detect this increase in risk.

Duration measures interest rate sensitivity and indicates how much the net asset value of a fund can be expected to change due to a change in interest rates. The technical definition of duration is the present value-weighted time to maturity of the cash flows of a fixed payment instrument. A longer duration indicates that the fund has a higher sensitivity to changes in interest rates.

The Securities and Exchange Commission (SEC) requires mutual funds to use a standardized method for calculating reported yields. The distribution yield is based on the purchase prices of the bonds in the fund; the SEC yield is based on the current market values of the bonds in the fund. The net asset value (NAV), which is the mutual fund price per share, gives an indication of bond fund activity. Fixed income funds that pay distributions higher than the actual yield are effectively returning part of the principal to the investor. Some techniques used to increase the size of a client's monthly distribution check may reduce NAV over time. Such techniques affect the taxable investor; however, these accounting issues are not required to be disclosed in any public documents.

Quality ratings are not typically reported in the filings or disclosure documents of most bond funds. Even though lower quality ratings may increase yield; however, they also increase risk. Consequently, quality ratings should be evaluated. Furthermore, the advisor should investigate whether ratings are split rated. For example, upon examination one may discover that a bond rated BBB was actually rated BBB by only one rating agency and was rated BB or less by others.

Turnover ratio. Of the other statistics that are useful in a fund evaluation, turnover ratio is the most interesting. If the advisor knows only the turnover ratio, he or she will be able to get a keen sense of the fund manager's operations, costs, tax efficiency, and other factors.

The turnover ratio, which is based on SEC regulations, is calculated by dividing the 13-month average market value for the portfolio into the lesser of gross purchases or sales proceeds for the fiscal one-year period. In using the turnover ratio to evaluate the tax efficiency of the fund, one must consider that the turnover ratio for a fund that experiences a greater amount of sales than purchases may understate the potential exposure to capital gains tax. Furthermore, a potentially high turnover may be masked by cash flows into the fund. The turnover ratio is not a reliable estimation of tax efficiency, but does imply that further evaluation of this is needed.

Investment Planning Answer Book by Jay L. Shein, Q 10:10, What are some valuable ratios or characteristics for mutual fund evaluation?

The term "portfolio characteristics" refers to various ratios that are calculated from the mutual fund's portfolio holdings. These characteristics are used in evaluating a variety of concerns, including whether the fund has too much money to be managed effectively and whether the fund is purchasing the appropriate security for the advisor objective.

Cash percentage. Cash percentage indicates the percentage of the fund invested in "cash equivalents" or highly liquid, short-term, interest-bearing investments.

The advisor should look at the changes in cash position. A rising cash position may be an indication that the fund manager is receiving too much in new cash flows. Some fund managers will consistently maintain large cash balances. If this has always occurred, it might not be considered a negative. Higher cash balances are typically seen in value funds

PLANNING NOTE

In most instances, the cash percentage of a fund should be as low as possible for advisor's where the asset allocation decision is the most important. Therefore, if a fund manager holds large amounts of cash or equivalents, the allocation to cash may be too high. A high cash allocation should cause the advisor to be concerned about paying active investment management fees for simply holding cash. At one time, cash positions were used to protect the fund against redemptions. Today funds can purchase futures to remain fully invested. If the advisor seeks a more flexible fund manager then his or her allocations to cash may be warranted.

Price-to-earnings ratios. The price-to-earnings ratio is a measure of a stock's price. It answers the question "how much in stock price does one pay for each dollar of earnings?" The higher the price-to-earnings ratio, the more the fund is paying for those potential earnings. Young, rapidly growing companies will typically have higher price-to-earnings ratios than older, mature companies. Price-to-earnings ratio is often used to differentiate value from growth funds:. a value fund purchases companies with low price-to-earnings ratios and a growth fund purchases companies with higher price-to-earnings ratios.

To calculate the price-to-earnings ratio for an individual security, the company's stock price is divided by its earnings per share.

EXAMPLE 10-1

All-Temp Corp. stock has $1 in per-share earnings. The stock sells for $20 per share. Therefore, the price-to-earnings ratio is 20 ($20/1).

Calculating the price-to-earnings ratios for mutual funds is not straightforward. There is no generally accepted method for calculating price-to-earnings ratios of a mutual fund portfolio, and fund companies use a variety of approaches. Some fund companies will report 12-month trailing price-to-earnings ratios. In this case, the earnings are based on the past 12 months of actual results. Other fund companies will report price-to-earnings ratios based on their analyst's predictions for the company's projected earnings for the upcoming year. Most mutual fund rating services will calculate the price-to-earnings ratios of a fund by multiplying the price-to-earnings ratio of each stock by the stock's weight in the portfolio.

EXAMPLE 10-2

Lake Street Fund owns 3 stocks. Stock X, with a price-to-earnings ratio of 20, makes up 50% of the fund. Stock Y, with a price-to-earnings ratio of 25, makes up 30% of the fund. Stock Z, with a

price-to-earnings ratio of 35, makes up 20% of the fund. The price-to-earnings ratio for the fund is calculated as follows:

Stock X price-to-earnings ratio (20) ×weight (.50) = 10

Stock Y price-to-earnings ratio (25) ×weight (.30) = 7.5

Stock Z price-to-earnings ratio (35) ×weight (.20) = 7

Lake Street Fund price-to-earnings ratio = 10 + 7.5 + 7 = 24.5

The concern with this approach is that it does not work for companies with negative (or zero) earnings. When a fund owns such a stock, some rating services arbitrarily assign the stock a price-to-earnings of zero (0). This has the effect of lowering the entire mutual fund's price-to-earnings ratio. A similar problem occurs with companies that have extreme price-to-earnings ratios. Fund rating services usually limit the maximum price-to-earnings ratio.

 **EXAMPLE 10-3**

Interactive Technology Value Fund reports that its price-to-earnings ratio is less than 24. However, a footnote indicates that 30 percent of the fund's stocks do not have any earnings. Since each of these stocks is listed at a zero (0) price-to-earnings, the fund is reporting a much lower price-to-earnings ratio than would otherwise be true.

The most accurate method to calculate a fund's price-to-earnings ratio is a share-weighted calculation. In this case, each company's earnings are multiplied by the number of shares held in the fund. The sum of these products will be the total earnings per share of each company. The negative earnings, instead of being counted as zero (0), are then offset by the positive earnings. The price in the equation is based on the total fund market value or the sum of shares times the price. This is the proper way to calculate the price-to-earnings ratio for a mutual fund, especially when it is being used as a comparison to the S&P 500's ratio, which also uses a share-weighted price-to-earnings ratio.

Price-to-book ratios. The price-to-book ratio is calculated by dividing the share price of a stock by its net worth, or book value, per share. For a mutual fund, the overall price-to-book ratio is the weighted average price-to-book ratio of the stocks that it holds.

Value companies generally have low price-to-book ratios while growth companies have higher price-to-book ratios. In a sense, the price of a stock is a measure of the market's estimate of its worth. The book value is a measurement of the accountant's calculation of a company's value.

Earnings growth rate. The earnings growth rate is the average annual rate of growth in earnings over the past three or five years for the securities held in the mutual fund. A higher earnings growth rate is normally associated with growth stocks and a lower earnings growth rate is common for value stocks. This statistic can be especially important when other characteristics such as the price-to-book ratio and price-to-earnings ratio fail to give an accurate reflection of a fund's investment style.

Often small cap growth funds are listed by rating services as small cap value funds. There are several possible reasons for this false classification. One has to do with potentially faulty price-to-earnings calculations. Small Company growth companies are often companies that are growing earnings quickly, but losing money. If earnings are nonexistent or negative, the price-to-earnings ratio is listed as zero (0), a low price-to-earnings ratio normally associated with value stocks. A second potential reason for false classification of small cap growth funds is that the price-to-earnings ratio and the price-to-book ratios are generally compared to the S&P 500. Certainly small cap stocks will have different characteristics than large cap stocks.

Median market capitalization. The median market cap is the midpoint of market capitalization, or market price times shares outstanding, of the stocks in the portfolio. It is the point where half of the stocks in the portfolio have higher market capitalization and half have lower.

COMMENT

There are 99 stocks in a Last Community Fund portfolio ranked from largest to smallest in market capitalization. The median market cap is 50.

The median market cap is useful in determining the size of the company that the fund is purchasing. Small company funds traditionally have purchased companies with a market capitalization of under $1 billion. (This number has been rising recently to approximately $1.5 billion.) Large capitalization companies are those with market capitalization that exceeds $1 billion.

Sometimes the advisor will see a statistic called median market cap but it will actually be an average market capitalization. Average market capitalization will usually be a much higher number than median market cap as it is a weighted average. If a mutual fund holds large cap stocks such as General Electric Company or Microsoft Corporation as some of its largest positions, the average market capitalization of the fund is likely to be skewed by these stocks.

Advisors should look at both the median and the average market capitalization. Both should be within the range represented by the fund's expected market cap. If either is rising over time, it might be an indication that the fund size is forcing the fund manager to select from a narrow universe of securities. This makes the job of the fund manager even more difficult as it is harder to outperform when the universe of available stocks becomes smaller.

CAUTION

Traditionally, market capitalization is calculated by taking common shares outstanding and multiplying by share price. Today this process may be more complicated because companies such as Microsoft Corporation, Intel Corporation, and others have issued millions of stock options. When options are included, the market capitalization calculations change.

Number of positions. The number of stocks, or positions, refers to the number of securities held in a mutual fund portfolio. It is important to review as an indicator of mutual fund diversification. In most cases, the more securities a mutual fund holds, the more diversified it will be. This is true unless the fund has purchased most of its securities in one or two sectors or holds large percentages in a few stocks and small percentages in the remainder. A fund with many positions is more likely to track the broad market averages.

The advisor should note the percentage invested in the 10 largest fund holdings. The average for stock mutual funds is about 30 percent. The fewer stocks a fund holds, the more concentrated it is. Many fund companies are opening concentrated funds—sometimes holding as few as 20 positions—with a sales pitch that the fund owns only its best stock picks. These mutual funds have not existed long enough to be able to properly evaluate whether they will be successful in implementing their strategy. As the percentage invested in top holdings rises, like all concentrated funds, the fund's returns are likely to be more volatile, because they are more dependent on the fortunes of a few companies.

CAUTION

The advisor should evaluate the consistency in a fund's holdings. The advisor may find that the fund owns positions that are much different from he or she expected based on the fund's name. For example, ABC Utilities Fund holds large positions in XYZ, Inc., UVW Corp., as well as international stocks. It also has made a 20-percent bet on corporate bonds and convertibles that appear to contradict the objective of holding utility-based equities.

Finally, the number of positions compared over time is often used to assess whether a fund size has affected its strategy. A fund that purchased only 60 stocks three years ago and that is now purchasing 90 stocks may be an indication to the advisor that fund management is unable to invest in certain smaller capitalization stocks.

Foreign holdings. Foreign holdings are the percentage of a portfolio's net assets represented by stocks or American Depository Receipts of companies based outside the United States. The S&P 500 lists many foreign stocks.

> **CAUTION**
>
> The advisor should focus on the percentage of foreign holdings, especially when returns to international stocks are higher than returns to U.S. stocks. A U.S. fund manager may be chasing returns in a better market as a result of moving from domestic stocks and concentrating on of foreign holdings. If this occurs, the advisor should assess the effect on his or her client's asset allocation as well as attempt to ascertain the fund manager's experience in the international markets.

Gross dividend yield. The gross dividend yield is the amount of income or dividends received by the fund from the portfolio holdings. This gross dividend yield should be an indicator of the weighted average of the portfolio securities dividend yield. The true number can be an important indicator of a mutual fund's investment characteristics. For example, with equity funds, gross dividend yields are higher for value funds than for growth funds.

Most rating services fail to provide an accurate gross dividend yield. Mutual fund expenses are commonly subtracted from the fund's dividend yield. This after-expense number is the number reported by fund rating services. Unfortunately, after fees have been deducted, it is very difficult to interpret the portfolio characteristics or to use them for comparison purposes. The advisor should attempt to examine the portfolio characteristics *before* expenses have been subtracted.

Mutual fund style boxes. Mutual fund style boxes are categories of investment styles. The most common styles are broken into large cap value, large cap growth, mid cap value, mid cap growth, small cap value, and small cap growth. Some rating services list funds that have characteristics of both growth and value stocks as blends.

The style of a fund is useful in assisting the advisor in determining in which fund to invest. Unfortunately, sometimes the style that the fund claims to be or that is listed by a fund rating service is not really the investing style of the fund. Consequently, investors may *think* they are invested in one style, but in reality they are invested in something very different.

> **CAUTION**
>
> There can be many problems with determining a mutual fund's style simply by reviewing its style box. The style boxes provided in publications will not be very sensitive to short-term style changes. Another problem is that a mutual fund's style is not usually black or white but tends to be shades. For example, a fund classified as a large cap growth fund begins buying large cap value stocks. This change may not be picked up by the style boxes. The actual return might be due to the fund manager buying value stocks, not due to skillful security selection. This can be a particular problem if the fund is being compared to a style benchmark, such as the Russell 1000 growth. By failing to perform an attribution analysis, or by failing to determine exactly why the mutual fund has returned what it did, the advisor may be misled into believing that the fund is an outstanding growth stock fund. The reality is that the fund is engaging in some type of tactical asset allocation or timing. Subsequently, the advisor may be disappointed when growth stocks return to favor and the "supposed" growth stock fund manager misses the rally because the fund owns true value stocks. There can also be problems with small cap growth funds showing up as small cap value funds. This might be due to the fact that Morningstar, Inc. compares the price-to-earnings and price-to-book ratios of all funds to the S&P 500 and not to small cap benchmarks such as the Russell 2000 or the S&P 600.

Star ratings. Star ratings are quantitative ranking systems calculated by mutual fund rating services. The star rating system examines the risk-adjusted historical performance of mutual funds and ranks funds on a bell curve

according to that performance. Some rank the funds with proprietary calculations of risk and others use common statistical techniques, such as Sharpe ratios. However, because the ratings are historical, they require careful interpretation.

COMMENT

Rating systems that use stars and category ratings are quantitatively based. In some cases, when a group of funds, such as high-yield bond funds, international funds, or derivative funds, have limited histories upon which to judge performance, the ratings results can be misleading. The hypothetical example of ABC Fund shows the potential misleading aspect of the rating systems. In 1994, based on a limited history of the fund, a rating service awarded ABC Government Income Fund five stars. Only two weeks later, as more information became available, the fund dropped to a one-star rating. Certainly the star rating based on less than a full market cycle was not an indication of anything. When the cycle turned, so did the fund. The information that the rating service looked at was accurate, but not the interpretation of the fund as a good risk-adjusted fund. This kind of limited history is repeated many times. International funds were all poorly rated during their big year of 1993. Many small cap growth funds performed very well from 1995 to July 1997, and, just prior to their demise, sported very high star ratings.

Rating services reports may include a wide range of equity fund types, for example, domestic equity funds such as diversified domestic equity funds, sector funds, and a miscellaneous category containing convertible bonds and hybrid funds. Possibly because of the poor diversification of sector funds and a rating services emphasis in its ratings on the total volatility of a fund, it tends to assign low ratings to sector funds.

CAUTION

Star ratings are not useful for most advisors who design multi-fund portfolios. This is because star ratings are based on the total risk of a fund. However, when a fund is placed into a diversified portfolio, the unsystematic risk, or risk that is unique to the fund, will be diversified away. The fund will have totally different risk and return characteristics when included in a diversified portfolio. Therefore, the rating is useful only if one is buying a single fund.

Investment Planning Answer Book by Jay L. Shein, Q 10:11, How does Modern Portfolio Statistics help in fund evaluation?

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Modern Portfolio Theory is premised on the relationship between risk and return. In essence, the theory states that investors are risk adverse, and, in order to take on higher levels of risk, they must be rewarded with higher returns. Risk is defined in MPT as volatility measured by standard deviation. The greater the volatility of a security, as measured by standard deviation, the greater the risk. Another measure of risk is called "beta." It is used to compare the movements of a fund to the movements of the broad market. It works much like a swing. The harder one pushes, the higher one goes—both when going forward and when going backward. A mutual fund that fluctuates in price more than the broad market is considered to be more risky and would have a higher beta.

Defining risk as volatility is controversial. There are conflicting studies in the relationship between volatility and higher returns. Many believe that risk should be defined not as volatility but as the potential to outlive one's capital due to the erosion of inflation.

MPT can be very useful to the advisor. Historically, investors simply looked at the return of a fund, and many popular publications still rank funds solely on return over a short sample period. MPT uses statistics in an attempt to create a return measure that takes into account both return and risk.

Standard deviation. Standard deviation is a statistical tool used to help measure how volatile a fund's return has been over time. The higher the standard deviation, the higher the range of historical returns or the greater the uncertainty of returns. What standard deviation measures is the variability of returns around an average return.

EXAMPLE 10-4

Preserve Fund has an average monthly return of 1.5% and a monthly standard deviation of 2.5%. This means that the return for about 2 of every 3 months would be between 4% (1.5% + 2.5%) and -1% (1.5% - 2.5%).

Most mutual fund rating services calculate monthly standard deviation over the past three years and then annualize the results. The first step is to compute the average return over 36 months. Then each individual month, or observation, is subtracted from the overall average. Each of these "deviations" is squared, eliminating any negative number and emphasizing the importance of any extreme deviations. The average of the 36 months' squared deviations is calculated and then the square root of this number is calculated.

The actual standard deviation number by itself does not have much value for the advisor. The advisor uses the standard deviation to compare two funds against each other or to compare a mutual fund to a market index. The lower the standard deviation, the lower the uncertainty of the monthly return and, hence, in theory, the lower the risk.

EXAMPLE 10-5

If Service Fund has a 1% monthly standard deviation and a similar, Technology First Fund, has a 3% monthly standard deviation, it is often concluded that Service Fund has less risk than Technology First Fund.

CAUTION

Comparing the standard deviations of two funds can lead to inaccurate conclusions. For example, Agisow Fund and Industroth Fund have monthly standard deviations of one percent. Agisow Fund has a return of two percent. Industroth Fund has a monthly return of one percent. Since both funds have identical standard deviations, it would appear that they are equally risky. However, they are not. This is because the standard deviation is measured around the average

monthly *return of each investment.* The Agisow Fund because of higher returning asset is actually *less* risky.

Standard deviation rewards consistency above all else. In other words, a fund could lose three percent every month, and do so consistently, and would be assigned a standard deviation of zero (0). Since this fund would have a low standard deviation, it would appear to have low risk. Yet most investors would prefer a volatile fund with the opportunity to earn positive returns over a low standard deviation fund that consistently loses money.

Standard deviation also assumes that the mutual funds being compared are the only assets in the portfolio. However, portfolio theory teaches us that the standard deviation of a portfolio can be much less than the standard deviation of the individual funds making up the portfolio. This is because some funds will go up when others go down. In other words, adding a fund with a high standard deviation may actually *decrease* the volatility of the portfolio as a whole.

Standard deviation gives equal weight to both positive "deviations" from the mean and negative "deviations" from the mean. Standard deviations do not separate upside volatility from downside volatility. Many investors consider returns above the average to be desirable and not an increase of risk. Investors are generally concerned about not having enough money when they need it and would consider having too much money a good thing. Yet a fund's positive returns over the average will increase the standard deviation, which defines risk as uncertainty of returns, not loss of money.

Finally, standard deviation assumes that returns are normally distributed, yet this is not necessarily the case. A normal distribution is where the returns are very smooth, sometimes higher, and other times lower. It is not a good measure to indicate the possibility of sharp movements in return. This can be seen during very volatile times such as on October 28, 1929, March 15, 1933, and October 19, 1987, September 2002, or September 2008. These dates had very extreme distributions.

Beta. The beta coefficient is used to measure the volatility of a fund relative to something else, usually a broad market benchmark. In many cases, equity funds are compared to the S&P 500 and fixed income funds are compared to the Barclays Brothers Aggregate Bond Index. Unlike standard deviation, which reflects total risk—both risk unique to a particular investment (often called unsystematic risk that is diversifiable) and market risk that is not diversifiable (often called systematic risk)—beta measures only market risk. The market risk is the portion of risk that investors cannot diversify away; it can be a very revealing statistic.

Most fund rating services calculate beta by determining the monthly returns for the S&P 500 or an index that best fits mutual fund over the most recent 36-month period. The next step is to subtract the return on risk-free Treasury bills to determine the "risk premium" and reduce the overall return to only that subject to market risk. These excess returns are then expressed in continuously compounded terms and used to construct a scatter chart. Finally, by using the linear regression techniques of least squares, a line is constructed and the slope is measured. The resulting slope is the beta of the fund.

Calculating beta compares the fund's performance with the market's performance over various points in time. When the market is up, beta will give an indication as to how the fund reacted. A beta of one (1.00) indicates that the fund moves identically with the market during both up periods and down periods. A beta of greater than one (>1.00) means the fund is more volatile than the benchmark index, while a beta of less than one (<1.00) means the fund is less volatile than the index. A beta of .5 means that the fund moves half as much as the market (on the upside or downside). Beta is not better or worse than standard deviation. In most cases, a fund with a high standard deviation will also have a high beta.

Betas should be calculated by finding the best benchmark possible. For example, if the fund invests in real estate, comparing the fund to the S&P 500 makes little sense. It should be compared to a proxy for the real estate market such as the Wilshire Real Estate Investment Trust (REIT) Index. If the proxy for the market is poor, the beta will provide false information. Therefore, a real estate fund might have a low beta when compared to the S&P 500 but the conclusion from this information is meaningless. In MPT, all of the statistics can be calculated even if they are not appropriate. In this case an apple is being compared to an orange and the advisor

cannot conclude that real estate funds are less volatile than the market. What the advisor may conclude is that the portfolio performance is not very highly correlated to the U.S. market. International funds and gold funds are additional examples of funds that are highly influenced by factors other than the U.S. large capitalization domestic market. In this case, the standard deviation may be very high. When standard deviation is high and beta is low it usually indicates substantial unique or unsystematic risk, which may be eliminated with proper diversification of funds. Some rating services list two numbers. The first is a beta to the S&P 500 and the second is a beta to a more appropriate benchmark or market index.

Another problem with betas is that they are calculated on historical performance numbers. Since these numbers tend to change over time, so too will the beta. An advisor might think that a fund is stable but find that in the future it is a highly volatile fund. Some studies have shown that volatility in one period is unrelated or cannot predict volatility in a subsequent period.

Like standard deviation, betas are higher for a fund that underperforms *or* outperforms a market index. Investors, however, are only concerned about the downside risk. Other issues to consider revolve around the time period used. Is 36 months the most appropriate time period? Should we even look at monthly returns? Investors rarely have a one-month time horizon and much of the volatility is reduced over one year or even 12 quarters. Therefore, investors who shy away from high beta funds may be unnecessarily giving up return.

R-Squared. R-squared, also known as the "coefficient of determination," is a statistical tool generally measured over 36 months to determine how closely a fund's performance is influenced by the overall market. R-squared is measured in percentage terms and is based on performance, not on the fund's actual holdings. The "r" in r-squared is the correlation coefficient for the fund as a whole compared to the market. The correlation coefficient is a standardized form of covariance. Covariance is a measure of how two investments' returns perform over time and it is calculated much like standard deviation; however, instead of squaring the deviations, they are multiplied. Consult a standard statistics textbook for a more detailed description.

The r-squared for a fund tells us how much of the risk of the fund is related to the broad market, usually measured as the S&P 500. Since market risk or systematic risk is nondiversifiable, one (1) minus the r-squared tells us how much of the fund's risk can be eliminated through proper diversification of funds.

EXAMPLE 10-6

Sanfrass Fund, when compared to the S&P 500, has an r-squared of 0.92. The diversifiable return is 1 - .92, or .08. Ninety-two percent (.92) of the fund's return comes from market risk. Eight percent (.08) of the fund's return comes from accepting unique or unsystematic risk. An example of unsystematic risk is business risk. When the Exxon Valdez spill occurred, major international oil companies' stocks did not fall dramatically in price, but Exxon Corporation's stock did. In this case, an investor holding a fund with only Exxon Corporation stock and no other international oil companies' stocks was subject to unsystematic risk.

The r-squared also tells us how much influence an active manager has on the portfolio returns. An index fund such as the S&P 500 should have an r-squared of 100 percent. This return is based solely on the return of the market. Active managers divert from the market portfolio or S&P 500. However, they are still highly influenced by the return of stocks in general. R-squared tells us how much of the return was due to the market moving either up or down. One (1) minus r-squared tells us how much of the return was due to unique factors. A low r-squared means that the fund may move very differently from the index.

PLANNING NOTE

For diversification purposes, an investor holding a core market-like fund, or one that has a high r-squared, might want to look for a fund that has a very low r-squared to offset that risk. An example of such a fund is a sector fund, whose performance is highly correlated to the same sector and not to the market overall. This fund might offer a great deal of diversification when combined with the existing portfolio.

R-squared also indicates the degree of significance of the calculations for beta (discussed above) and alpha (discussed below). The higher the r-squared, the more confident the investor can be that the benchmark selected was the best benchmark. When the r-squared is low, the calculations for beta and alpha will be of little value as one is comparing two very different investments.

EXAMPLE 10-7

Everglade Fund invests in gold stocks. It has a beta of 0.3 to the S&P 500 index, indicating that the fund has low risk relative to the broad market. However, the r-squared is 0, meaning the S&P 500 has no influence on gold stocks at all and, therefore, the beta is not useful. In this case, standard deviation provides more useful risk information. Gold funds have a standard deviation greater than 25% as compared to the average diversified fund at about 15%.

R-squared can tell as much about a fund as beta by reflecting how closely it responds to market changes. Hence, two funds with the same beta of .95 but each with a different r-squared would perform quite differently.

CAUTION NOTE

If a fund has a very high r-squared, the advisor might be getting index-like returns yet paying much higher active management fees. This is often the case as funds grow too large.

Semi-variance. Semi-variance is a statistical tool, like standard deviation; however, it measures only downside deviations, not upside or positive deviations, from the mean. Otherwise, it is computed like standard deviation. Its primary value derives from the fact that investors are not concerned about the volatility of above-average returns, only those below average.

CAUTION NOTE

One problem with semi-variance is that while investors are looking at risk as downside risk, a market that has a lot of positive movements may indicate that negative movements are possible but have not occurred. The advisor may see a lot of standard deviation but a low semi-variance. The semi-variance may fail to show the potential negative returns. Standard deviation, which looks at both upside and downside, is still an important indicator of the *potential* dispersion of returns.

Coefficient of variation. The coefficient of variation is a useful tool for comparing the standard deviations of two different funds while neutralizing some of the problems of standard deviation. Essentially, the coefficient of variation helps to scale standard deviation. It is calculated by dividing the standard deviation by the mean return. This calculation provides the standard deviation per unit of mean return. It allows the financial advisor to compare two different funds by a properly adjusted standard deviation.

EXAMPLE 10-8

Panther X Fund has a mean return of 15% with a standard deviation of 10%. Gossimer Z Fund has a mean return of 20% with a standard deviation of 12%. At first glance, one might conclude that Panther X Fund was less risky because it has a lower standard deviation. However, the coefficient of variation tells a different story. By dividing standard deviation by the mean return we find that the Panther Fund has a coefficient of variation of .67 (10/15). The Gossimer Fund has a coefficient of variation of .60 (12/20). Like standard deviation, the lower the coefficient of variation, the better. In this example, the Gossimer Z Fund would have a lower level of risk.

COMMENT

Although the coefficient of variation is a better and more appropriate statistic for comparing funds, it is rarely reported.

Alpha. Alpha, also referred to as Jensen's Alpha, is a single statistic that incorporates both a fund's risk and its return. Alpha is usually calculated over a three-year period, is typically reported on an annual basis, and can be positive or negative. We learn from MPT that returns are based on two factors: a risk-free return and a return for taking on risk. The first part of the return is commonly measured against U.S. Treasury bills because they are guaranteed, easily attainable, and virtually risk free. The second part is the return above the risk-free rate of return. This portion is known as the "risk premium" and is calculated by taking the actual return and subtracting the risk-free return.

The alpha is a statistic that measures a fund's actual return minus the expected return that is adjusted for risk as measured by beta. It tells us whether the fund manager, for the level of risk that was taken on, earned excess returns. Simply knowing that the fund manager beat the benchmark does not help us. If the fund manager took on twice as much risk as the benchmark, much higher returns are expected. Alpha addresses whether the returns are high enough to justify the additional risk.

Alpha is a measure of *risk-adjusted return*. If the risk-adjusted performance is better than expected, the fund has a positive alpha, and the conclusion is that the fund manager added value. If the fund has a negative alpha, it may mean that the fund manager actually subtracted value.

If the fund has a beta of 1.0, the fund is expected to earn the same return as the market. If the fund outperforms the market, since it has the same level of risk, it can be said that the fund manager added value through either timing or security selection. This is the kind of return that investors should be seeking. If the fund has a beta greater than 1.0, then the fund manager could possibly outperform the market yet still have a negative alpha. In this case, for the level of risk that the fund manager took, he or she should have done even better.

EXAMPLE 10-9

Suppose risk-free Treasury bills returned 5%, the S&P 500 returned 12%, and The Germond Fund with a beta of 1.2 returned 17%. The market excess return is 7% (12% - 5%) and the expected risk-adjusted return of the fund is 13.4% ((1.2 × 7%) + 5%). Since the fund actually returned 17%, its alpha is 3.6% (17% - 13.4%), meaning that the fund performed more than 3 percentage points better than expected considering its beta. In contrast, a negative alpha indicates underperformance.

CAUTION

The challenge with alpha is that it is very dependent on beta, which, in turn, is dependent on using the right benchmark. If the benchmark is wrong, then the number is meaningless. When reviewing the alpha of a fund, it is very important to look at the r-squared. A high r-squared means that the alpha is significant. A low r-squared, sometimes defined as less than .70, means that the alpha is not very useful. Value added by a fund manager should also be offset by fund expenses. As with any statistical measure, a financial advisor should never rely on only one indicator. However, alpha may be useful for screening purposes.

Sharpe ratio. Nobel Laureate William Sharpe created the Sharpe ratio in an attempt to quantify how much return is achieved by a fund for each unit of risk. The return for the Sharpe ratio is the risk premium that is calculated by subtracting the risk-free return (i.e., 30-day Treasury bill rate) from total return. The risk premium, or "excess" return, is then divided by the standard deviation. The higher the Sharpe ratio, the better the returns are per unit of risk taken.

Like standard deviation, it is difficult to use the Sharpe ratio in isolation. Knowing that a fund has a Sharpe ratio of 1.5 does not tell the advisor whether the level of return for the risk is good or bad. The Sharpe ratio is best used for comparing two similar funds on a risk-adjusted basis.

EXAMPLE 10-10

Dolphin Fund earned a return of 20% with a standard deviation of 10%. The guaranteed 30-day Treasury bill earned 5%. The Sharpe ratio is calculated as follows: 20% - 5 %/10.

CAUTION

Sharpe ratios use standard deviation as the denominator. As most advisors design multifund portfolios, the Sharpe ratio has little relevance because standard deviation measures total risk, not just systematic or market risk. In a diversified portfolio, the unsystematic portion of total risk will be eliminated. Therefore, much of the risk captured by standard deviation will go away when the fund is in a portfolio, which is what the Sharpe ratio uses to measure risk.

COMMENT

Alpha and beta coefficients are rarely used in evaluating fixed income (bond) funds because they have a very low correlation to the S&P 500, the benchmark used by some rating services. Most of the risk is unique risk and standard deviation is a much better indicator. It should be noted that standard deviation increases the longer the duration of the bond holdings. Standard deviation does not measure the risk of default, only the volatility of returns. The probability of default should be measured by credit ratings.

Investment Planning Answer Book by Jay L. Shein, Q 10:12, What are some fixed income measures?

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Funds investing in fixed income securities are typically evaluated using a host of ratios and other data. For fixed income securities, some of the more important calculations are duration and various yield measures.

Duration. Duration provides a measure of a fund's sensitivity to interest rate risk and is an alternative to maturity. The objective of the duration calculation is to find a bond's "average" life considering years to maturity, coupon payments, and price. It is technically defined as the present value-weighted time to maturity of the cash flows of a fixed payment instrument.

Duration indicates how much a fund's net asset value can be expected to change in the event of a change in interest rates. The longer the duration, the more sensitive the fund will be to changes in interest rates. The longest durations are typically found in bond funds that hold zero-coupon bonds and target a specific long-term maturity.

EXAMPLE 10-11

Marlin XX Fund has a duration of 10 years. Purple ZZ Fund has a duration of 5 years. Marlin XX Fund is twice as volatile as Purple ZZ Fund. If interest rates rise by 1%, the Marlin XX Fund will fall by 10% while the Purple ZZ Fund will fall by 5%.

CAUTION

It is often useful to evaluate a bond fund's standard deviation in conjunction with its duration. A fund with a low duration and a high standard deviation often indicates risk other than interest rate risk such as credit risk, currency risk, or other fixed income pitfalls.

SEC yield versus standardized yield. In the past, some fund companies deliberately bought high coupon premium bonds so that they could advertise high current yields. Many investors were unaware that the reported yield overstated the fund's true return. In 1988, the Securities and Exchange Commission (SEC) required mutual funds to use a standardized method for calculating reported yields. Bond funds and balanced funds must quote a 30-day SEC yield, which is based on the theoretical earnings of the fund's bonds given current market prices and current market yield to maturity. These theoretical earnings minus the fund's operating expenses are then annualized.

The difference between distribution yield and SEC yield normally occurs because the fund's distribution yield is based on the *purchase prices* of bonds in the fund while the SEC yield is based on the *current market values* of the bonds. The current market values may be higher or lower than the prices originally paid by the fund. In a declining-interest-rate environment, the SEC yield tends to decline faster than the distribution yield.

The net asset value (NAV) also gives an indication of bond fund activity. The NAV is the mutual fund price per share. When a fixed income fund is paying a distribution that is higher than its actual yield, it is in effect returning to the investor part of the principal. Therefore, when analyzing fixed income funds it is important to verify that NAVs are remaining flat during similar interest rate periods. For example, when interest rates rise, it is expected that bond prices and the NAVs will fall. It is also expected that when interest rates decline, the principal or NAV will rise. Therefore, when interest rates get back to the level at which they started, there should be no depreciation in price.

At times bond funds are sold based on yield. To earn above-market yields, the mutual fund might, for example, purchase premium bonds or high coupon bonds for more than par value that will depreciate in value over time. At the same time, the mutual fund purchases discount bonds or bonds sold at a price lower than par but offering a lower coupon than current market rates. As the bond gets closer to par, the mutual fund adds the capital gain to the distribution yield. These are techniques used to increase the size of a client's monthly distribution check

(in addition to the investor's taxable income) while reducing the capital, and, hence, the NAV over time. If the investor reinvests income and capital gains and does not pay taxes, these issues do not apply. For the taxable investor, unfortunately, these issues of fund accounting are not disclosed in any public documents.

Quality rating. Advisors should evaluate the average quality rating as well as the distribution of the individual securities held in the portfolio. Most bond funds do not report the portfolio's quality structure in their filings or disclosure documents and funds can easily increase their yield by lowering the quality ratings of their portfolio. However, this increase in yield comes with an increase in risk. This is especially noticeable for high-expense bond funds that are enjoying high performance.

For example, the Ivy Bond Fund is a high-quality corporate bond fund. It must invest 65 percent of more of its assets in investment grade (BBB or better) quality corporate bonds. According to Morningstar, Inc., over 55 percent of the portfolio was rated BBB and over 32 percent was rated below BBB. Only 11 percent was rated A or better. Should the advisor analyze the fund further, he or she would find that the securities rated BBB are primarily split rated. This means that they are rated BBB by only one rating agency. The same bond may have been rated BB or less by other rating agencies. The expense ratio on this fund is 1.47 percent.

Turnover ratio. Turnover ratio is a broad measure of a fund's operating efficiency, costs, tax efficiency, and other factors. Turnover calculations for mutual funds are based on Securities and Exchange Commission regulations. The ratio is calculated by taking the 13-month average market value for the portfolio and dividing it into the lesser of gross purchases or sales proceeds for the fiscal one-year period.

EXAMPLE 10-12

Manatee ABC Fund sells $50 million in securities and its monthly average asset value during the fiscal year is $500 million. Manatee ABC Fund's turnover rate is 10%. Windturn XYZ Fund sells $500 million in securities and its monthly average asset value is $500 million. Windturn XYZ Fund's turnover rate is 100%.

There are two issues to consider when using this number to determine the tax efficiency of the fund. First, if a fund experiences a greater amount of sales than purchases, the result is a turnover number that may understates potential capital gains exposure because no capital gains are experienced on purchases. This might be common when a fund is merging or a fund family is being sold. Some investors will remain with the originating fund manager. Second, the cash flows into the fund might mask a potentially high turnover. Also, if a fund experiences rapid growth toward the end of a one-year period, the denominator used for turnover calculation is low relative to current assets, thus inflating the turnover number. Therefore, one of the most important criteria for appearing more efficient has to do with cash flows.

EXAMPLE 10-13

Global Time Fund with $50 million in net capital gains (after offsetting total gains with losses) and with 50 million shares outstanding has to pay out a taxable gain of $1 per share. But if the fund sells another 50 million shares, the gain would be reduced to 50 cents per share. Conversely, as money leaves the fund, fund managers must not only liquidate shares that generate large capital gains but also must distribute the gains over a smaller shareholder base.

Fundamental statistical analysis is a useful tool to evaluate a mutual fund. The objective of calculating the various statistics is to reduce a large amount of information about a mutual fund or investment to a manageable amount. Fundamental statistical analysis takes a large amount of information and reduces it to a few helpful numbers. It is important to recognize at the outset that statistics have limitations. A mutual fund portfolio is a constantly changing entity, not just a summation of statistics. Yet by performing a statistical analysis, the advisor will be able to quantify ambiguously employed investment terminology, such as "value investor," "good balance sheets," or "highly profitable companies."

The advisor must consider all the statistics of various funds when planning for a particular client. Depending on the client's current positions certain funds may be more appropriate than others and these will not be simply

obvious from the self-described fund type. By a careful combination of the various statistical analyses the advisor can better recommend the appropriate funds for any particular client.

Investment Planning Answer Book by Jay L. Shein, Q 10:13, Why should advisors look at investment style?

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The advisor must adequately evaluate and analyze many different mutual funds prior to recommending a particular fund or group of funds to a client. To do a high quality analysis the advisor must understand what is meant by the investment style of the particular fund or manager, the different types of styles and how a particular style might be analyzed and compared before making an investment decision. An evaluation should be done to assist the advisor in selecting funds that match a client's objectives and risk tolerance, setting performance goals, assessing a manager's level of skill, monitoring style drift, and evaluating fund overlap.

Investment style is concerned with evaluating the types of securities that a mutual fund purchases. Mutual funds typically purchase either securities from one market segment or a group of securities that have similar portfolio characteristics. These securities tend to move up and down together, and the risk and return of a mutual fund is largely based on the securities that it purchases.

An advisor can reduce a portfolio's overall volatility during the business cycle by choosing or combining mutual funds with different investment styles. Furthermore, knowing a fund's investment style enables the advisor to choose an appropriate benchmark, such as the Standard & Poor's 500 Index or the Russell 2000 Index, against which to compare fund performance. Investment style may also be useful in evaluating whether a fund manager added value and whether the fund manager is adhering to the discipline for which the manager was chosen.

Investment Planning Answer Book by Jay L. Shein, Q 10:14, Are there different investment styles?

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Yes, the primary investment styles, or market segments, are value, growth, and size. Size is defined by market capitalization, which is the current stock price multiplied by the number of shares outstanding.

Value funds purchase "distressed" securities that the fund manager believes are priced below the company's true value or future growth prospects. The manager of a value fund will look for opportunities to buy when the price is low in the hope that other investors will later bid up the price. A value fund manager should be able to distinguish between a company that is permanently declining in value and a company that has likely prospects for an increase in value. Utility, financial, and energy securities are typical value securities. The following is a sample of the portfolio characteristics of a value security:

- Price-to-book value ratio—less than 2x
- S&P rating—at least B-
- Ratio of cash to market capitalization—at least 10%
- Dividend yield—at least 3%
- Ratio of long-term debt to market capitalization—less than 50%
- Price-to-earnings ratio—less than 12x
- Price-to-cash flow ratio—less than 80% of the S&P 500 cash flow.

The value segment is sometimes further divided into three sub-styles: low price-to-earnings ratio, contrarian, and yield. The price-to-earnings ratio is a company's current market price divided by the company's earnings per share. The manager of this sub-style of value fund focuses on companies whose stock is selling at a low market price compared to earnings. If such a company falls out of favor in the market for the wrong reasons, then as the difficulties are corrected, the stock may quickly appreciate. The contrarian manager focuses on companies with currently depressed earnings and a strong potential for turnaround. Typically, these companies have significant problems that are expected to change with some type of price or business change. The manager of the yield sub-style of value funds focuses on companies with above-average dividends, as dividends have historically been more stable than capital appreciation. The increased emphasis on dividends in these yield funds, which are often known as equity income funds, leads to higher income taxes for the taxable investor.

Growth funds aim at purchasing securities of rapidly growing companies that have earnings that are accelerating at rates faster than the overall market. The managers of growth funds expect to hold securities for a long term and look for opportunities for above-average capital appreciation. Since they expect profits to be derived from capital gains, these managers are generally not interested in dividends. The criteria for growth stocks differ among growth stock funds, and company size is often an important factor. Technology, retail, and health care securities are typically held by growth funds.

The growth segment is sometimes further divided into two sub-styles: consistent growth and earnings momentum. Consistent growth funds have little turnover and focus on large successful companies with significant market shares. Consistent growth fund managers seek rapidly growing companies that are expected to continue growing in the long term. Earnings momentum managers focus on stock price rather than company characteristics. These funds typically have high turnover ratios, as fund managers sell when the price stops rising. For the taxable investor, these funds are not normally tax efficient.

Advantages of the value style are that overall risk should be limited by careful stock selection and that underpriced stocks are less vulnerable to significant declines. A disadvantage of the value style is that it is not a "buy and hold" strategy, as the securities are typically sold once their price recovers. The disadvantage is that growth stocks may be susceptible to severe price corrections.

Funds that purchase both value and growth securities are referred to as blend funds. Mutual funds that purchase stocks based on criteria unrelated to value and growth are referred to as inefficiency hunters. Managers of these funds search for stocks that they believe the market has improperly priced.

Mutual funds are also segmented by the market capitalization (cap) of the companies in which they invest. The ranges among the market cap categories differ among practitioners and are continually shifting. A large cap company has a market capitalization (current stock price multiplied by the number of shares outstanding) usually over $1 billion. A small cap company has a market cap usually under $1 billion. Sometimes, stocks are also divided more finely into a third category called "mid cap," which consists of stocks of companies with a market cap between $1 billion and $5 billion. Additionally, stocks of companies with a market cap under $250 million are usually referred to as microcap. Some rating services use a more flexible approach to determine the divide between the various market capitalization categories.

Other types of styles include blends, which are combinations of value and growth stocks or combinations of large and small cap stocks.

Investment Planning Answer Book by Jay L. Shein, Q 10:15, How is style analysis used?

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Financial advisors use style analysis to determine which market segment a fund's portfolio reacts most like. This information is useful, because the advisor needs to ensure that the fund is reacting the way the advisor understands it to be reacting. Analyzing fund style is most commonly done through fundamental style analysis or returns-based style analysis.

In fundamental style analysis, the advisor would review the individual security holdings of the fund. The fund, in the aggregate, would be characterized by the summation of the individual positions. The characteristics are compared to those of an index such as the S&P 500. By using r-squared, one can analyze how close a mutual fund is to the style index. R-squared can range from a zero (0) correlation to a perfect correlation of 1.0. If the r-squared is below 0.70, that is usually an indication that the mutual fund was regressed an inappropriate index. R-squared generally falls between 0.80 and 0.90 when the mutual fund is regressed against an appropriate index. One of the problems with fundamental style analysis is that the necessary data may be difficult to obtain, outdated, or even inaccurate. Furthermore, the characteristics used, such as price-to-earnings ratios and price-to-book ratios, are subjective, and the fundamental style analysis identifies only the end result.

With returns-based style analysis, the only information required is the fund's returns and returns from various indices. Using returns-based style analysis, it is possible to detect the style drift that occurs when fund managers change investment styles. Style drift is not favored by some advisors. Style drift often occurs as the size of a fund increases. One problem with returns-based style analysis is that the analysis is only as good as the style indices. Furthermore, the analysis relies on historical returns and requires a great deal of data.

Investment Planning Answer Book by Jay L. Shein, Q 10:16, Is it important to understand the investment process?

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Understanding the investment process of a mutual fund is a critical step in fund evaluation. This is because it is difficult to evaluate the manager's competence without understanding the skills required for investing. The investment process can be implemented using a passive approach, an active approach, or a combination of both.

Passive investment approaches are concerned with matching the performance of market indices or other anomalies. Passive approaches can be used alone or in conjunction with active approaches. An investor taking a passive approach has concluded that it is extremely difficult for an active manager to add value after fund expenses and taxes.

If the fund is actively managed, the manager may be using fundamental, quantitative, or behavioral approaches. Fundamental investment processes are research intensive. They involve getting to know either the macroeconomic situation, or where the economy is positioned within the business cycle (known as "top down" analysis), or getting to know the individual companies regardless of the overall economic scenario (known as "bottom up" analysis). Quantitative investment processes involve using computers and running mathematical models. These models help the manager determine the best securities to purchase. Behavioral approaches focus on heuristic biases of market participants. By taking advantage of systematic errors that are often made by market participants, the behavioral manager will be able to add value.

Investment Planning Answer Book by Jay L. Shein, Q 10:17, Why is investment style important?

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Investment style refers to a market segment of securities that have similar characteristics and tend to perform similarly over several economic and market cycles. Individual mutual funds ordinarily focus on purchasing securities from only one market segment. The investment style of a mutual fund is a term often used to identify the market segment from which a fund manager will select securities. Market segments of securities are identified by having common characteristics, such as similar price-to-book ratios, price-to-earnings ratios, earnings growth rates, dividend yields, and returns on equity. Securities with similar ratios all tend to move up and down together. For example, the universe of mutual funds that purchase stocks with low price-to-book ratios all tend to outperform or underperform the broad market at the same time.

Determining a fund's investment style is important in helping the advisor find a fund that matches a client's portfolio objectives, setting performance goals, assessing a manager's level of skill, monitoring style drift, and evaluating fund overlap. Investment style is important in setting objectives as there is considerable empirical research that shows that a mutual fund's risk and return are largely based on the characteristics of the securities that it purchases. There are periods when stocks of certain market segments outperform others by substantial margins. Significant outperformance over one or more years by one market segment is typically followed by a period of relative underperformance. Over a complete business cycle, each actively managed mutual fund, regardless of style bias, should be expected to outperform a broad market index; yet, during the business cycle, various styles will come into and go out of favor. For example, in 1997, small capitalization *value* stocks returned over 31 percent, while the return for small capitalization *growth* stocks was only 13 percent.

Each investment style in an undiversified portfolio, or in one where only one investment style is represented, may be very volatile. This would occur, for example, if a client's entire portfolio was placed in only one mutual fund or if the entire portfolio was invested in technology stock funds. This is because each market segment or investment style is more concentrated with stocks in certain individual sectors such as technology or consumer durables. This volatility, however, can be reduced by proper diversification. By choosing or combining mutual funds with different investment styles, the advisor will reduce the overall portfolio's volatility *during* the business cycle. In this way, the risk of significant underperformance or the risk of only being invested in a style that is out of favor is dramatically reduced. If the volatility of the overall portfolio can be reduced, then the client will have a higher percentage of his or her portfolio invested in equities or other higher-earning assets without increasing his or her risk. This is the essence of the rationale for asset allocation. See the chapters titled Introduction to Portfolio Theory and Asset Allocation & Portfolio Strategy and Design for further discussion of the asset allocation process. Certain combinations of investments may be volatile alone, but when combined in a diversified portfolio will offer a higher risk-adjusted return. Typically, the distribution of a client's assets to various investment styles and their weighting in the client's portfolio are determined during the asset allocation process.

PLANNING NOTE

Within a client's portfolio, a mutual fund that specializes in growth stocks might be matched with a mutual fund that specializes in value stocks. By combining equity funds with different investment styles, an advisor is reducing the volatility of the portfolio's overall equity weighting. This permits the advisor to increase the percentage allocated to higher-returning equities and to decrease the percentage of holdings in lower-return fixed income securities. If a portfolio is invested in only one style, the equities are more volatile as that style moves into and out of favor.

After an advisor has analyzed a mutual fund and knows its investment style, the advisor will have a better understanding of the fund's potential risk and return. By knowing the fund's investment style, the advisor will also be able to identify the proper benchmark (with a similar risk profile) to use to compare the mutual fund's performance. These benchmarks can be made up of either a market index or a peer group. By understanding

the fund's style, and hence the risk and return characteristics, the advisor can choose a benchmark for comparison and, therefore, will have an appropriate measuring tool to evaluate future performance.

Investment style is also used to evaluate a manager's skill. First, an advisor should look for effective managers by reviewing the market segment from which the fund manager selects securities. The advisor then needs to decide if the fund manager will be able to select the best stocks from this segment. With an active manager, this process will help determine whether the manager can add value and, therefore, outperform a passive alternative. Ultimately, the advisor's decision will be based on a host of factors, including the fund's investment process, operations of the fund, and the manager's history of demonstrating a capacity to outperform. Investment style is useful in determining whether the fund's performance was good simply because the universe of stocks in that style was outperforming the overall universe of stocks or whether the manager actually added value. In actuality, the manager might be subtracting value and still outperforming a broad index such as the S&P 500.

Another use of investment style is to monitor whether a mutual fund manager is adhering to the discipline for which he or she was chosen. If a fund manager begins purchasing securities in an alternative style, it may cause an overlap in a client's portfolio. The overlap will cause the portfolio to be more volatile than anticipated. This change of style is known as "style drift." It occurs when a fund manager who has been buying securities within one market segment changes the portfolio to one that holds a majority of securities from another market segment. If style drift occurs, the advisor should seek to identify any overlap between fund managers in the portfolio and identify a lack of representation in a particular market segment.

There are generally three ways to assess the style of a fund:

1. Conducting a qualitative interview with the portfolio manager,
2. Conducting a fundamental analysis, or reviewing the portfolio's actual holdings to look at factors such as price-to-book and price-to-earnings ratios, and
3. Conducting a statistical analysis of a time series of returns to assess the proper mix of indices that best explains the returns.

Investment Planning Answer Book by Jay L. Shein, Q 10:18, What are the different types of investment styles and mutual funds?

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The primary market segments or investment styles are value, growth, and size, which are defined by market capitalization. Mutual funds select securities from their market segment using specific parameters. In general, value funds purchase securities that the manager believes are priced below the current worth of a company's assets or its future growth prospects. Growth funds strive to purchase securities that offer above-average opportunities for capital appreciation and typically have proven track records of superior earnings.

Some fund managers further define each segment into what are called sub-styles. Value sub-styles include funds that purchase securities with (1) low price-to-earnings ratios, (2) contrarian, or currently depressed earnings with strong turnaround potential, and (3) yield, or above-average dividends.

Two sub-styles of growth funds that purchase securities are (1) consistent growth, or securities that are growing faster than the overall market and are expected to continue this growth long-term, and (2) earnings momentum, or securities that have stock price action or movement.

Both value funds and growth funds can be successful. The value manager seeks to buy stocks later than his or her peers. Buying too early, even if eventually correct, will result in underperformance. A growth style manager seeks to sell before his or her peers. Underperformance will occur when the growth stock manager holds a position too long.

Other fund managers purchase securities in more than one market segment. These funds are typically classified as blends. If a fund manager purchases securities from the value segment and the growth segment, the securities are not easily classified and are referred to as "blends." One example of a blend is a GARP (growth at a reasonable price) fund. A GARP manager seeks to find stocks whose price-to-earnings ratio to projected earnings growth is relatively low.

Some mutual funds purchase stocks based on very narrow segments using criteria unrelated to value and growth investment styles. Managers who purchase these segments are sometimes known as inefficiency hunters. There are many potential market segments that these inefficiency hunters seek to exploit; they look for segments that they believe the market has failed to price properly. For example, the Undiscovered Managers Funds Special Small Cap Fund limits its investments to companies that have undertaken a voluntary financial restructuring such as a stock buyback or an asset sale or that are the result of a corporate spinoff.

Lastly, mutual funds are segmented based on the size of the companies whose securities they purchase such as large capitalization for a company whose market capitalization is over $1 billion or small capitalization for a company whose market capitalization is under $1 billion. Some advisors further narrow the size differentiation. To some, stocks between $1 billion and $5 billion are known as mid cap stocks while stocks under $250 million are considered microcap. These capitalization ranges continually shift and the dividing lines among these categories are defined differently by practitioners.

Value funds. A value mutual fund contains distressed securities that seem underpriced relative to their intrinsic worth. Value stocks typically have lower price-to-earnings and price-to-book ratios, higher dividends, and lower earnings growth rates than growth stocks. The securities found in the value segment often come from the utility, financial, and energy sectors.

The value fund manager focuses on price, looking for opportunities to buy when stocks are priced relatively low. The value manager purchases distressed securities believing that other investors will eventually realize the true worth of the company and bid up the price.

The following is a sample of an investment firm's criteria for a value security:

- Price-to-book value ratio—less than 2x
- S&P rating—at least B-

- Ratio of cash to market capitalization—at least 10%
- Dividend yield—at least 3%
- Ratio of long-term debt to market capitalization—less than 50%
- Price-to-earnings ratio—less than 12x
- Price-to-cash flow ratio—less than 80% of the S&P 500 cash flow

A security may decline in price for many reasons. A price decline may occur because an entire industry has fallen out of favor and the market has priced all securities in this industry the same. On the other hand, it may occur because the market has determined that future return prospects for a mature company are no longer favorable.

A security that declines in price does not necessarily increase in value. A mutual fund portfolio manager who specializes in the value segment will become very knowledgeable about mature companies and very good at assessing those companies that are truly in decline and those whose management will be able to improve the companies' economic and profit outlook. An experienced manager will know the participants in the industry and will be able to determine whether the current management of a company is skilled for the company's particular needs. This knowledge will help the fund manager assess which companies are good values and which are past their prime and simply priced low because they have little worth.

For example, in the 1980s, when large, integrated domestic steel companies became less productive than international producers, all steel company securities fell in price. However, certain specialty steel makers were able to thrive. A value manager seeks out those companies whose prices are depressed, although the fundamental earnings outlook remains very favorable.

Another example occurred in 1993 when President Clinton suggested changes to U.S. health care. As a result, many drug companies' stock became very depressed in price. Eventually the value of the drug companies was realized as investors began to reconsider the impact of the pending health care legislation.

Low price-to-earnings ratio. The low price-to-earnings value fund manager is attracted to companies whose stock is selling at a low market price in comparison to their earnings. The price-to-earnings ratio is calculated by dividing the current market price by the company's earnings per share. The price-to-earnings statistic is often used in investing and represents the multiplier. Price-to-earnings ratios answer the question, "How much do I have to pay in terms of market price per share for every $1 of earnings?" A low price-to-earnings ratio stock can increase in value by increasing earnings or by an increase on the price-to-earnings multiplier. A security may be given a low price-to-earnings ratio by the market as it falls out of favor. If this occurs for the wrong reasons, once the difficulties are corrected, the stock may quickly appreciate.

EXAMPLE 10-14

The earnings of PYlot Corporation are $2 per share and the stock trades for $20. The price-to-earnings ratio, or multiplier, is $20/$2, or 10. If the price-to-earnings ratio rises to 20, or $40/$2, each dollar of earnings is valued twice as high by the market. PYlot, doing nothing to increase earnings, is now valued at $40 per share, which is a 100% rise.

Contrarian. The contrarian sub-style of the value investment style includes stocks of companies that have currently depressed earnings but a future turnaround is possible. Essentially, the contrarian manager looks for companies that have fallen out of favor, not accidentally but because of significant problems. The contrarian manager evaluates a company by looking for a possible catalyst for a price or business change. The contrarian style is a more aggressive form of value investing. While the quality of these companies is typically below average, the opportunities for reward can be great if the bet pays off.

Yield. The yield sub-style of value investment style focuses on companies with above-average dividends. Historically, dividends have been more stable than capital appreciation. Therefore, buying stocks in companies that distribute a significant portion of their returns in higher dividends will often mean that they are less volatile. These stocks also tend to be less risky because the dividends can cushion a decline in security price. Yield

funds are often known as equity income funds. One of the disadvantages of a yield fund is that the increased emphasis on dividends leads to higher income taxes for a taxable investor.

Growth funds. A growth mutual fund contains securities of glamour or rapidly growing companies whose earnings are accelerating faster than the market overall and the fund manager believes that management is highly effective. Growth funds are usually filled with securities from the technology, retail, and health care sectors. Growth style managers look for companies that offer above-average opportunities for capital appreciation and often expect to hold these securities for the long term. A growth fund manager, through experience, is very knowledgeable about emerging technologies and the companies that produce them. Managing a growth company is very different than managing a mature company. Growth fund managers are competent in assessing whether a company's management has the proper skills to rapidly grow and sustain its business. They know the industry players and their capabilities. Growth fund managers evaluate a company's financial structure to assess the potential for continued and sustained advancement. They typically are not interested in dividend income, often buying securities with little or no dividends and anticipating that profits will be derived through capital gains.

Criteria differ among growth stock funds. One set of criteria is that a security must show three or more years of consecutive increases in both earnings per share and return on equity as well as projected earnings increases of 10 to 15 percent (or more) for the next three to five years. If a company is growing earnings by 25 percent a year, the price of the growth stocks should rise by at least this percentage. The size of a company is also important for growth stock funds, as different industries are represented in market capitalizations. Large capitalization U.S. growth funds invest nearly 20 percent of their securities in consumer staples, yet small capitalization growth funds have less than one percent in this sector.

Consistent growth. Consistent growth is one sub-style of the growth investment style. A mutual fund that focuses on consistent growth will seek companies that are growing rapidly and that are expected to continue growing for the long term. They are often large successful companies that have significant market shares. Consistent growth managers tend to have very little turnover in their fund portfolios as they usually anticipate investing for the long term.

Earnings momentum. Earnings momentum is another sub-style of the growth investment style. Funds defined as earnings momentum growth style focus on the price action of a stock, not on the underlying characteristics of the company. If a stock price rises, earnings momentum fund managers tend to buy. When stock prices stop rising, earnings momentum fund managers tend to sell. Securities are often sold when sales, earnings, or the stock price peaks. By their nature, these funds have high turnover ratios and, therefore, and may not be tax efficient. Earnings momentum investing has been referred to by other names in the past, such as "trend following." In the 1980s momentum managers were called "relative strength" managers because they looked at the "strength" in price.

PLANNING NOTE

Earnings momentum managers normally are short-term investors and mutual funds following this strategy might be better placed in a tax-exempt or sheltered portfolio if possible. Turnover is not always a good measure of tax efficiency. Some managers are very tax aware and try to mitigate negative tax consequences.

Investment Planning Answer Book by Jay L. Shein, Q 10:19, Are there advantages and disadvantages to value and growth investing?

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The principal advantage to value investing is that careful stock selection should limit overall risk. Buying a stock that is underpriced should make it less vulnerable to a large decline. Growth stocks are sometimes bid up to very high valuations and are susceptible to severe price corrections. Generally, large cap value stocks pay higher dividends, although this is not necessarily the case with small value company stocks.

Some investment managers suggest that value stocks are less volatile than growth stocks and that, therefore, value investing is less risky than other investment styles. To demonstrate risk, value managers point out that value stocks have a lower standard deviation than glamour or growth stocks. Others argue that standard deviation does not properly assess the risk of value stocks and further suggest that the cost of capital is the appropriate measure. The standard deviation between government fixed income securities and corporate fixed income securities is very narrow. Yet most advisors intuitively realize that, with the potential of default, corporate securities are riskier than government securities. Since a distressed or value company will typically have to pay a higher rate of interest on debt than a growth or glamour stock, it would seem to some that value stocks are riskier. If value stocks are riskier, capital market theory tells us that investors in these securities should be rewarded with higher returns.

A disadvantage to value investing is that it is normally not a buy and hold strategy. If a portfolio has successfully purchased securities that are erroneously depressed in price, the securities should recover in price. A maxim for a value manager is: "May all our value stocks become growth stocks." Once a value stock's price recovers, these securities are typically sold.

CAUTION

Not all funds with "value" in their name are truly buying value stocks. Style analysis helps one make this determination regardless of what a fund manager claims his or her market segment to be.

PLANNING NOTE

Value and growth funds differ significantly in dividend payout rate and, therefore, exposure to taxes. Accordingly, the distinction between value and growth funds is important in deciding how to allocate assets between tax-deferred and taxable portfolios.

Investment Planning Answer Book by Jay L. Shein, Q 10:20, How are large and small market capitalization defined?

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Although there are varying definitions, a large cap style is typically one where the fund manager concentrates on purchasing securities in companies with a market capitalization of over $1 billion. A small cap style is one in which the fund manager concentrates on purchasing securities in small company stocks valued under $1 billion. Market capitalization is determined by multiplying the current stock price by the number of shares outstanding.

Market capitalization is segmented for two reasons. First, smaller capitalization stocks have low correlations to larger company stocks. A study by SEI Investments Company, for example, noted that during the period from 1980 through 1996, the correlation between U.S. large cap growth and U.S. small cap value was less than 0.80. Although controversial, academic studies of the "small company effect" point out that smaller capitalization stocks significantly outperform larger ones over a multidecade time period even after accounting for the additional risk. These studies are controversial because they are based on the returns of indices, not on actual portfolios. The problem with indices, especially small cap, is that they are not always investable. The smallest companies with the highest returns often are very illiquid and stock in these companies simply doesn't trade. For this reason, the security can be rapidly bid up. Another criticism is that the bid/ask spreads can be 10 percent or more. An index never considers the cost of purchasing and trading in these illiquid stocks.

A second reason stocks are segmented by market capitalization is due to trading and liquidity problems that often occur in smaller companies. Some large institutional investors may not be able to buy stock of smaller companies. Often there is simply not enough company stock that trades. Even a small percentage of a large mutual fund's assets invested in a small company might cause the mutual fund to own a significant percentage of the company.

Investment Planning Answer Book by Jay L. Shein, Q 10:21, What is growth at a reasonable price?

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Inefficiency hunters are mutual funds whose managers have learned to exploit a new approach or utilize a less common and focused approach to investing that is not readily recognized. An example of this approach is a fund that selects securities from companies that have announced share repurchases. Inefficiency hunter funds are the most difficult to evaluate. In fact, the more a manager deviates from the broad market, the more difficult it is to determine his or her investment style and, therefore, how the manager should be evaluated.

A GARP fund manager seeks to find companies that have a low price-to-earnings ratio relative to projected earnings growth. A GARP manager looks for undervalued companies whose growth prospects are greater than the market is projecting. This strategy is also known as low price earnings to growth. Typically, these companies are not found among the most depressed in price stocks. Companies that a GARP fund manager seeks have a higher price-to-earnings ratio than value stocks but a lower price-to-earnings ratio than growth stocks. GARP investing is almost a contrarian approach within the growth stock universe. GARP funds are usually quantitatively oriented and are neutral between pure growth and pure value stocks.

EXAMPLE 10-15

ABC Fund uses a GARP strategy. It examines 2 companies. Wheeling Always, Inc. has a price-to-earnings ratio of 15 times earnings and is expected to grow by 15% a year. Arlington XYZ, Inc. has a price-to-earnings ratio of 15 times earnings and is expected to grow by 20% a year. Arlington XYZ, Inc. would be more attractive to a GARP manager.

At times, a manager will claim to be using a GARP approach to investing. This might occur when a manager's segment is underperforming and the manager can't find attractive stocks in the segment. The advisor should proceed with care with the second type of fund. Often a fund will find its segment unattractive just before the segment starts outperforming. For example, a value manager that is underperforming may begin to purchase growth stocks because he or she can't find attractive stock ideas in the pure value segment.

Investment Planning Answer Book by Jay L. Shein, Q 10:22, How can style analysis be used to evaluate a mutual fund?

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Style analysis is the process by which a financial advisor evaluates mutual funds to ascertain the market segment in which the fund buys securities or to determine which market segment the fund's portfolio holdings react most like. Since the type of security that a fund holds will be the primary influence on the fund's risk and return, the advisor needs to make sure that the fund's holdings accurately reflect the advisor's understanding of those holdings. It is very common for a mutual fund to call itself a value fund, yet the portfolio might consist primarily of growth stocks. Fund names alone do not provide an accurate representation of the portfolio's holdings and are often selected for marketing purposes. Therefore, the advisor uses style analysis to provide another determination of the actual portfolio holdings.

There are several ways to analyze the investment style of a mutual fund. The two methods used primarily in financial planning practices are: (1) fundamental style analysis and (2) returns-based style analysis. Fundamental style analysis focuses on the individual securities held by the portfolio and their characteristics. The characteristics of the overall portfolio are determined by the characteristics of the individual positions. In returns-based style analysis a statistical technique that looks at how closely the fund's return matches the indices. If they are a close fit, i.e., the fund and the indices move very closely together, then one can surmise that the fund's portfolio is close to the holdings of the indices. Since the indices are very well defined as to style, this comparison will give the advisor a good way of analyzing the style of the fund.

Investment Planning Answer Book by Jay L. Shein, Q 10:23, What is fundamental style analysis?

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Fundamental style analysis involves evaluating each individual security in a portfolio and focusing on several specific characteristics. Each individual characteristic is then weighted according to its stock's percentage of the fund's holdings. In this way, an overall composite is compiled to determine the fund's style. Most fund rating services that use fundamental analysis, such as Morningstar, Inc., focus primarily on the individual characteristics of price-to-earnings and price-to-book ratios. These ratios are then compared to the ratios of the securities in the S&P 500.

The market capitalization of the fund is usually determined from a weighted average of the individual securities. Morningstar, Inc. determines the market capitalization by looking at the number of positions and then dividing the portfolio into large stocks and small stocks. The middle security defines the fund's market capitalization. Funds are then ranked by size as large, mid, or small and by investment style as value or growth. A fund that does not fit neatly into a category is often called a "blend."

CAUTION

Some rating services may give erroneous indications of a mutual fund's style. One reason is the method used to calculate price-to-earnings ratios. There is disagreement on whether a stock with negative earnings should be included or excluded from the analysis. Most rating services weigh negative earnings with a zero (0) price-to-earnings ratio. This method will usually result in an understated price-to-earnings ratio. Another problem is that both growth and value managers buy low price-to-earnings ratio stocks. Growth managers do so because many high-growth companies have zero or low earnings relative to their price. Also, a related issue involves comparing all funds to the S&P 500. A small cap fund may be more appropriately compared to a small cap index, not to the S&P 500.

Choosing the appropriate index. One of the ways to analyze how close a mutual fund is to a style index is to look at a measure called "r-squared," or "R^2." This measure is calculated by performing a regression between the returns of an index and the returns of the mutual fund. The higher the resulting R^2 for the mutual fund, the higher the explanatory power of the index. Explanatory power refers to the mutual fund's return. If the index is made up of large company stocks such as the S&P 500, and the R^2 is 0.95, this means that 95 percent of the fund's return can be explained by the return of large company stocks. Only five percent of the fund's return can be explained by something else, such as the fund's portfolio holdings or the manager's success at market timing.

R-squares fall between a zero (0) correlation and a perfect correlation of 1.0. If a large cap index fund is regressed against the S&P 500 index, the entire return of the index fund is explained by the S&P 500 index and the R^2 should be 1.0. If a fund is regressed against the wrong index, the R^2 would reflect this by being low. An R^2 falling below 0.70 usually means that the fund has been regressed against the wrong index. This can also be a signal to the advisor that the fund is a poor fit for his or her client's portfolio. If the advisor expects that the mutual fund is buying core U.S. domestic stocks but the R^2 is only 0.30, the advisor might want to reevaluate the use of the fund.

When a mutual fund is regressed against a correct index, the R^2 generally falls between .80 and .90, indicating that a high percentage of the fund's total return can be explained by the performance of the overall stock market. This also means that the portfolio is holding many of the securities included in the index or the fund is holding securities that move very much like those in the index.

An R^2 of .90 means that 90 percent of the fund's return can be explained by the index and only 10 percent is explained by some combination of the fund's basic strategy and the security selections of the fund's portfolio manager. An active manager using fundamental analysis for a particular fund with an R^2 of 0.95 mean that 95 percent of the variability of the fund can be explained by the movements of the stock market. Therefore, in fundamental analysis, a high R^2 is not always good. Sometimes it can mean that an active fund, charging management fees, is essentially a closet index fund. The higher the R^2 to the benchmark index, the more the return of the fund is influenced by the types of stocks held, not by the activities of the portfolio manager.

Problems of fundamental style analysis. There are several challenges with using fundamental style analysis to assess the investment style of a mutual fund. First, data may be difficult to obtain, outdated, and possibly inaccurate. The data used in fundamental style analysis comes from reviewing current and historical portfolio holdings, interviewing fund managers, and reviewing prospectuses. Therefore, much of the data used is taken from surveying fund managers. This is a challenge as there is little consistency in classifying securities. Even in their public reports, various fund managers of the same fund will classify the same security differently.

A second criticism of fundamental style analysis is that the characteristics, such as price-to-earnings and price-to-book ratios, as well as weights used, are subjective, with little support from academic studies. Finally, fundamental style analysis identifies only the end result, such as whether the mutual fund most closely matches a large cap growth index or small cap value index. There is no differentiation or degree, such as whether the mutual fund is deep value or excessive growth.

Investment Planning Answer Book by Jay L. Shein, Q 10:24, What is returns-based style analysis?

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Returns-based style analysis an alternative way of assessing the investment style of a mutual fund. It was developed by Nobel Laureate William Sharpe, who in 1988 published an article entitled "Determining a Fund's Effective Asset Mix" in *Investment Management Review*. [Nov./Dec. 1988, pp. 59-69] While fundamental style analysis looks at the individual holdings in a fund, returns-based style analysis looks at a mutual fund's pattern of investment returns compared to various style benchmarks. This statistical technique is calculated by regressing a mutual fund's daily, monthly, or quarterly returns against the similar performance results of a set of indices, each representing various styles. The objective is to find the best fit or combination of indices that explain the mutual fund's returns.

Returns-based style analysis is only concerned with movements in the fund's performance and, therefore, the only data required are the fund's performance history and the performance history of various indices. With returns-based style analysis, there is no requirement for fundamental inputs such as looking at the portfolio holdings or calculating ratios such as price-to-earnings ratio or price-to-book ratio. The resulting analysis gives the advisor information as to the returns behavior of the fund. Rating services such as those provided by Standard & Poor's Ratings Services and Value Line, Inc. use returns-based style analysis to determine a fund's investment style.

Returns-based style analysis helps the advisor implement the asset allocation. Many advisors need this kind of tool to help implement an asset allocation strategy if based on Modern Portfolio Theory. Once the asset allocation or optimization process is complete, the advisor's role is to select funds to fulfill the asset classes chosen. Fundamental analysis is a good starting point as it will tell us what is in a mutual fund's portfolio. Returns-based style analysis will help X-ray the portfolio to tell us how it reacts.

> **PLANNING NOTE**
>
> Using returns-based style analysis, an advisor might consider two small companies' value funds. One fund has been consistently buying small company value stocks; the second has moved from small company value to small company growth and back to small company value style. Knowing how the two funds have reacted, an advisor might feel more confident that the first fund is accurately providing the exposure that he or she seeks.

Returns-based style analysis will provide information about the changes in the portfolio composition over time. In this way, it is also possible to detect style drift. Style drift occurs when a mutual fund changes from one investment style to another. An advisor needs to monitor style drift carefully, as he or she may include a mutual fund in the client's portfolio to fulfill one asset class, and, through this analysis, learn that the fund manager is investing very differently than originally anticipated. Most advisors do not favor managers who switch investment styles. Fund managers who shift between styles tend to have very inconsistent performance records. Further, it is difficult to determine if the fund's return is due to true skill or to the luck of the fund manager. Finally, it is easier to set performance goals and a standard of measurement when a mutual fund is focused on one defined investment style.

Style drift often occurs as funds get larger. Fidelity Magellan Fund was once a small cap growth fund but as its assets under management grew, the fund became a large cap blend. This type of change is picked up in returns-based style analysis as it identifies the fund as reacting like a large cap blend rather than like a small cap growth fund. Some software programs show the changes of portfolio composition over time. The analysis can also pinpoint when these changes occurred.

> **PLANNING NOTE**

It is important for the advisor to understand that looking at a fund's historical performance differs dramatically from looking at the fund's fundamental features or the fund's actual portfolio. For example, a short-term bond fund reacting like a longer-term or longer-duration bond fund might indicate that the portfolio was weighted heavily with derivatives. Or, perhaps after a market decline, the advisor might want to know if the fund manager is still fully invested or has moved to cash. A domestic stock mutual fund owning domestic stocks but moving like an international fund should be considered an international fund. Returns-based style analysis will ascertain how the fund moves and which indices best represent that movement.

R^2 returns-based style analysis. Returns-based style analysis is predicated on evaluating the fit between a mutual fund's returns and those of a series of indices. The statistical technique used to measure this fit is called R squared or R^2 (see discussion above). The higher the percentage value of R^2, the more completely the style analysis is able to explain the long-term return behavior of the fund. If the R^2 of the fund and a series of indices is high (the closer to 1.0 the better), the advisor gains a great deal of insight as to what investment style the fund manager is pursuing. By reviewing the indices that represent the fund's results, the advisor will not necessarily know what the fund is, but how the fund reacts compared to the appropriate market.

In returns-based style analysis, the goal of R^2 regression is to find the best fit of indices. Therefore, the higher the R^2, the better the advisor is able to understand why the fund performed as it did. A low R^2 means that the regression was unable to isolate the key variables. This may be due to the fund manager's security selection or because the fund manager was inconsistent and switched styles.

When the R^2 is modest, or less than .80, the advisor must ascertain if it is due to the return from security selection or whether it is due to other factors such as choosing the wrong indices against which to regress. If a mutual fund's regression results in a low R^2 and the mutual fund has low stock turnover, the advisor should examine the fund's prospectus to determine if the fund is permitted to invest in derivative securities. If this is the case, the derivatives may be the reason why the fund's return cannot be explained by the standard indices.

CAUTION

Remember that with these statistical techniques, one can only infer what investment style a mutual fund is following. The advisor can never know with certainty unless the manager is questioned directly.

Problems of returns-based style analysis. One of the criticisms of returns-based style analysis is that the end result gives a best fit to style indices that are themselves created from fundamental data. Therefore, the outcome of the analysis is only as good as the style indices used in the regression. If the indices fail to capture the manager's style, e.g., momentum managers, then the benefits of returns-based style analysis are questionable. In addition, the method relies solely on a fund's historical returns. It does not consider the fund's current positions or future prospects.

Returns-based style analysis works better for some mutual funds than for others. There is a significant percentage of funds that cannot be factored properly and the results of style analysis will not be conclusive. However, it is beneficial to evaluate the fund, even if the results are mixed, as returns-based style analysis can point out issues that need to be addressed and resolved with the fund manager or representative.

Another criticism of returns-based style analysis is that it requires a great deal of data. As much as 60 months of returns regressed against seven to ten different indices may not be enough data to provide meaningful analysis. This might occur because many funds' portfolios change constantly and hold only a small percentage of the securities of the portfolio from 36 months before.

PLANNING NOTE

Returns-based style analysis software is being used by more and more advisors and software vendors.

Investment Planning Answer Book by Jay L. Shein, Q 10:25, What is investment process?

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An advisor can implement an investment style through passively managed mutual funds, actively managed funds, exchange traded funds, or a combination. Academic theory suggests that securities are efficiently priced. If securities are priced on the basis of common expectations of market participants, it follows that the rate of return to the buyer is based on the securities' risk. Only by accepting higher risk can a portfolio generally earn higher returns. A passive manager is one who simply buys a portfolio of securities and expects to get the appropriate return for the level of risk taken.

On the other hand, active managers reject the concept of market efficiency. To be successful, an active manager believes that he or she can see something valuable in a particular security that is not seen by others. An active manager seeks to get either higher returns for the same level of risk or lower risk for the same level of returns.

Data from investment rating services has shown that many active portfolio managers have underperformed their passive alternatives. While active managers can often add value through research, the leakage that occurs from transaction costs may not be enough to offset the benefits of that research. Management costs add another layer to actively managed fund expenses. Therefore, when deciding whether to choose an actively or passively managed mutual fund, the advisor needs to evaluate how much better an active manager must be over a passive alternative in order to compensate for those additional fees, commissions, market impact, taxes, and higher allocation to cash.

Investment Planning Answer Book by Jay L. Shein, Q 10:26, What is passive management?

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Academic theorists believe that current stock prices reflect all publicly known information and all future earnings as well as the risk of those earnings for every security. If all securities are properly priced, then markets are efficiently priced based on future earnings and the risk of those earnings. Proponents of passive management believe that even if securities are not properly priced, it would be impossible to predict which securities are and which securities are not. According to this theory, the best place to invest is in low-cost passive funds. A passive fund is one whose manager does not attempt to forecast the economy or differentiate securities that are over- or undervalued.

The passive fund manager seeks to purchase securities based solely on their characteristics. Usually, the mutual fund will purchase all of the stocks in the underlying index. Passive funds can be based either on benchmark indices or on market anomalies. A passive fund based on an index would seek to replicate the index by purchasing the same securities with the same weightings as the index. An anomaly occurs when a segment of the market returns more than expected if it were efficiently priced.

A manager of a passive index mutual fund will focus only on purchasing the securities in a specified index, such as the S&P 500, by adjusting the stock weightings as cash flows into and out of the mutual fund. The objective is to try to minimize tracking error, or the deviation of the fund's return from the index return. While index funds generally have low turnover that typically translates into lower tax liabilities, there is still some turnover as securities are replaced in the index due to mergers or other reasons. Therefore, while index funds may be more tax efficient than active funds, the investor will incur some tax liability, including a tax on fund dividends.

Passive funds also have other advantages. First, they usually have low costs. Since securities are chosen based on the index composition, there are no research or analysis requirements. This usually equates to much lower management expenses. Second, passive funds are always fully invested in the market. An active manager must retain cash for fund redemptions, preventing him or her from taking full advantage of a market rise. However, this can work against passive funds in a declining market. Third, passive funds provide style exposure that an advisor might seek without concern for style drift. Fourth, passive funds provide cost savings for the advisor in terms of time needed to analyze and monitor the investments. Last, passive funds may be more tax efficient because they apply a buy-and-hold strategy.

Passive funds are structured in many ways. There are passive mutual funds seeking to replicate the market exposure of large cap stocks, large cap value stocks, large cap growth stock, the entire market, fixed income indices, and international markets. More difficult to choose are passive funds designed to replicate small capitalization securities. The most widely used small cap index is the Russell 2000 Index, which represents approximately 10 percent of total domestic market capitalization. The Russell 2000 Index is also divided into the Russell 2000 Growth Index and the Russell 2000 Value Index. Other indices include Dimensional Fund advisor's DFA U.S. 9-10 Small Company Portfolio, which represents micro cap stocks.

The most popular passive index fund is based on the S&P 500. The S&P 500 represents the Standard & Poor's register of 500 corporations that it believes represent the largest and most successful companies in the United States. An S&P 500 index fund is designed to purchase these 500 securities in their market weighting, without any consideration for whether the stocks were properly or improperly priced. The general criteria for inclusion in this list are:

1. Companies must represent the important industries in the U.S. economy.
2. Each company must generally have the largest market value in their industries.
3. The stock of the company must be widely held and therefore not closely held.
4. There must be liquidity and significant amounts of trading in the company's stock.

5. The companies must have stable histories and prospects, both of which have been established after fundamental analysis.

PLANNING NOTE

In choosing an index fund, the advisor should carefully examine the index's characteristics in conjunction with the existing portfolio. For example, some of the more popular funds are based on the Frank Russell Company indices. The Russell 1000 Index is a list of large-company U.S. stocks. The Russell 1000 Growth Index is made up of 600 securities of the Russell 1000 Index that have growth characteristics. The Russell 1000 Value Index is also made up of 600 securities from the same Russell 1000 list that have value characteristics. Since each style index has 600 securities and the Russell 1000 fund has 1,000, there is an overlap. If an advisor wishes to design a portfolio with passive funds and wishes to purchase both a core holding, such as the S&P 500, and style holdings, such as large growth and large value, he or she must choose indices carefully. If the advisor defines the core holding as the S&P 500, he or she will duplicate the portfolio's exposure with an index fund based on the Russell 1000 Growth Index. This is because many securities are included in both the S&P 500 and the Russell 1000 Growth Index.

There are many types of passive funds. One distinction among index funds is that while most are market weighted, some are equal weighted. In a market-weighted fund, stocks are owned in proportion to their total market capitalization. Little or no rebalancing is necessary. In an equal-weighted fund, stocks are owned in equal amounts. Frequent rebalancing is necessary to maintain the equal weighting.

Fund managers can employ different strategies in designing a mutual fund to match the index. "Full replication" of a mutual fund to an index means that the manager will attempt to invest in each security exactly like the index. "Sampling" is where a manager invests in a smaller set of securities than is included in the broad index. Sampling is used most often for larger indices such as the Wilshire 5000 Equity Index or for fixed income indices. As the index gets larger, or for indices containing illiquid securities (e.g., small cap or fixed income), the trading costs can potentially offset the advantage of low tracking. In this case, sampling will be a much more efficient means of earning index returns.

Not all passive funds are based on indices. Academics have found that efficient market models trying to predict returns based on the risk of a stock could not account for the outperformance of certain groups of stocks. They uncovered anomalies to the efficient market theory suggesting that the equity market does not behave as one market, but rather is segmented. These academics found that by designing a portfolio based on certain attributes, they could earn higher returns with less risk than indices. The portfolios are still passive, in that there is no security selection or timing activities occurring. However, the portfolios are built on criteria that research has shown provide a higher risk-adjusted return than efficient market theory would suggest.

An example of such an anomaly is found in the research conducted by Eugene Fama and Kenneth French and discussed in an article entitled "The Cross-Section of Expected Stock Returns." [47 J. Fin. 427 (1992)] The research suggested that small capitalization stocks and stocks with high price-to-book values (sometimes referred to as "value stocks") earned higher risk-adjusted returns. A mutual fund company has created a passive mutual fund to mirror this academic research.

Investment Planning Answer Book by Jay L. Shein, Q 10:27, Are there benefits to active management?

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An active manager seeks to outperform a market index by choosing a select group of stocks. This outperformance is commonly called "alpha." Contrary to passive managers who seek index returns, active managers believe that they can outperform the market over the long term, on a risk-adjusted basis. Many different investment processes are used by active managers. The three primary categories are fundamental, quantitative, and behavioral.

Passive fund managers believe that all current information is discounted by the market and is included in the price of a stock. Active managers believe that this may not always be true. If an active manager determines that the market has incorrectly priced a security before the market corrects its price, the active manager can add value. This typically takes three forms. First, a manager may use fundamental analysis to anticipate new information before the market receives and acts on this new information. A second approach is to manipulate public information, and with the use of computer models, quantitatively make a better assessment of the stock's intrinsic value than the market. A third approach is to assess the reactions of market participants, including securities analysts who may have biases that affect their estimates of a stock's upcoming earnings. If analysts make systematic biases in their estimates and an active manager can consistently act on these biases, he or she can add value. This third approach is known as behavioral finance. Other approaches are known as inefficiency hunters. These active managers use different and uncommon approaches to outperform the market.

When an advisor is assessing an active manager, he or she should consider that the active manager will charge higher fees and potentially cause higher taxes to be incurred by the investor than a passive manager might. Therefore, the advisor should seek out active managers who can outperform on a risk-adjusted basis, after-fees, and after-tax basis.

Fundamental analysis. A mutual fund that invests using fundamental analysis performs an in-depth security analysis on each company to be held in the fund's portfolio. The object of fundamental analysis is to calculate, for each security, an intrinsic value. This is the manager's or analyst's estimate of what the company is actually worth. This intrinsic value is compared to the market price to determine whether a security is under- or overvalued. The majority of mutual funds use fundamental analysis.

Fundamental active managers believe that stock prices can be over- or undervalued relative to their true worth or intrinsic value. Therefore, the market price, which reflects the market consensus, is often temporarily incorrect. Individual securities may be mispriced and the fundamental fund manager seeks to find those mispriced securities. Securities that are most undervalued or are expected to revert to their true valuation in a relatively short time period are purchased for the mutual fund.

Fundamental analysts believe in the self-correcting nature of security markets over time, that what goes up must come down. According to these analysts, stock prices will eventually revert to the mean.

The methods by which a fundamental fund manager determines the value of a company vary considerably. Most fund managers review the books and records of companies, talk to management and competitors, evaluate the macroeconomic environment, as well as other activities to try to determine the best estimate of future earnings. In short, the manager reviews all the basic ingredients of a company's health.

Determining the risk of a security's future earnings is also important. The fundamental manager often estimates risk by looking at how the security reacts to broad economic factors such as unexpected inflation, industrial production, housing starts, exchange rates, and other factors.

A fundamental analyst also tries to anticipate new information before it is known to the market in an effort to predict future stock prices. New information must be anticipated often and consistently for the fund manager to effectively add value. A fund manager or analyst who can correctly predict future earnings better than the market will be able to predict future prices and successfully add value.

Quantitative analysis. Another valuation method that a mutual fund manager might seek to apply to security selection in an effort to add value would be to use a computer-based interpretation of current information. Quantitative managers do not seek to predict the news. Instead they consider a host of variables in an effort to determine whether a stock is over- or undervalued.

Quantitative managers use simple or multiple regression techniques that compare stock returns with those of the market. A simple regression equation is an algebraic statement that relates two different variables. Quantitative managers seek to use regressions to find securities that are mispriced, based primarily on statistical techniques. These might include assessing the value of a company by looking at its contribution by each industry. In this situation, the quantitative manager evaluates how the market values different sectors in the economy.

To illustrate, automobile dealers are valued at one multiple of earnings. Automobile financing company earnings are valued at a different multiple. Used car dealership earnings are valued at a third multiple. A large auto manufacturer's earnings would then be divided among the various corporate functions. Then the earnings would be attributed to the various components. The multiple for each component would be applied to each component's earnings. Then all of the components would be added together to arrive at a value for the entire company's earnings. The total value composed of a sector-by-sector evaluation is then compared to the market's value, which would be the current market price. If the sum of the parts is worth more than the current market price, the company's stock would be purchased.

One mutual fund manager, for example, has a "black box" quantitative model that has incorporated 190 different input items. His computer processes the 190 items through various modeling techniques to determine a true price for the stock. A manager who is better able to process information and better able to predict future stock prices will, of course, add value. Quantitative funds tend to do worse in a directionless market. The turnover of securities is very high, resulting in high trading and transaction costs that often eliminate any positive alphas. Computer technology, however, allows for the measurement of trading costs, which are now an important component in many quantitative models.

Behavioral finance. Behavioral finance is a relatively new methodology and is based on the failure of efficient markets and the reality of the irrational investor. Markets normally process new investment information correctly. However, at times, markets can over- or underreact. Behavioral managers seek to find opportunities when they believe that this occurs. Behavioral finance analyzes and contrasts the world view of rational economic models and efficient markets with the human factors that influence the markets, such as: (1) how and when people act on information, (2) normal human tendencies that create biases, and (3) cognitive illusions that affect decision making.

If investors are not rational, and if the behavioral manager can consistently find instances of this nonrational behavior, then the manager can add value. Even if new information is known and properly processed, the market may still be biased in forming future expectations. The behavioral manager seeks to exploit these biases.

One example of a behavioral manager: This manager who, through a quantitative process, assesses earnings forecasts and prices to study the effect of changes in analysts' earnings expectations on stock prices. Companies with upward changes in earnings expectations often outperform the market, and those with downward changes usually underperform. Their earnings models are based as much on behavioral psychology as statistical analysis. Analysts tend to revise their estimates incrementally rather than all at once. These small revisions then induce other analysts to update their estimates.

The manager tries to anticipate the "creep" by looking not only at the size and direction of earnings estimates but also at the number of analysts changing their estimates and the degree to which analysts, whether optimistic or pessimistic, are reacting. The model works best for smaller stocks because a change in one or two earnings forecasts has a larger impact when only a few analysts are covering a stock. There are many other behavioral biases that occur in investing.

Investment Planning Answer Book by Jay L. Shein, Performance Evaluation

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Performance evaluation is an important component in determining the effectiveness of any investment program. The goal of performance evaluation is to identify managers who have demonstrated enhanced returns as a result of security selection skills and not as a result of luck or style drift. To be useful, results must be reliably stated, derived from appropriate data, and focused on clearly defined comparative data. When forming opinions about performance, it is important not to evaluate performance on a relative basis alone. Judgments should compare the achievement with that which was possible on an average or passive basis at the same risk level.

Performance evaluation is useful for examining how successful a fund was historically in executing its strategy to grow a client's assets. It also helps the advisor understand the pattern of returns and whether the fund is continuing to be managed in a way that was contemplated.

Performance evaluation is a method of getting feedback and maintaining control. As long as the fund is getting the results expected, the performance will typically be fine. However, if the results differ dramatically from expectations, then the advisor needs to be very critical, whether the fund outperforms or underperforms expectations. For example, the manager with unusual outperformance may be lucky or taking inappropriate risks. As a rule, if the fund is earning more or less than two percent from its benchmark, the advisor should take note. Typically, the fund manager is being paid to make security selection decisions. If the returns divert dramatically, it may mean that the manager has drifted from the fund's style. This outperformance can often be followed by periods of underperformance and unrecoverable losses.

There are several factors to keep in mind when evaluating a fund's performance. These are the managers' capabilities, the structure of the fund, and the investment style being used to select securities. Finally, the advisor should address any conditions that might influence the fund's results in the future.

The first factor is the managers' capabilities. Ultimately, in performance evaluation, the financial advisor is seeking to assess whether the fund offered superior or inferior performance and whether these results were based on skill or luck. For example, if a fund is purchased based on its long-term track record, it is also important to verify that the individuals responsible for the fund performance are still managing the fund. Whether the fund is managed by an individual or a team will also be important. A single manager can be held accountable. A team-managed product can make assessment more difficult, as the advisor does not know who bears responsibility.

The structure of the fund is another important factor. A fund with high expenses or high sales charges is at a disadvantage. Higher expenses may put pressure on the manager to stretch for additional return and can involve taking outsized risks. This might occur, for example, in a bond fund by purchasing longer-dated securities, adding duration risk, buying lower-quality securities, or purchasing derivatives.

The third factor in performance evaluation is the investment style. A value manager should be producing good returns relative to value stocks and other value managers. A growth manager should be producing good returns relative to growth stocks and other growth stock managers. The advisor should evaluate the returns of the fund against returns from a benchmark with the same investment style.

Some managers are not style specific enough to use a specific benchmark. These funds may seek an absolute return or other strategies. Because of this some comparisons may not be of value even though the fund can be a good addition to a portfolio.

Investment Planning Answer Book by Jay L. Shein, Q 10:28, What is performance measurement?

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Performance measurement is the process of gathering sample performance data to be evaluated. Often the retail investor will look at fund performance as the primary criteria in fund selection. Although popular with individuals and the media, very little can be ascertained by reviewing raw performance data, either annually or cumulatively. This data must be evaluated in the context of the risk taken, objectives sought, time periods used, and alternatives available.

In reporting rates of return, mutual funds must comply with the rules of the Securities and Exchange Commission (SEC). The advisor should evaluate returns on a total-return basis. Performance data will be heavily influenced by three factors: sampling error, market environment, and manager skill. Sampling error means that the same data for June to June to may look very different from the same data for January to January. The market environment during the measuring period will also affect performance data. For example, in periods where U.S. large company stocks have terrific performance, small cap stocks may be out of favor. The manager of a small cap fund may appear to have poor performance until the small cap style comes back into favor. The third factor is manager skill.

The rate of return may be calculated using a dollar weighted method that measures a client's actual returns, or a time weighted method that assumes no changes in cash flows. Since the fund manager cannot control the timing of cash flow, the time weighted method may be preferable. Choosing a time period is more of an art than a science, as the traditional notion that a five-year period should be used because the fund's style will come into and out of favor over the business cycle is outdated due to recent market behavior and changes in the mutual fund industry. Using period of less than three years introduces statistical biases into results. Often, an advisor may evaluate shorter time periods first and work backwards.

Investment Planning Answer Book by Jay L. Shein, Q 10:29, How does an advisor analyze risk?

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The first task in evaluating performance is to determine whether the results were superior to alternatives. This includes measuring the fund against benchmarks such as indices and peers. The second task is determining how much risk the fund manager took to achieve those results. Raw performance numbers will not provide a clear picture of how well a fund performed until they are adjusted for the amount of risk taken.

Risk indicates what could have happened. In evaluating risk, the advisor should choose a benchmark that most closely matches the fund's investment style and accurately reflects the fund's strategy. Using a market index as a benchmark is a low-cost alternative to customized benchmarks. Peer groups with similar risk and investment styles can be combined into a "universe" that may be used for comparison purposes. The use of peer groups is criticized due to the presence of numerous biases and the need to decide the most appropriate universe. An alternative benchmark is a normal portfolio that essentially creates a list of securities that conform to the type that the manager typically invests in and then weight the securities. This alternative is not easy to construct or maintain.

Statistical measures that can be used to indicate risk include standard deviation, the beta coefficient, r-squared, and the alpha coefficient. Alpha measures risk-adjusted return. A positive alpha indicates that the fund added value over the level of risk taken. The consistency of alpha is measured by the information ratio. The higher the information ratio, the better. Although the information ratio is not always found in most rating services, it can be calculated by more sophisticated software programs or by using a spreadsheet regression program. It is important that a relative benchmark be used for the information ratio.

Investment Planning Answer Book by Jay L. Shein, Q 10:30, What is attribution analysis?

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Another task in evaluating performance will be in determining whether the past performance was due to skill or luck. Attribution analysis tells the financial advisor what portion of a mutual fund's return is due to the abilities of the fund manager and what portion is due to factors such as market timing.

An attribution analysis will typically evaluate (1) return from stock selection, (2) return from market timing, and (3) return from investment style. The stock selection return measures how individual security selection decisions affected the total return of the portfolio and addresses whether the fund manager's selections were better or worse than those in the benchmark. Advisors typically perform this calculation by using a returns-based style analysis. Market timing return measures the value added by sector rotation (moving funds from one industry to another). Positive returns indicate that the manager has added value over time. The total return of the mutual fund that is not explained by the customized benchmark or a combination of security selection and market timing is the alpha. If the alpha return is positive, this indicates that the fund has added value over a passive alternative. The t-statistic determines the significance or validity of the conclusions. A higher t-statistic indicates a higher validity.

Investment Planning Answer Book by Jay L. Shein, Q 10:31, How does fund size affect performance?

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There are differing fields of thought on the effect of the size of a fund on its performance. The concerns about size often involve the market capitalization and liquidity of the fund. Other concerns come from having too few positions of comparable size within the fund. Additionally, the issues relating to the percentage of ownership of any one holding or group of holdings may reduce the fund manager's ability to realize the market value of that holding.

Liquidity issues examine how much money a mutual fund can effectively manage. A manager that has more money than the fund style can support may have difficulty maintaining a positive excess return or alpha.

Brokerage commissions, market impact, and opportunity costs are the three primary portfolio transaction costs. Brokerage commissions can cover taxes as well. The effect that purchasing or selling shares has on the price of a stock is called market impact. The difficulty of buying what the fund manager wants to buy in the size that he or she wants to buy it is opportunity cost.

An increase in the number of positions and growth in fund size may lead to negative performance as the manager's best ideas are diluted. Position size is important for fundamentally based funds that are research-intensive and less important for funds with quantitative approaches. Position size should also be considered as liquidity issues may arise when the manager intends to sell. Sharp cash inflows may hurt fund performance more than size.

Performance measurement concerns. A mutual fund's past performance is not an accurate predictor of future returns. The financial advisor can attempt to improve his or her odds of success by understanding several factors that may lead to poor performance by a mutual fund with historically high returns.

Back testing uses hindsight and applies the methodology of a mutual fund against historical information to see the results that method would have achieved in the past. Portable records are records that were achieved while at a different firm. Portable records can be very helpful in evaluating start-up mutual funds. However, these results may not indicate future performance if the manager was assisted by a team or if the real reason for the performance is still at the place that the manager left. The task of evaluating performance is easier if a manager sticks closely to a readily identifiable mandate. Deviations from the mandate should be considered poor performance.

Investment Planning Answer Book by Jay L. Shein, Q 10:32, How does an advisor measure rates of return?

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For many investors, performance is the most important criteria for choosing a mutual fund. Performance measurement is concerned with assembling data into rates of return. Mutual funds must report rates of return in compliance with the rules of the Securities and Exchange Commission.

The advisor should always evaluate results on a total-return basis. This means results should be analyzed by including reinvested dividends, interest, and capital gains distributions. Distributions should not be ignored in the return calculation just because they are paid out periodically. Dividends are, in fact, earned by the fund and are an integral component of the total performance of the fund. It is also important to determine the return from income versus the return from capital appreciation. The income portion of the return will typically be much less volatile than the capital gain portion. In addition, the income portion is typically taxable at higher ordinary income tax rates. Taxes are not included in performance measurement; however, their impact on clients' portfolios is of the utmost importance. Nonetheless, there are no standards or benchmark comparisons for taxable investors.

There are three factors that will heavily influence the performance data. These are sampling error, market environment, and manager skill. Unfortunately, short-term performance numbers with a large impact from the first two factors may very well influence the returns to a much larger degree than the actual manager's skill.

Sampling error means that the results do not accurately reflect reality. One common error is to look at performance data on an annual basis. This same data might look very different if the year was June to June versus January to January. It is also important to understand that most fund management involves constantly changing securities. A professional baseball team that has the same players year after year has some level of predictability. An investment portfolio with changing securities is like having the same baseball manager manage a completely new set of players every year. In addition, even the most impressive presentation of numbers might become quite ordinary when subtracting one year from either the beginning or the end of the time period.

PLANNING NOTE

Clients are often concerned with looking at performance results over a certain time period such as one year. If the returns during this particular period are good, they will judge the results as good. If the results are poor, they will judge the results as poor. One way of explaining the unpredictability of short-term performance returns is to calculate performance over rolling one-year periods. In this way, the client will see vast differences among a January to January period, versus a February to February period, versus a March to March period. If the calculation is done over a rolling one-year period for six months, the client may see vastly different results.

The second factor influencing performance data is the market environment during the measuring period. U.S. large-company domestic stocks may have recently had several years of terrific performance. Therefore, a small capitalization manager may appear to have poor performance when compared to a broad market index. However, the market for small capitalization stock could have been out of favor. When the style comes back in favor, the results should improve appreciably. The impact of style on performance is an important consideration, as is understanding the current economic environment.

The third factor is manager skill. This is the primary area that attribution analysis seeks to determine. Attribution analysis is concerned with separating the reasons behind a mutual fund's returns into the three components of investment style, market timing, and manager skill.

Calculating rate of return. There are two different methods of calculating returns for investors. They are (1) dollar weighted, or internal rate of return, which considers cash contributions and withdrawals during the measurement period, and (2) time weighted, which assumes that there were no changes in cash flows. Time-weighted returns assume that money was invested on the first day and taken out on the last day. The dollar-

weighted return reconciles the beginning dollar amount of the client's investment plus all cash contributions with the ending value of the account. Time-weighted returns intentionally ignore the fact that money is contributed or withdrawn from the fund and looks only at money in the fund at each period.

Clients are most interested in dollar-weighted results because they measure a client's actual earnings. When evaluating fund managers it is better to use the time-weighted returns. The rationale for using time-weighted returns is that the advisor is evaluating the activities of the fund manager rather than the client's results. Since the manager does not have control of the timing of the cash flows, it is not appropriate to attribute any of the return to these cash flows.

EXAMPLE 10-16

John James placed cash in two mutual funds (First USA Fund and First Global Fund) that had an identical time-weighted return of 20%. However, because of the timing of cash flows, the results are dramatically different for each fund.

Assume that First USA Fund and First Global Fund have had no capital gain or income distributions. First USA is up 50% during the first half of 2009, then down 20% in the second half. First Global's results are exactly the reverse, or down 20% in the first half, then up 50% in the second half. Note that both funds have identical performance for all of 2009. The net asset value of each grew from $10 to $12, a 20% annual rate of return.

Assume that James invested $10,000 in First USA Fund on December 31, 2009, and another $12,000 in First Global Fund on June 30, 2010. James' investment in First USA has an ending market value of $21,600, slightly less than his $22,000 purchase cost; his internal rate of return was 2.51%.

12/31/2009	Invested $10,000 to buy 1,000 shares at $10 per share
06/30/2010	Invested $12,000 to buy 800 shares at $15 per share
12/31/2010	Owned 1,800 shares at $12 per share, valued at $21,600

Assume that James invested $10,000 in First Global Fund on December 31, 2009, and another $12,000 on June 30, 2010. Fortunately, James fared considerably better with First Global. His ending market value is $30,000 for a +52% internal rate of return on the same $22,000 investment.

12/31/2009	Invested $10,000 to buy 1,000 shares at $10 per share
06/30/2010	Invested $12,000 to buy 1,500 shares at $8 per share
12/31/2010	Owned 2,500 shares at $12 per share, valued at $30,000

Time period to use. Choosing a time period to evaluate performance is important for fund evaluations and is very much an art, not a science. Traditionally, a five-year time period has been the accepted practice for performance evaluation. This is based on the concept that the business cycle typically lasts five years. The fund manager should be evaluated over this business cycle because during the cycle the manager's style comes into and out of favor. The reason for hiring an active manager is to achieve returns better than benchmark alternatives. However, most advisors recognize that there are periods when the manager's style will be in favor and times when it will be out of favor. In all cases, the manager should be able to outperform over a business cycle, regardless of style.

Unfortunately, the concept of a five-year business cycle is outdated. The last five years have been a time of consistently rising prices. Therefore, an advisor addressing the issue of how well a fund manager reacts to market declines will not find this information in the last five years' time period.

Another challenge in choosing a time period is that the mutual fund industry today is very different from five years ago. The growth in fund assets and the number of funds has been geometric. As funds grow in size, they often adopt different strategies than when they were smaller. While this is not necessarily bad, it does mean that a larger fund going forward will look very different from the past. Therefore, periods beyond even three years will introduce the possibility of changes in fund policy as well as different fund managers and analysts. As managers gain more experience, they adopt and hone their techniques.

Evaluating periods of less than three years introduces statistical biases into any results, although many argue that 36 months is still not long enough. Since one objective of performance measurement is to differentiate between the skillful manager and the lucky one, if there are not enough data points, the validity of the statistics can be suspect. With three years, the advisor will have 36 months of observations. Still, this tends to be a magic number. If the advisor has access to 33 months of data, this is what the advisor must use and not discount the fund for the next 90 days while awaiting the 36th month's return. Nonetheless, the advisor should be aware that the shorter the time interval, the more severe the statistical validity of the conclusions.

With all of these challenges, the advisor must make choices. Often, the advisor will evaluate shorter time periods first and work backwards. The initial screening might be to seek a manager who has performed well over the past three years. A secondary step is to evaluate whether the results were similar for the past five years. The advisor should also review a host of variables that may have been introduced into the portfolio that will affect these results going forward. This includes manager or analyst changes, fund size and its effect on the portfolio management process, and other intangibles affecting the fund's future.

With newer funds, the advisor may access the track record of separate accounts that have been managed in a similar style. While separate account data can be very difficult to translate into the mutual fund format, it often is the only available data. If the manager has a promising strategy that appears to fit into the portfolio, the advisor should not discount the fund because of a lack of three-year performance data.

In addition to reviewing long-term results, the advisor should examine year-by-year results. This allows the advisor to analyze the consistency of results. The best fund manager is one who could outperform a benchmark year after year, not one who had a big "pop" one year and mediocre results thereafter. A statistical measure of the manager's skill over time is called the "information ratio."

CAUTION

The advisor should realize that performance calculated over a historical time period does not represent actual performance. It is simply the performance over a *sample* time period. Actual performance doesn't occur until the investor sells the investment, pays taxes, and calculates how much has been gained or lost. Performance evaluation is never truly accurate until the portfolio is liquidated. This is the difference between an evaluation time horizon and an investment time horizon. A manager can have a terrific record for many years, but if circumstances change, the losses can quickly diminish years' worth of excellent results.

Analyzing risk. While performance returns indicate what has happened in the past, risk indicates what could have happened. Therefore, unless placed in a risk context, raw performance numbers alone have very little meaning. It is only when the raw performance is compared against appropriate benchmarks and after being adjusted for risk, do raw performance numbers translate into meaningful information.

EXAMPLE 10-17

Star Fund has high returns of 10% per month for the past 6 months. In the 7th month, the entire portfolio value was lost. If an assessment of performance was made after 6 months without considering risk, this fund would appear to be a highly desirable choice.

Typically, some criteria for success should be established before purchasing a fund, such as outperformance over a certain benchmark. A benchmark serves both prospective and retrospective functions in a portfolio. In its retrospective role, the target is an evaluation tool. It is the benchmark against which to assess underperformance, which should be seen as a red flag. It can also be used to assess outperformance. A manager significantly outperforming a benchmark can be indicative of noncompliance with stated investment objectives and guidelines. Finally, benchmarks are used to monitor a fund's discipline regarding investment style. The advisor should deviate from a passive strategy only if he or she believes that the active investment strategies offer positive incremental returns relative to the risk incurred, and only after taxes are considered.

In hindsight, then, a client's investment in a mutual fund is successful only if it at least matches the benchmark returns (after all fees, expenses, and taxes) on a risk-adjusted basis.

Benchmarks come in many forms. They can be made up of indices or peer universes or they can be a customized benchmark. These are the most common methods of comparison; however, all of these methods have been criticized. Each may give an indication of performance, yet none is truly effective in determining whether the fund performance results were because of skill or chance.

Internal methods of analyzing risk can also be useful. These methods include analyzing statistics such as standard deviation and betas. Internal methods can be especially useful when comparing two or three managers against each other.

Investment Planning Answer Book by Jay L. Shein, Q 10:33, How does an advisor choose indices?

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Indices such as the S&P 500 Index or the Russell 2000 Index are benchmarks commonly used for comparison purposes. They are readily available on a daily basis to advisors. Many major indices are found in newspapers such as *The Wall Street Journal* or the *New York Times.* Specialized benchmarks such as the Russell indices can be found daily on the Russell website (www.russell.com). Many of the major indices have now been duplicated and are available to the advisor in the form of low-cost no-load mutual funds or exchange traded funds (ETFs). The objective for the advisor is to choose the benchmark that most closely matches the mutual fund's investment style and risk level. Various indices can also be combined to create a benchmark portfolio. This can be used to assess the advisor's mutual fund selection capabilities. This is still not effective when a manager/fund has an absolute return focus or is benchmark independent.

One criticism of benchmark indices is that they may be misinterpreted if the index does not accurately reflect the mutual fund's strategy. It should also be noted that benchmark indices are reported without transaction costs or management fees. Therefore, even though many fund companies have created portfolios to match the indices, the indices cannot necessarily be bought at a zero (0) cost. Although the cost is relatively small, it should be taken into consideration in making evaluations.

COMMENT

The Dow Jones Industrial Average (DJIA), although widely quoted as an indicator of domestic equity performance, represents a relatively narrow segment in the U.S. stock market. DJIA is composed of 30 large, mature corporations and fails to account for the performance of certain sectors of the economy. As a result, it does not adequately represent the investment opportunities available to investors in U.S. stocks.

One reason why market indices are chosen for comparison is that they are low-cost alternative investments for an advisor when investing his or her client's assets. By choosing an active manager, the advisor is betting that the fund manager will be able to outperform the index after fees. If the fund manager is not able to beat the index, there is no reason to pay additional fees for "active" management. This is why the index chosen must be "investable." There are numerous indices that are used for comparison purposes, but there are not necessarily funds or other investments that allow one to gain a similar exposure. If the advisor cannot use the index as an alternative, it is not an adequate substitute. Not all indexes are investable.

Investment Planning Answer Book by Jay L. Shein, Q 10:34, How important are peer groups?

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A second benchmark for comparison purposes is to evaluate a mutual fund's performance in relation to its peers with similar risk and investment style. Peer groups are mutual funds of similar investment style and risk combined into a "universe." These universes are compiled by consultants or fund rating services or can be put together by the advisor. An advisor can create a universe when he or she knows that each fund manager has a specific investment process and the advisor wants to compare only those funds with that process. A peer universe comparison is in many ways similar to an index comparison. The mutual fund is compared to the set of funds available in the marketplace. The goal remains the same, that is, to assess the contribution of the manager versus the contribution of his or her style. Unlike an index comparison, where the only alternative is the benchmark if the manager underperforms, in a universe comparison, the available alternatives are expanded.

Thus, Lipper Analytical Services compiles a daily report on mutual funds that appears in *The Wall Street Journal*. The peer groups are segmented into equity and fixed income and further broken into groups such as "small cap core" and "international growth." The Lipper indices are based on large funds with the same investment objective. An advisor-created universe might be used when looking at a momentum fund. Although momentum funds typically buy small cap growth stocks, they may react very differently from the Lipper small growth universe.

The returns of each fund receive a percentile ranking depending on relative performance within the comparison universe. The fund is also ranked within the universe.

EXAMPLE 10-18

Upstart Fund had the 9th best performance in a universe of 100 similar mutual funds. Upstart Fund is the 90th percentile manager. The performance was better than 90% of all competing funds over the evaluation period.

Some funds have unique investment processes that are not captured by reviewing a broad-style benchmark. Peer groups are often criticized because there are numerous biases present. Many fund managers claim that they are unique and without peers.

For example, equity income managers focus on securities that have larger dividend ratios than the overall market. They tend to be grouped as value managers; however, at times, value stocks significantly outperform equity income. As a sub-style of value, the returns may have a very unique pattern. It might be best to compare equity income managers against a universe of other similar-style managers.

There are several disadvantages to using peer universes, including the decision as to what is the most appropriate universe for comparison. Mutual funds often present results selectively by using odd periods or favorable peer groups. Different universes may also be created by different reporting services. One service may rank a fund higher than another service because it is using different criteria for evaluation.

Another issue to evaluate is the sample size of the ranking. Sometimes a rating service ranks funds based on so many different criteria, including size of assets and time periods, that it is effectively useless for the advisor. A final concern involves what is known as "survivorship bias," or when funds with the poor performance go out of business or merge with other funds. In this case, historical results of folded funds are eliminated, thus creating upwardly biased historical universe returns. Ultimately, the peer group universe is appropriate if it includes reasonable alternatives for the advisor.

Even with these concerns, it is common for a client to want to know how he or she did in comparison with others. By seeing consistently superior results, the advisor will gain confidence that the returns were the result of skill and not chance.

Normal portfolio. A normal portfolio is a specifically customized benchmark that controls for investment strategy and that provides a "bogey" for evaluating investment decisions. A normal portfolio essentially creates a list of securities that conform to the type that the manager typically invests in. These securities are then weighted. One of the difficulties of a normal portfolio is that it is not easy to construct and maintain.

PLANNING NOTE

A normal portfolio for a high-quality growth stock manager might be composed of the largest 25 growth stocks in the S&P 500 index. By measuring the performance of these 25 stocks, the advisor has a benchmark that may more closely replicate the manager's approach than a broad-based benchmark such as the Russell 1000 Growth Index.

One benchmark that is much like a normal portfolio is called a portfolio opportunity distribution, or POD. This idea was created by Ron Surz. Essentially, a POD takes all of the securities that a manager could conceivably buy using the manager's unique criteria and investment process. These securities are then statistically placed into a series of random portfolios made up of securities in the manager's universe. The fund is then compared to these random portfolios. If the fund manager is adding value, he or she consistently appears above the median of the newly created portfolios. PODs may be especially valuable when comparing international fund managers because the established benchmarks often fail to replicate the manager's strategies.

Investment Planning Answer Book by Jay L. Shein, Q 10:35, How can an advisor adjust for risk when measuring returns?

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Standard deviation and beta. A widely accepted notion in the investment community is that mutual fund rates of return should only be compared with some consideration for the level of risk incurred. It is inappropriate to compare the returns from an equity fund against the returns of a fixed income fund. It is also misleading to compare the returns from an aggressive equity fund against returns from a conservative equity fund.

Most fund-rating services employ two useful statistical measures as indications of risk. These are standard deviation and the beta coefficient. The advisor will also find the measures of diversification (R2) and a risk-adjusted measure called the alpha coefficient reported. These statistics come from a field of study known as Modern Portfolio Theory. These statistics, when used properly, may give the advisor an indication of fund risk. They are briefly described here and described in detail in the chapters titled "Risk Adjusted Measures of Return" and "Investment Statistical Concepts and Evaluation Methods."

Standard deviation measures two kinds of risk—that which is due to the movement of the overall market, called "systematic risk," and that which is unique to the fund, called "unsystematic risk." Beta measures only the systematic risk, or that risk directly related to the market. Fund diversification is measured by r-squared. It indicates how much of the fund's return was due to the movements of the market. The alpha coefficient measures how much return the fund earned over expected returns after adjusting the fund for risk (as measured by beta). A positive alpha indicates that the fund added value over the level of risk taken. A negative alpha suggests that the fund did not add value.

These statistics may be reported differently in various reporting services due to differences in the time periods or numbers of observations in the calculations. For example, one rating service may be using 36-month returns starting in June while another may also use 36-month returns, but starting in January. This difference would result in different statistical numbers.

Information ratio. In performance measurement, the advisor seeks managers who consistently outperform their benchmark. In other words, the alpha doesn't just occur in one year, but occurs year after year. This consistency of alpha is calculated by a statistic known as the information ratio.

The information ratio is a measure of consistency in generating excess returns. The name derives from the active manager's bets based on special "information" that the manager has obtained or deduced. It measures the excess returns over a benchmark and then divides it by the standard deviation of those excess returns. It can be one of the most informative statistics. Outperformance is what the advisor is looking for in an active manager. However, outperformance in one period will not translate into future outperformance. What the advisor is looking for is outperformance that occurs consistently. This is what the information ratio seeks to measure. The more consistent the outperformance, the lower the standard deviation of the excess returns. Therefore, the higher the information ratio, the better. The information ratio is not found in all rating services. The information ratio can be calculated by more sophisticated software programs, or an advisor can export the monthly return data from a fund and an appropriate benchmark from a rating service. The information ratio can be calculated through a spreadsheet regression program.

In hiring a mutual fund manager, the advisor seeks exposure to a market segment and purchases fund shares with the intention of having the manager select stocks within the universe. The manager is being hired to select the better-performing securities within a style, not to shift between investment styles. If the manager is hired to purchase large cap growth stocks, the advisor will seek assurance that the stocks purchased are in the large cap growth stock universe. If the manager begins purchasing large cap value stocks instead of growth stocks, this will move the portfolio out of balance. It will also create an opportunity for returns to be dramatically different from what was expected. A large cap growth manager's underperformance of the benchmark by two or three percent might be caused by poor stock picking. However, underperformance of nine or ten percent by the same manager

is usually due to the manager drifting styles. Style drift occurs where the investor believes that the mutual fund manager purchases stocks from one type of style universe, but, in actuality, the fund manager purchases a security from a different universe.

Attribution analysis. Attribution analysis refers to analyzing a mutual fund's return to "attribute" or assign the reasons for the return. While raw performance numbers are useful, the advisor should be concerned with the source of those returns. There are many factors that could have contributed to the return. The goal of performance attribution is to determine what contribution to returns can be attributed to the fund's manager. When a financial advisor is trying to ascertain the alpha added by the manager, whether through either active securities selection or market timing, he or she must first isolate each component over which the manager has control.

The returns of a fund should first be compared to a style-specific set of benchmarks. In this way, an advisor can tell if the fund manager added value or chose the right type of securities that were in favor during the time period being evaluated.

The three factors typically evaluated in attribution analysis are (1) return from stock selection, (2) return from market timing, and (3) return from investment style. Global or international funds have added complexity as they are additionally affected by currency and country allocations. Currency return and risk is sometimes eliminated by the fund manager choosing to hedge the currency exposure. Returns-based style analysis can be used to help determine the skills of the investment.

EXAMPLE 10-19

South Fund has reported performance of 15% versus 10% for the market. This appears to be excellent performance. However, on closer examination it was found that the fund held 10 stocks. Nine of the stocks had a return of 1%. One stock had a return of 141%. The manager had only one winner. Does this indicate skill at stock selection or did these results occur by chance? Performance attribution seeks to answer this question.

The quickest and easiest attribution analysis is to evaluate a fund against a benchmark. For example, a large cap value manager would be compared to a large cap value benchmark such as the Russell 1000 Value Index. If the fund manager is underperforming the benchmark, he or she is subtracting value. If the fund manager is outperforming the benchmark, he or she is adding value.

CAUTION

Many mutual funds compare their performance against a broad benchmark such as the S&P 500 or the Russell 2000 Index. However, if the funds are tilted toward growth or value, the broad benchmarks may not be appropriate. Broad benchmarks may give the appearance that the mutual fund manager is adding value when, in reality, he or she is more properly compared to the style benchmark and may be subtracting value.

PLANNING NOTE

A passive manager should be able to deliver consistent style return. Since there is no individual security selection, the passive fund should match its benchmark less fees.

Stock selection return. The selection return measures the impact of individual security selection decisions on the total return of the portfolio. The issue to be addressed is whether the manager made better or worse security selections than those that are included in the benchmark.

A mutual fund manager typically invests in a particular style, such as small capitalization growth stocks. There are hundreds of securities from which to choose and the manager must decide in which particular companies to invest. This decision is known as the security selection decision. One element of attribution analysis is to

determine how much of the return was due to the fund manager's stock-picking prowess. This calculation is typically performed by s using returns-based style analysis

Returns-based style analysis is a statistical technique that seeks to identify a customized benchmark made up of a combination of long positions in passive indices that most closely replicate the performance of a mutual fund. The passive indices commonly chosen will represent investment styles within an asset class.

PLANNING NOTE

A customized benchmark for a global fund, developed by returns-based style analysis, may be constructed with a large company stock index, a small company stock index, and an international stock index. For a particular time period, the results may show 40 percent international stock, 40 percent large company stock, and 20 percent small company stock.

The percentage attributed to security selection is calculated by subtracting the return of the fund from the return of the customized benchmark. A higher return indicates that the manager added value, while a lower return indicates that the manager subtracted value.

Market timing return. A second element of performance attribution analysis focuses on the manager's selection of industries. The manager may overweight or underweight various industries relative to the benchmark. Moving funds from one industry to another is known as sector rotation. Market timing return measures the value added or subtracted from sector rotation.

The return from market timing is calculated by subtracting the portfolio return from the monthly customized benchmark return. The positive or negative deviations from the portfolio's long-term returns are calculated by using rolling periods. Positive returns indicate that the fund manager has added value over time.

EXAMPLE 10-20

The benchmark for Techno Fund has a weighting of 10% in financial stocks. The fund manager would overweight financial stocks if he or she believed that financial stocks would do well and underweight them if he or she thought that they would do poorly. The effect of these under- or overweightings would be measured by return from market timing.

Alpha return. The alpha is the total return of mutual fund not explained by the customized benchmark or a combination of security selection and market timing. A positive return would indicate that the fund has added value over a passive alternative.

T-statistic. The t-statistic is used in regression analysis to determine the significance or validity of the conclusions. The higher the t-statistic, the higher the validity. For example, a fund may show positive security selection return; however, a t-statistic that is too low invalidates the results. In other words, there would be no conclusive evidence that the alpha was truly positive. When the advisor considers statistics, he or she must accept some possibility of error. To be 95 percent certain in the results, the t-statistic would need to be 1.98 or higher.

To illustrate, the XYZ Fund has the following returns-based style statistics.

	Investor	Manager	Total
Policy	1.2669	0	1.2669
Timing	0	-0.0108	-0.0108
Selection	0	0.2527	0.2527
Total	1.2669	0.2419	1.5088

According to this chart, the investment style attributed 1.2669 of the average monthly return. The activities of the manager attributed 0.2419 and this came from timing, which lost 0.0108 percent per month, and security selection, which added .2527 percent per month. The t-statistic on this analysis was statistically significant at 2.5908, which is greater than the 1.98 required to be 95 percent sure that the sample accurately measured the results.

CAUTION

Software packages are available to the advisor that perform style analysis. The advisor is advised to gain an understanding of the software used and to review the software manual in order to interpret results.

It is important to compare the manager's results to an appropriate benchmark. The returns of managers within a certain investment style are more likely to be similar than the returns of the overall market or the returns of managers who use different investment styles.

At times a manager is fired because he or she failed to keep up with a broad market benchmark. For example, in 1997 a small cap value manager was far more likely to outperform a small cap growth manager. This was not due to the manager's skill or lack of skill but was due primarily to the investment style. Therefore, it is much more important to measure a manager in relation to his or her specific investment style than to a broader group of managers.

There are many checks and balances available for those looking to interpret results provided by a returns-based style analysis. Practitioners can view selection return, market timing return, and total alpha return in assessing a fund's value added relative to its customized benchmark, its value added relative to its average style, and its total value added, respectively.

With passive management, the fund manager's primary role is purchasing securities with set criteria, typically those securities included in a market index and dependent on cash flows to and from the mutual fund. With active management, the fund manager actively seeks to purchase a sample of available securities that he or she expects will outperform available alternatives.

Fund size versus performance. There is a great deal of empirical research that claims that past performance of mutual fund returns is not a predictor of future returns. This lack of correlation may be due to many factors. The financial advisor should seek to improve the odds of future success by understanding several of the factors that may lead to poor future performance. One of the benefits for a successful mutual fund is the ability to attract significant additional assets. However, when asset size grows too large, returns may be negatively affected. This results in making the fund for tomorrow's investor very different from the way it behaved for yesterday's investor. Fundamental statistics based on historical returns may not be indicative of performance in the future.

For example, the Emerging Growth Fund has been recently marketed as having high alphas and r-squares over the past three and five years. In calculating the alpha, the advisor chose to evaluate the fund against the Russell 2000 Growth Index and found that alpha was 5.55 percent and the r-squared was 88.52 percent over the past five years. (An r-squared above 70 percent is often considered significant. Below 70 percent indicates a low correlation and in this case would indicate that the Russell 2000 growth benchmark would be a poor benchmark for comparison purposes. The higher the R2, the better for this purpose. This would seem to suggest that Emerging Growth had an excellent record of outperformance (the high alpha) as well as being a good fund to use in a small cap growth allocation (the high r-squared). However, on closer examination, the Emerging Growth fund size doubled in the past year and the median market capitalization grew from $1 billion as the end of 1996 to over $2 billion at the end of 1997. This indicates that the future r-squared to the Russell 2000 Growth will drop and that the fund will no longer have a high correlation to the Russell 2000 Growth Index. It therefore will not track small cap growth stocks going forward.

In most fund rating services, you will find the total net assets under management. Fund sizes can range from a few million dollars to over $50 billion. As a fund raises more assets, returns in the future might begin to suffer. This is because of liquidity constraints, transaction costs, number of positions, position size, and cash inflows. The notion that fund size can have a negative impact on future returns is very controversial. One debate pointed out that larger firms got to be big by having good performance. The study contends that larger funds have the resources that smaller funds lack, including the ability to hire the best investment talent and to support that talent with the best research and the best trading. Certainly if a fund fails to raise a minimum amount of assets, its

existence going forward will be questionable. Nonetheless, the advisor should be vigilant for signs that the fund has grown too big.

Investment Planning Answer Book by Jay L. Shein, Q 10:36, What are some other fund risk concerns other than risk adjusted measure?

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The liquidity issue is important because actively managed funds are paid to purchase and sell securities. If it takes a long time to execute purchases, or if a manager can no longer buy in sufficient quantity, performance may suffer. In addition, buying or selling large chunks of a company's stock will most likely negatively impact the stock's price. This is known as market impact and works against a larger investor for purchases and sales. Buying a large amount of stock often pushes up the price. Likewise, selling a large block can exert downward pressure on the stock, particularly when the fund manager wants to get out because of negative reports.

The type of investment is also important to consider. It is much easier to buy a large capitalization company than a small capitalization company where much of the stock may be held by insiders. One way that funds limit their size is by closing the fund to any new or additional investors.

CAUTION

Closing a fund to new investors can result in a higher expense ratio than might otherwise be the case. Also, it can result in higher volatility and higher taxes, as redemptions are not offset by additional purchases.

PLANNING NOTE

When reviewing fund size, keep in mind that separate accounts are managed in the same way as a mutual fund. An excellent security will perform as such in both portfolios. Therefore, a fund with $500 million in mutual fund assets and $2 billion in separate account assets is really a $2.5 billion fund.

Liquidity. Some argue that the thousands of mutual funds in existence are too many. Others claim that there are not enough. The heart of the question is how much money a mutual fund can manage effectively. If a manager has more money than his or her style can support, the manager may have difficulty maintaining a positive excess return or alpha.

EXAMPLE 10-21

Assume that Drywet Fund manager, Stan Yvstrevski, has $100 million in assets and does not want to buy more than 5% of any one company because he is concerned that the portfolio would be undiversified. Therefore, the maximum position that he could take would be $5 million in any one stock. Assume also that the fund manager does not want to own more than 5% of the outstanding shares of any one company. With a 5%-of-outstanding-shares restriction, the smallest company that the manager can put the full $5 million into, assuming that he decided that it was a good buy, would be worth $100 million. As the fund grows larger, this number increases. Now asset size increases to $500 million. The new maximum position is $25 million in any single stock and the new company size that the fund manager is able to buy must be worth $500 million. To follow further, if the fund's asset size grows to $1 billion, the smallest company that could be bought with a significant position would be a $1 billion company. The terrific performance record was built at $100 million in assets while the fund manager is now investing in a completely different sector of the market, and Yvstrevski is forced to buy stocks of larger and larger companies. The growing asset base forces him into a more narrow field of investment alternatives, primarily one of larger capitalization stocks. In addition, the fund manager must often buy short-term futures to assure that the money is invested and is not in cash reserves. Short-term futures are taxable as ordinary gain and assure benchmark performance. When an active management fee is paid, benchmark performance is usually not acceptable.

Although the above logic is sound, it is not necessarily clear that as funds get larger, performance gets worse. Studies offer conflicting results. There are many funds whose performance continued to shine long after they became very large. Possibly the largest funds are able to attract the brightest managers and research analysts. Nonetheless, it is important to know that the manager might have additional handicaps that might act to reduce the positive alpha.

PLANNING NOTE

When looking at assets under management, always consider the total dollars under management in a similar style or manner by including both the fund and the separate account portfolios. Unless the manager is picking different stocks for each account, something fairly difficult to justify, the liquidity issue should focus on total dollars. Also, it is important to look at liquidity position by position and not on an average basis.

Transaction costs and market impact. The three primary portfolio transaction costs are brokerage commissions, market impact, and opportunity costs. The most obvious expense is brokerage commission. This can be included to cover any taxes as well. Market impact is the effect that purchasing or selling shares has on the price of the stock. Typically, prices are quoted as a bid (the price that others are willing to pay the holder) and ask (the price that others want for their stock). Bid and ask prices are usually for a relatively small number of shares, known as the quote depth. The difference between the bid and ask price is called the spread. If the quote depth is greater than the amount for sale or purchase, the fund usually buys the stock at the midpoint, or midquote. Often mutual funds have to pay more than the initial ask price for a security when they purchase larger blocks. This is especially important with less liquid or smaller stocks. Likewise, mutual funds often have to accept less than the bid price to unload a significant block of stock.

Excluding commissions, the midquote price at which a stock is listed when subtracted from the last trade is called "market impact." Simply put, market impact is the difference between the price quote prior to the trade less the price at which the trade was actually filled. Typically, the market impact represents the largest portion of a fund's transaction costs. Opportunity costs refer to the difficulty of buying what the fund manager wants in the size that he or she wants to buy it. If the fund manager has to wait for the stock to become available, the opportunity cost is the difference between the price of the stock when the manager decides that he or she wants it and the price that the manager ends up paying for the stock.

Number of positions. As funds grow in size, they often purchase a greater number of stocks. This may lead to negative performance as a manager's best ideas are diluted. Increasing the number of stocks makes it more difficult for a fund manager and his or her team to track stocks and continue to analyze each company in the portfolio's companies well. It is important when considering position size to understand whether the fund manager's style is fundamentally based, as style is a very research-intensive process. If the fund manager makes site visits and talks to management and competitors, the number of positions can be very important. The number of positions is less important if the approach is quantitative. The importance of the number of positions will depend on the active management philosophy of the fund. It is also important to look at the weighting of positions. A small weighting with many stocks approach is very different from an equal weighting approach.

Position size. Position size is something that funds that receive large cash inflows need to be concerned with. Often the easiest thing to do with additional dollars is just buy more of the existing positions. On the buy side, if the cash flows come in evenly, the market impact won't necessarily be great because the fund manager consistently buys small amounts. On the sell side, when the fund manager intends to sell, the liquidity issues begin to cause problems.

PLANNING NOTE

Review position size by comparing the number of positions in the past to the number held today. If cash flows have come in, and position size stays the same, the advisor should consider the impact of position size.

PLANNING NOTE

When considering the market impact of a fund, it is important to understand how the manager's style is affected. A high turnover, momentum-based, or quantitative fund is more than a large cap buy and hold fund. The higher the turnover, the higher the transaction costs.

Cash inflows. In a research study, Kanon Bloch Carre found that size did not hurt future fund performance as much as sharp cash inflows. Funds with top performance attract a lot of attention, which precipitates big inflows. This forces managers to buy securities at what often turns out to be their peaks.

Performance measurement concerns. When evaluating performance reports, there are two areas that should be carefully scrutinized. Back testing is the process of creating a hypothetical performance report. Portable records are those that have been achieved while at a different firm.

Back testing. In back testing, the mutual fund applies its methodology against historical information to create the hypothetical returns that the fund would have achieved had this method been used in the past. There are several problems with this approach. A fund will be creating returns based on 20/20 hindsight. Further, it is doubtful that one would ever see back-tested results that were not superior. Back testing is used by mutual funds with quantitative techniques in their investment process.

Portable records. The Securities and Exchange Commission permits prior performance records of mutual fund managers to be portable and allows advertising in the new fund's prospectus. Federal law does not preclude any information from being included in a prospectus as long as it is not misleading, does not contain material misstatements, and does not obfuscate material that is required to be in the prospectus.

For the financial advisor this information can be valuable, especially with start-up mutual funds, as it would be very difficult to obtain performance data in any other way. However, the advisor needs to evaluate whether the fund manager was 100 percent responsible for the performance record and whether the manager took all aspects of the investment and analysis process with him or her. If portfolio decisions were made with the assistance of a team of analysts or even co-managers who stayed behind, the results may not be indicative of future performance.

Investment performance or star ratings are often the first criteria that clients use to evaluate mutual funds. Unfortunately, these criteria fail to consider the importance of asset allocation. Since the advisor's goal is to design a portfolio that considers the client's risk profile, capital needs, and objectives, it is far more important to design a portfolio and then find investments that satisfy the asset allocation criteria than to simply look for a methodology for finding the "best" mutual fund.

Evaluating performance is easiest with managers who stick closely to a readily identifiable mandate. As the manager's flexibility to divert increases, the difficulty of evaluating performance increases as well. In other words, the more different kinds of risks that the manager takes on, such as market risk, group risk, and individual stock risk, the harder it is to determine whether the manager has added true skill or was just in the right place at the right time.

If there is any unexplained deviation from the norm, whether up or down, this should be considered poor performance. The larger the unexplained performance, the poorer the performance. The ultimate objective of performance measurement is to identify questions that advisors should ask of fund companies to make sure that the advisor has a good understanding of what can be expected. Evaluation against a universe, peer group, or portfolio opportunity distribution tells the advisor whether the sample performance results were good or bad relative to other opportunities. Further investigation such as attribution analyses and manager questionnaires will give the advisor the reasons for success or failure and can help reveal the manager's level of skill.

Investment Planning Answer Book by Jay L. Shein, Taxes

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Though not commonly discussed or a major concern of many clients, the consideration of the tax implications of investing in mutual funds has become more apparent. This has been most adequately demonstrated by certain fund families creating "tax managed" mutual funds. It should be noted that portfolios should be managed with awareness for taxes, a "Tax Aware" thought process. The economic opportunity of decisions should be the driving force, not taxes.

Investment Planning Answer Book by Jay L. Shein, Q 10:37, What is the importance of tax management?

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Taxes are the largest expense that a private investor in mutual funds confronts. Therefore, the advisor should make every effort to minimize this tax burden. This effort is made more difficult by the fact that most mutual fund managers are concerned with pretax results and rarely discuss the impact of taxes on shareholders' returns. Clients are also accustomed to evaluating pretax results and are mainly unaware of the impact of taxation.

The tax cost of short-term trading has led many advisors to choose funds with more tax-efficient strategies such as long-term holding and low turnover. The mutual fund process of annual distributions creates multiple tax lots. In the case of partial redemptions, the advisor has an opportunity to choose the most tax-efficient method of determining the cost basis of shares. Phantom income occurs where a fund makes a large taxable distribution that subjects the shareholder to current taxation even though the shareholder has not actually received the income or has a loss on his or her portfolio. Several fund companies are now offering "tax managed" mutual funds. These tax managed funds attempt to add value by tax managing the portfolio. The advisor must have sufficient knowledge to distinguish between products that truly add value and products that are marketing "gimmicks."

Investment Planning Answer Book by Jay L. Shein, Q 10:38, How are mutual fund investors taxed?

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Mutual fund investors are subject to income and capital gains taxes similar to the taxes on the individual assets that they hold. However, unlike individual securities whose capital gains are taxed only at the time of sale, it is not necessary to sell a mutual fund to incur capital gains tax. Mutual funds must distribute to shareholders a minimum of 90 percent of the income and net capital gains that have been generated during the year. The sale of securities by the fund manager can generate short-term and long-term capital gains taxes that are paid by shareholders in the year in which the securities are sold. It sometimes happens that a shareholder has an annual loss on a mutual fund position and still incurs capital gains taxes on the fund that year. Mutual funds make distributions based on the fund's cost basis and time held, not the shareholder's cost basis and time held.

When fund shareholders sell shares at a profit, they are taxed on the capital gains realized. Or, the fund shareholder may recognize a capital loss if their ending net asset value is lower than their final cost basis. Tax rules allow the shareholder to choose, during a partial sale, which lot to sell. These partial-sale options are single-category average cost, double-category average cost, specific identification, and first in, first out (FIFO). By choosing the most beneficial method for lot selection, the advisor will assist the client in deferring taxes as long as possible.

Once the shareholder chooses single-category or double-category average cost method, the chosen method must be used for future redemptions or tax return computations of that mutual fund. If the shareholder uses the single-category average cost method, then the cost basis in the shares is determined by dividing the total cost of all mutual fund shares purchased to date (the cost of purchases and reinvestment) by the number of shares held. The funds are assumed to be sold on a FIFO basis for purposes of determining long-term or short-term gain. If the shareholder uses the double-category average cost method, all mutual fund shares sold must be placed either in the category of shares held for one year or less or the category of shares held for longer than one year.

The specific identification method give advisors the most flexibility in determining the amount and type of gain or loss from the sale of mutual fund shares, as it allows shareholders to choose which specific fund shares are being sold at the time of a partial redemption. The shareholder must receive written confirmation from the custodian of the particular shares sold before using this method. If none of the three methods above are elected, then the FIFO method must be used. Under this method, the first shares purchased are assumed to be the first shares sold. The FIFO method typically produces the greatest capital gains.

Investment Planning Answer Book by Jay L. Shein, Q 10:39, What are the factors affecting mutual fund tax efficiency?

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In evaluating a mutual fund's tax efficiency, the advisor should pay attention to effective turnover and cash flows. These two factors, one within the fund manager's control and one outside the fund manager's control, will have the greatest impact on whether taxes are paid annually or deferred.

The increase in turnover may be due to the fact that the Taxpayer Relief Act of 1997 [P.L. 105-34] (TRA '97) eliminated the "short-short rule" that prohibited a fund from realizing a substantial portion of its income on holdings of less than 30 days. Some believe that a high turnover indicates capital gains liability. *Effective* turnover is a measure based on the percentage of accumulated unrealized capital gains that are realized and distributed on an annual basis. The manager of a fund with a high turnover may offset gains with losses such that the net capital gains recognized by shareholders is minimal.

A fund's cash flow affects the tax efficiency of a fund in that positive cash flows allow the manager to buy without selling. Redemptions may force a fund to sell shares and thereby incur large capital gains.

Investment Planning Answer Book by Jay L. Shein, Q 10:40, What are tax-managed mutual funds?

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Some mutual funds have been created specifically to focus on tax management. These tax-managed funds use portfolio tools available to all fund managers, although all fund managers do not consider taxes when managing their funds. Techniques used to minimize taxes include buy and hold, loss offset trading, loss harvesting, tax lot accounting, buy and sell strategies, gains tilting, and tax aware trading.

The buy and hold strategy involves buying a passive, well-diversified, low turnover, portfolio index and holding it over time. Loss offset trading matches unrealized losses with realized gains, typically at the end of a tax year. In the loss harvesting method, the manager harvests losses by reviewing securities on a lot-by-lot basis and using losses to offset gains continually during the year. A disadvantage to this method is that it may lead to an increasingly overweighted portfolio as losses are sold and gains are increased. Tax lot accounting, which will not work if the shares with the highest cost basis are not long-term, evaluates all trades and sells lots that either are a short-term capital loss or have the highest cost basis (highest-in, first-out (HIFO)).

The buy strategy prefers capital gains to dividends and looks for long-term holdings. Also, the buy strategy prefers growth stocks to stocks whose value has fallen and may suddenly rise, and the buy strategy avoids concentrated initial positions. The sell strategy harvests losses. In addition, the sell strategy uses a higher "hurdle rate" in deciding to sell one stock and buy another, since the sale of a stock may trigger capital gains.

Gains-tilted investing assumes that, since value stocks tend to have higher tax consequences than growth stocks, growth stocks tend to be underpriced for the taxable investor. Assuming this conclusion is accurate, taxable investors should tilt their portfolio toward growth stocks. However, increasing the number of growth positions will generally increase the volatility of the portfolio.

The tax-aware fund manager calculates returns adjusted not only for transaction costs, but also for capital gains taxes. This type of manager must estimate returns, capital gains, and the time frame in which he or she expects a security to reach its intrinsic value so that it can be replaced with an undervalued security. In practice, this process is extremely difficult and requires sophisticated computers to evaluate the implications of thousands of possible trades.

Investment Planning Answer Book by Jay L. Shein, Q 10:41, What are the weaknesses of tax-managed funds?

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Some advisors have questioned the validity of funds designed specifically for tax management. The criticisms revolve around the fact that the tax-managed techniques may focus more on minimizing taxes than on maximizing after-tax returns.

One disadvantage of tax-managed funds is that by selling too early to realize a gain or loss, the manager may miss out on opportunistic movements in the price of the stock. Another disadvantage is the redemption fee (fee for selling a fund within a certain time period after purchase) that most tax-managed funds impose in order to minimize cash flow disruptions. Furthermore, a shareholder may be better off holding separate stock and bond funds instead of one tax-efficient balanced fund.

Investment Planning Answer Book by Jay L. Shein, Q 10:42, How does one use mutual fund distribution structure to one's advantage?

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A mutual fund has a unique structure whereby investors increase their worth by owning an increasing number of shares at a relatively flat price. This process, the root of most tax-efficiency arguments, can actually be a benefit to the shareholder because capital gain distributions provide a volatile share price. This volatility means that there will most likely be specific shares that a shareholder owns at a loss. When managing the portfolio, the advisor will look at the individual lots and sell those lots with either short-term losses or long-term capital gains. This opportunity is usually not available with individual stock positions.

For the taxable shareholder, volatility creates opportunities for losses. The mutual fund structure forces shareholders to hold fund shares at a higher cost basis and creates multiple lots with different cost bases. In the event there are losses, shares with a higher cost basis will have a value in offsetting gains from other investments, thus enabling the to rebalance the portfolio without incurring taxes or simply raising the basis for eventual liquidation.

Since a mutual fund that realizes a loss cannot pass that loss onto shareholders, a shareholder may be able to earn gains from a fund without being subject to a capital gain distribution. Since funds must distribute realized capital gains at least once a year, the advisor should consider selling the fund the day before the distribution and repurchasing the fund the day after the distribution. If this is done, the shareholder will realize the shareholder's actual gain but will avoid realizing phantom gain. Transaction costs should be considered in this decision, as well as the fact that the fund may have changed the distribution date without notification.

There are two strategies for realizing a loss so that it actually becomes a tax-free gain. The first strategy is to sell shares in one mutual fund with a loss and purchase shares in a similar fund to avoid being out of the asset class in the event of a sharp upward movement. The second strategy is to sell one mutual fund, invest the proceeds in cash, and, if a loss is realized, wait 31 days to repurchase. Although the second method incurs the risk of a sharp upward movement, an alternative fund may not be available to swap into.

Investment Planning Answer Book by Jay L. Shein, Q 10:43, How does one time the purchase?

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Conventional wisdom suggests that advisors should be cautious when purchasing a fund close to a distribution date. Such a purchase may cause the advisor's client to realize gains that occurred before investing in the mutual fund. Although these distributions will increase the client's cost basis, care should be taken to minimize what is called "phantom income." Typically shareholders should avoid purchasing shares in the two months prior to a fund distribution.

Another side to this conventional wisdom is discussed in a published paper by this author [Jay L. Shein, *Is Opportunity Cost a Source of After-Tax Alpha?*, J. of Inv. Consulting, vol. 2, no. 1, Nov. 1999, pp. 12-21] which looks at just one component of the tax drag, the opportunity cost of waiting in order to avoid taxes. This paper found the opportunity cost of waiting to buy a mutual fund can cause a loss of positive after-tax alpha. This article demonstrates that deciding when to invest does have an opportunity cost that should be considered. The better-informed advisor and investor realize that tax-motivated decisions can be ineffective. For the time periods in this study, the investor would usually have outperformed the money market and Treasury bills strategies by investing in a fund in the Universe studied on an after-tax basis rather than waiting until January 1. Even with consideration for taxable distributions, investing in a Universe of funds or an index fund most likely will be beneficial to the investor. Waiting to make an investment decision could always have an opportunity cost. For taxable investors, the many decisions the advisor and the investor confront must include consideration of an opportunity cost. Decisions made with taxes as the only motivation may be costly in the long run.

Investment Planning Answer Book by Jay L. Shein, Q 10:44, What is the importance of asset placement?

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With changes to the income tax laws and the treatment of capital gains, the importance of asset placement has been reduced. Asset placement is important because taxation on earnings from a retirement plan is initially deferred, but, upon distribution, the earnings may be taxed at higher ordinary income brackets. Taxable accounts can take advantage of reduced capital gains tax rates.

Nonetheless, advisors & investors should strive to place the most tax-inefficient assets in retirement plans and the most tax-efficient assets in a taxable portfolio. A general rule of thumb is that the closer the numbers between pretax and after tax returns, the more tax efficient the fund. Funds that are most tax efficient are those that trade rapidly and distribute to shareholders short-term capital gains. Passive funds that pay little in capital gain distributions should be considered for the taxable account. Often, fixed income securities are best held in taxable portfolios due to the availability of tax-exempt municipal bonds.

Investment Planning Answer Book by Jay L. Shein, Q 10:45, What is after-tax performance analysis?

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Tax effects cause traditional performance figures to give a false impression of actual returns for a taxable investor. Although difficult to measure, the tax effect is significant. It is difficult to determine after-tax returns because taxes affect each fund differently and mutual fund managers do not report after-tax rates of return. The major fund rating services rank performance based on returns net of fees, but not after taxes. When an advisor considers the effect of annually paying capital gains taxes on trades within the mutual fund, it may be difficult for actively managed mutual funds to outperform their benchmarks on an after-tax basis.

Although there are several approaches, the two main approaches to determining after-tax return are (1) to net out all taxes when paid and (2) to assume that the fund was fully liquidated at the end of the period. The first method uses an assumed income tax rate (usually the highest). The calculations under this method can be very complicated, as municipal bonds may be taxable to some but not all investors (depending on the state), and the return of principal is not taxable. The second method assumes that the fund was liquidated at the end of the reporting period. Using this method makes sense for fixed income managers who are not concerned with capital gains. This method may understate the returns achievable on an after-tax basis if a manager is planning on holding securities for many years. Another method used in after-tax performance standards for calculating investment return after taxes using a method called *realized method*. This method assumes that taxes are due when incurred, such as January of one year, and not when paid, such as April of the following year. Furthermore, this method does not consider unrealized gains and losses.

Investment Planning Answer Book by Jay L. Shein, Q 10:46, What is the importance of tax management?

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Tax management is very important because taxes can be a significant cost to private investors. These costs can be greater than management fees, commissions, brokerage costs, and even sales loads. While some tax planning can be obvious, such as purchasing municipal bond funds for a high-tax-bracket investor, many advisors and their clients fail to consider the implications of taxes paid as a result of annual fund distributions. Part of this lack of consideration comes from the clients' focus on pretax benchmarks such as the S&P 500. The advisor may often be faced with questions about performance when the returns lag popular broad market indices. However, the client fails to appreciate the advisor's objective of maximizing after-tax returns, not maximizing pretax returns or minimizing taxes. Taxes should not be the driver of all decisions. The opportunity and economics of a decision must always be considered when choosing a fund.

Many large capitalization fund managers claim that their performance objective is to earn two percent or 200 basis points of excess return over a benchmark, typically the S&P 500. Yet those 200 basis points are almost always before taxes. The tax cost of short-term trading alone can give those potential 200 basis points of outperformance right back. On an after-tax basis, the great difficulty of achieving out performance large enough to surpass a passive benchmark after taxes has led many financial s to mutual funds that concentrate on tax-efficient strategies such as long-term holding periods and low turnover.

EXAMPLE 10-22

Jane Evans has 2 mutual funds of $100,000 each. Smart Fund is a buy and hold fund that purchases growth stocks paying no dividends and appreciating by 10% per year. After 10 years, this portfolio is worth $259,374.25. If Evans liquidates Smart Fund, she is subject to long-term capital gains taxed at a 15% rate. Therefore, assuming that the taxes are paid at liquidation (this is not the case at death where there is a step up in cost basis to market and income taxes are avoided completely), the portfolio is worth $220,468.11. Activity Fund is one that has significant turnover and pays out all of its income in short-term capital gains but appreciates by 10% per year. Since the short-term capital gains rate for a high-tax bracket investor is approximately 35%, after taxes, this portfolio is worth only $168,593.26. The difference is due to the annual payment of taxes with Activity Fund. Although both mutual funds earned 10% a year, a properly informed taxable investor would normally prefer Smart Fund, yet Evans would be unable to make this determination based on pretax returns. The dollar difference is due to different tax rates based on capital gain holding periods and the earnings from deferring the taxes owed.

Mutual funds have many unique features that differ from individual securities, allowing for a great deal of tax management. Through the process of annual distributions, mutual funds create multiple tax lots. At any particular time, it is likely that some of those lots will be at a loss. These losses could be continually used to offset gains, rebalance the portfolio, or simply permit tax management for distributions. Transactions cost should be considered when selling these tax lots.

Mutual funds are also subject to partial redemptions, in which some shares are sold but the entire position is not liquidated. In this case, the advisor will have an opportunity to choose the method of tax recognition. In other words, there are several ways to determine the shares' cost basis and the advisor should choose the appropriate one.

Traditional performance figures do not give an accurate picture of returns for the taxable investor as they are almost always calculated on a pretax basis. Returns are typically reported by mutual funds net of fees, but not after taxes. *The Wall Street Journal, Consumers Report, Fortune, Forbes, Business Week,* and *Money Magazine* frequently feature mutual fund performance. These reports fail to include or even discuss the impact of taxes

since there is no requirement to report after-tax returns. Yet, when taxes are considered, the results may change considerably. There also is considerable debate and controversy on how after-tax returns should be calculated.

Even within mutual fund communications and advertisements, taxes are rarely discussed. Fund wholesalers almost always emphasize pretax returns. Fund managers are consistently compensated based on pretax returns. This leaves very little incentive for the manager to monitor tax implications and places more importance on the advisor's awareness of the impact and consequences of choosing poorly tax-managed funds.

If the mutual fund manager fails to consider taxes in portfolio decisions, the effect on a client may be dramatic. This can be especially difficult for the client when he or she receives a tax bill on income not actually earned or received. A situation known as "phantom income" occurs when a fund makes a large taxable distribution to a shareholder. Even though the shareholder has not received the income, or may even have a loss on his or her portfolio, the investor is subject to current taxation.

While tax considerations have been relegated to an afterthought in the past, there is a movement to recognize their importance going forward. Several fund companies have created "tax-managed" mutual funds that attempt to add value through tax managing the portfolio. Other fund companies have changed accounting procedures in order to sell shares that provide the greatest tax benefit first. As innovations are created, the advisor needs a well-grounded understanding of the issues to know whether the products can truly add value or are merely marketing "gimmicks." The financial impact for an advisor's client can be dramatic if tax management is ignored. However, gains from tax reduction should always be evaluated against other portfolio design goals as well as the impact on after-tax performance. Designing portfolios for the sole purpose of minimizing taxes may have negative implications on the liquidity of the portfolio, the portfolio's risk profile, diversification, and cash flow. Still, the tax awareness movement in the future will probably force some index providers, such as Standard and Poor's, to begin to list an after-tax S&P 500 index. These would be welcome and helpful changes.

Investment Planning Answer Book by Jay L. Shein, Q 10:47, What are the basic tax rules?

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Mutual funds are required to distribute to shareholders a minimum of 90 percent of the income and net capital gains (total capital gains less capital losses) that have been generated during the year. Nearly all mutual funds do so. This "passthrough" was established in the Revenue Act of 1936, [P.L. 74-740] and today it is found under Subchapter M of the Internal Revenue Code.

The reason that funds distribute income and capital gains is to avoid a nondeductible four-percent excise tax at the fund or investment company level. [IRC § 4982] A corporation owning similar investment assets and operated much like a mutual fund is taxed on the income and capital gains. The corporation's shareholders are then taxed again when they receive dividends or realize capital gains. Mutual funds seek to avoid this double taxation by making annual distributions.

Capital gains are currently taxed at ordinary income tax rates if they are considered short-term gains, i.e., the security is held less than 12 months. Gains earned on securities held longer than 12 months are long-term gains. However, for low-tax-bracket investors, most of the issues discussed herein are not relevant and these investors can often be treated the same as tax-exempt investors. Currently, qualified dividends are taxed at 15 percent which will expire December 31, 2012, while ordinary dividends are subject to ordinary income tax rates. [IRC §1]

Investment Planning Answer Book by Jay L. Shein, Q 10:48, What is tax treatment during ownership?

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During ownership of a mutual fund, shareholders are taxed on income and net capital gains distributed by the funds. Mutual funds make distributions based on the fund's cost basis and time held, not the shareholder's cost basis and time held. Income is derived from interest and dividends earned on the fund's investments; shareholder capital gains derive from net realized short- and long-term capital gains realized internally by the fund.

Income and capital gain distributions are taxable to the shareholder, whether or not they are reinvested. The gain recognized is based on how long the mutual fund has held the security. The shareholder must treat any net long-term capital gain distributions as such regardless of how long he or she has held the mutual fund shares. Conversely, the fund may distribute short-term gains even though the shareholder has held the fund for at least one year. If the gains are reinvested back into the mutual fund, the shareholder's cost basis increases to reflect additional shares purchased. In this way, the mutual fund shareholder begins to accumulate shares at different times, in different lots, and with a different cost basis. This aspect is an important difference between individual securities and mutual funds.

Not all mutual fund income generated is taxable. For example, just like individual securities, interest from U.S. government bonds is exempt from state taxes, and interest from municipal bonds is exempt from federal taxes and from taxes in the state in which the bond was issued.

Investment Planning Answer Book by Jay L. Shein, Q 10:49, What is the tax treatment on disposition?

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Fund shareholders are taxed on capital gains realized when they sell fund shares at a profit. Fund shareholders may also recognize capital losses when they sell shares if their ending net asset value is lower than their final cost basis. At disposition, mutual fund shareholders are taxed on the ending net asset value (NAV), which includes undistributed income and capital gains less the final cost basis. The final cost basis is determined by adding to the original purchase price any distributions of the fund that have been taxed in a prior year and reinvested.

Mutual fund purchase prices are determined by the NAV plus any applicable sales charges. The NAV is calculated each business day after the close of trading on the New York Stock Exchange, typically 4:00 p.m. Eastern Standard Time. The NAV is calculated by adding up the total assets of the fund, i.e., stocks, bonds, cash, and accrued interest, and dividing by the number of outstanding fund shares.

The tax rules concerning the sale of all fund shares closely parallel the rules pertaining to the sale of individual stock. If a fund shareholder sells all of the shares owned at one time, the computation of the tax (cost) basis in the redeemed shares is straightforward. The shareholder calculated the basis by adding the cost of subsequent purchases and reinvested distributions to the original purchase price of the fund shares.

When a shareholder redeems only a portion of the fund shares, which is very common when a financial advisor periodically rebalances a client's portfolio, the determination of gain or loss is much more involved. These rules can be rather complicated and what follows is a basic introduction.

The financial advisor, in conjunction with the client and the client's tax advisors, may choose one of four methods for determining the tax basis in fund shares that are redeemed. The four methods are (1) single-category average cost, (2) double-category average cost, (3) specific identification, and (4) first-in, first-out (FIFO). The IRS provides this flexibility for taxpayers because, over time, by reinvesting dividends and capital gain distributions as well as purchasing additional shares, shareholders or taxpayers will have acquired shares in the fund with different original costs. [IRC §1012]

COMMENT

Different methods of tax computations may be used for different mutual funds held in a portfolio.

Investment Planning Answer Book by Jay L. Shein, Q 10:50, What is single-category average cost?

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One approach to computing the tax basis for a partial redemption of mutual fund shares is to elect the average cost method if the mutual fund shares are held by a custodian. Within the average cost method, the shareholder may use either the single- or double-category approach. Using the single-category approach, a shareholder determines the cost basis in the shares sold by dividing the total cost of all mutual fund shares purchased to date (the cost of purchases and reinvestment) by the number of shares held. Many mutual fund groups will provide this information to their shareholders. For purposes of determining whether the resulting gain is long or short term, the shares are assumed to be sold on a first-in, first-out (FIFO) basis. Thus, the first shares purchased are deemed the first shares sold. Therefore, one uses the average cost basis for all shares, not the original cost basis of shares purchased plus those acquired by reinvesting distributions.

Once this method is chosen for his or her tax return computations, the shareholder must continue to use it for future redemptions of that mutual fund.

Investment Planning Answer Book by Jay L. Shein, Q 10:51, What is double-category average cost?

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Using the double-category approach, all mutual fund shares sold must be placed into two categories: shares held for one year or less and shares held for longer than one year. Within each of these categories, an average cost per share is computed. Because the shareholder can choose from which category the shares are redeemed, he or she can control the gain or loss recognized as well as the character of the gain recognized, i.e., short term versus long term. Like the single-category average cost, a shareholder must continue using the same method for future redemptions of that mutual fund for future tax return computations.

When the double-category average cost approach is chosen, the shareholder must instruct the mutual fund custodian as to how many shares will be redeemed from the group of shares held for a year or less and how many will be redeemed from those shares held for more than a year. Written confirmation of these instructions must be received from the custodian to substantiate the shareholder's choice of redeemed shares. Otherwise, the shares will be considered sold first from the long-term shares and then from the short-term shares.

Investment Planning Answer Book by Jay L. Shein, Q 10:52, What is specific identification?

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The method that gives the most flexibility in determining the amount and type of gain or loss from the sale of mutual fund shares is the specific identification method. Under this method, shareholders may choose which specific mutual fund shares are being sold at the time of a partial redemption. To use this method, shareholders must make an adequate identification of the shares being sold by informing the custodian in writing as well as providing the purchase dates and cost of those shares. Finally, the shareholder must receive written confirmation from the custodian of the particular shares sold before using the specific identification method.

Investment Planning Answer Book by Jay L. Shein, Q 10:53, What is first-in, first-out?

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If neither the average cost nor the specific identification method is elected, investors must use the first-in, first-out (FIFO) method. In this method, the first shares purchased are assumed to be the first shares sold. Because older shares are typically purchased at lower prices, this method will usually produce the greatest capital gains and resulting tax of the four available methods.

Investment Planning Answer Book by Jay L. Shein, Q 10:54, Which factors affect mutual fund tax efficiency?

Taxes incurred by a mutual fund are affected by the actions of (1) the fund manager through turnover of individual securities, and (2) other investors in the fund through deposits and withdrawals.

Turnover has become an increasingly important factor because it has. This may continue to rise because the Taxpayer Relief Act of 1997 [P.L. 105-34] (TRA '97) eliminated the "short-short rule" that prohibited a fund from realizing a substantial portion of its income on holdings of less than 30 days. Turnover should be closely monitored by the advisor. It is estimated that nearly 30 percent of capital gains are short term, which indicates that many fund managers are not considering the tax impact on taxable investors.

A fund's cash flow also affects the tax efficiency of a mutual fund. If the fund has a positive cash flow, the fund manager can continue to acquire new positions without selling existing positions in an effort to raise cash. Cash flows also have the impact of spreading gains over a larger shareholder base. This benefit can be reduced when cash flows are reversed. Funds are forced to sell shares with large capital gains to provide cash to pay for redemptions. This is further aggravated by the fund having to spread those gains out to a smaller shareholder base.

Investment Planning Answer Book by Jay L. Shein, Q 10:55, What is portfolio turnover?

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Perhaps the most commonly used technique to evaluate a fund's tax efficiency is to look at the mutual fund's turnover rate. When mutual funds sell securities that have greatly appreciated over the past few years, such as Microsoft, Intel, Coca-Cola, and Gillette, there will be a large realized capital gain. Current law penalizes investors who realize short-term capital gains with a higher tax rate. Therefore, some believe that high turnover is an indication of capital gains liability. Although the turnover statistic is a good starting point, the conclusion that funds with high turnover are tax inefficient is not necessarily accurate. A more accurate indication of capital gains liability is "effective turnover."

Effective turnover is a measure based on the percentage of accumulated unrealized capital gains that are realized and distributed on an annual basis. For the taxable client, total turnover is not as important as the frequency at which capital gains are realized.

A fund manager who focuses on the tax impact to his or her shareholders will hold stocks with large capital gains to avoid their realization and will quickly sell off losses. These losses are then offset against gains. In this way, a mutual fund may show a great deal of turnover; however, since the gains and losses are offset, the net capital gain recognized by shareholders may be minimal. By holding the best performers, a manager is deferring for shareholders the majority of the tax liability.

Another important area of research has been conducted on how much turnover is required to cause large tax consequences. Although effective turnover is the most appropriate measure of turnover to evaluate, these statistics are not always available. Some fund companies claim that they are tax efficient because they have low levels of overall turnover. The advisor, however, cannot necessarily make this conclusion. Turnover at very low levels is the most critical. Some studies have shown that turnover above 30 percent will reduce most of the tax-deferral benefits. Most fund companies consider 30 percent turnover to be low. Once high levels have been reached, nearly all of the tax damage has been done. A turnover rate greater than 100 percent will be the same as turnover at 100 percent if all of the positions are sold. This is because once all of the capital gains are realized, the cost basis for all securities is short term. Hence, whether the turnover of the portfolio of securities is once a year or 25 times a year, the tax impact will be the same, that is, short term.

PLANNING NOTE

Research has led to the conclusion that very low turnover funds, such as the S&P 500 Index funds, tend to be very tax efficient, leading some advisors to conclude that passive funds with low turnover are tax efficient. While funds that stick to a buy and hold strategy, such as the S&P 500, do tend to be tax efficient, not all passive index funds are as tax efficient as they appear. Specifically, indices that track small- and mid-sized companies as well as value companies may not be as tax efficient as larger indices. This is because they have much higher levels of turnover. As a company outgrows the index, fund managers are forced to either sell out of the stock and realize the gain, or keep the security and move away from the index mandate. Many indices are weighted by capitalization and the largest positions become the best sale candidates. This is less a factor for large cap growth indices because, as small companies fall out, they tend to be the smallest positions. Those that are no longer trading as growth stocks are usually companies whose security prices have fallen.

Investment Planning Answer Book by Jay L. Shein, Q 10:56, What are investor cash flows?

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Recent large capital inflows into mutual funds have allowed funds to change their portfolios with a minimum of realized capital gains. These inflows allow a fund to increase the cost basis on individual securities within the fund. Thus, the fund manager may be in a position to cause partial sales of positions without creating any additional tax liability.

When shares are redeemed, however, the opposite occurs. Now the fund manager is forced to sell shares of stock. Some of those shares have been held for many years. When they are sold to pay for redemptions, the fund will sell shares with very low cost basis.

Investment Planning Answer Book by Jay L. Shein, Q 10:57, What are taxed-managed mutual funds?

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Recently, a new category of mutual funds was created and specifically designed to minimize shareholders' tax liability by using a variety of techniques to reduce potential taxable distributions. Charles Schwab introduced what is believed to be the first mutual fund designed explicitly to minimize capital gains. The Schwab 1000 fund, introduced in 1991, has yet to make a capital gain distribution.

Tax-managed mutual funds should be evaluated by the advisor to determine whether they truly add value by maximizing after-tax returns or whether they fail to achieve their objective. To determine whether tax-efficient funds are beneficial, the advisor must evaluate whether the tax benefits of tax-managed funds are enough to offset the potential loss of return. In particular, the advisor should understand what the portfolio manager is doing differently for a tax-managed

Investment Planning Answer Book by Jay L. Shein, Q 10:58, What is buy and hold?

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The simplest method is to buy a passive, well-diversified, low turnover, portfolio index fund and hold it over time. Trading stocks is what causes a mutual fund to realize gains. If no trading occurs, there will be no tax liability until the shareholder sells his or her shares in the mutual fund.

Investment Planning Answer Book by Jay L. Shein, Q 10:59, What is loss offset trading?

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Another simple method to minimize capital gains is a tax loss offset strategy. This involves matching unrealized losses with realized gains in a portfolio, typically at the end of a tax year. The portfolio manager evaluates the unrealized capital gains and losses in the portfolio, selling unrealized losses and matching those losses with a comparable amount of realized gains.

Investment Planning Answer Book by Jay L. Shein, Q 10:60, What is loss harvesting?

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Another technique is to actively harvest losses continually during the year. In loss harvesting, a fund manager reviews securities on a lot-by-lot basis, selling off those securities with unrealized losses. The manager then uses the losses to offset gains in other stocks. Lots with short-term losses are the most advantageous to sell. By realizing short-term losses and offsetting them against short-term gains, normally taxed as ordinary income at tax rates as high as 35 percent, the manager can minimize tax liabilities. Long-term losses are used only to offset long-term gains. The loss must be large enough so that the tax savings from netting realized losses against gains exceed the transaction costs. These costs include both the brokerage commission and the impact of the market by the fund manager selling shares at the bid price and repurchasing shares at the asking price.

One fund manager has established a rule of selling a stock that has taken a 10 percent loss, even if the stock is still favored. He then repurchases the stock after 31 days. Waiting 31 days corresponds to the IRS's "wash sale" rule, which bars recognizing a tax loss if the seller repurchases the stock within 31 days. [IRC §1091] If this is done, the new purchase must include in the tax basis of the investment bought the proceeds of the security in a wash sale. During this time the manager may elect to purchase a stock in the same industry in order to maintain similar exposure.

EXAMPLE 10-23

The Carrss Fund manager might sell stock in Ford to realize a loss and, while waiting the 31 days to repurchase Ford stock, purchases stock in General Motors. This will continue to give the fund portfolio exposure to auto stocks. Yet the manager has added a level of unique or unsystematic risk to the portfolio. General Motors stock is not Ford stock and may be subject to price changes that do not affect Ford stock.

One potential pitfall of this approach is that it leads to an increasingly overweighted portfolio as losses are sold and gains are increased. This is because the winners are allowed to increase in value while the losers are quickly sold off. The result will be a less diversified portfolio since more and more of the weight of the portfolio will be in stocks with large gains. These gains will be concentrated in only a few stocks. While minimizing net capital gains by offsetting gains and losses might be beneficial in the short term, in the long term, the portfolio might be increasingly vulnerable to "lock-up." This occurs when there are so many unrealized gains in the portfolio that no trading is possible without triggering huge capital gain tax liabilities. Once the portfolio reaches this "lock-up," the manager can no longer actively add value. The portfolio also becomes riskier as the best performing stocks grow to a larger percentage of the portfolio.

Investment Planning Answer Book by Jay L. Shein, Q 10:61, What is tax lot accounting?

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The process of tax lot accounting is to evaluate all trades and sell lots that either are a short-term capital loss or have the highest cost basis (highest-in first-out, or HIFO). This defers the capital gain as long as the mutual fund holds any position in the stock. Be aware that HIFO will not work if the shares with the highest cost basis are not long term. The correct strategy is to sell the long-term shares with the highest cost basis.

Accounting methods are very important for tax-managed mutual funds as well as all for mutual funds purchased by taxable investors. They involve taking care to sell the most tax-beneficial lots first. Although all funds can implement tax lot accounting, it is not a fund manager issue but a fund accounting issue. The fund manager makes the appropriate transaction and, after the sale, the fund accounting department chooses which lots to sell. Although all funds should implement tax lot accounting, not all funds do.

PLANNING NOTE

Tax lot accounting is also important in managing a portfolio of mutual funds. Since funds with reinvested dividends and capital gains have a variety of lot sizes, the advisor will be able to rebalance the portfolio, without a tax liability, by selling those lots that have losses or minimal gains.

Investment Planning Answer Book by Jay L. Shein, Q 10:62, What are buy and sell strategies?

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The buy strategy for tax-managed funds is one that (1) prefers capital gains over dividends taxed as ordinary income, (2) looks for long-term holdings, (3) prefers growth stocks, not stocks that have fallen deeply in value and might spike up in the short term, and (4) avoids concentrated initial positions. The sell strategy is one that (1) harvests losses, and (2) uses a higher "hurdle rate" for break-even sale decisions. This "hurdle rate" refers to the decision that a manager makes for selling one stock and buying another. In a tax-exempt world a manager will change stocks if one stock has a higher expected future return than a current holding. For a taxable investor, however, the sale of an existing position will trigger capital gains. This capital gain, when added to the transaction costs of buying and selling stocks, may make the trade unprofitable.

EXAMPLE 10-24

The Manage Taxes Fund manager incorporates taxes into the normal buy and sell decision process similar to the way transaction costs are considered. If Chevron stock has a higher expected return than Exxon stock, but the Exxon stock has large unrealized capital gains, the Exxon stock is not traded for the Chevron stock unless the return that is expected on the Chevron stock is large enough to offset the tax on the unrealized gains in the Exxon stock.

Investment Planning Answer Book by Jay L. Shein, Q 10:63, What is gains-tilted investing?

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Some advisors believe that stock prices are set on an institutional, tax-exempt framework where the tax impact of buying and selling stocks is not considered. Since taxable investors prefer stocks that have low dividends that can be held for the long-term gains, it follows that taxable investors prefer growth stocks. In a taxable world, growth stocks should be priced to provide a lower return than value stocks because value stocks have higher tax consequences. In the real world, if taxes are not considered in the valuation of stocks, and if tax-exempt investors do not have a preference for growth or value stocks, it follows that growth stocks tend to be underpriced for the taxable investor.

If this conclusion is accurate, the planning strategy for taxable investors is to change portfolio design from style-neutral, where the portfolio has an equal number of growth and value positions, and tilt it toward growth stocks. The advisor then purchases fixed income funds that stick to tax-free municipal bonds and buys equity funds that avoid dividend-paying securities and focus on companies earning through capital gains.

Although there may be some tax benefits of a tilting strategy, the impact on the overall portfolio increases volatility. Lower-risk assets, such as utilities and basic industries, tend to generate most of their total return through income and dividends. Higher-risk assets, such as growth stocks in technology, generate their total return through capital appreciation. Increasing the number of growth positions in a portfolio increases its volatility.

EXAMPLE 10-25

Assume that Fastgrowth Company issues 2 classes of stock, both returning 10%. Class A shares pay a 10% dividend but do not share in price appreciation. Class B shares use the same dividend dollars for share repurchases. These shares are designed so that a pension fund willing to invest $100 for the 2 securities gets a 10% return from both, but Class A shares return dividends and Class B shares return capital gains. If the market consisted of only tax-exempt shareholders, each stock would have a price of $100. There would be no compensation for the higher taxes associated with Class A since taxes would not matter to a tax-exempt shareholder. For taxable shareholders, Class B shares are more valuable since there are no dividends and the shareholder has the opportunity to hold the stock, both deferring capital gains and eventually paying those gains at a lower capital gain tax rate. By buying Class B shares, or the capital gain stock, the shareholder receives a higher after-tax return than he or she would by buying Class A shares.

Investment Planning Answer Book by Jay L. Shein, Q 10:64, What is tax-aware trading?

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Tax-aware trading is another method used to minimize taxes. Looking at tax efficient trading from an intuitive point of view is sometimes helpful. A tax-exempt or tax-efficient fund manager typically makes complicated estimates of expected returns on a universe of securities. Before replacing an existing security, the fund manager must determine if the expected return on the new security will outperform the expected return on the current position plus the transaction costs of buying and selling.

It is very difficult for a fund manager's pretax returns to outperform a pretax index. However, the tax-efficient fund manager must provide additional calculations to make an accurate assessment. He or she must not only calculate returns adjusted for transaction costs but must also adjust the returns for capital gains taxes as well. The manager must also assume a holding period. If the expected holding period for the new security is under 12 months, ordinary income tax rates will be used for calculating the tax effect of selling the new security. Another rate must be used for long-term gains, since the total return is one that must be measured against the cost of replacing a security. Therefore, the manager must estimate returns together with capital gains as well as estimate the time frame in which he or she expects the security to reach its intrinsic value so that it can be replaced with an undervalued security. This process is exceedingly difficult in practice and requires very sophisticated computers to evaluate the after-tax implications of literally thousands of possible trades. This process is known as tax-aware trading.

Investment Planning Answer Book by Jay L. Shein, Q 10:65, What are the weaknesses of tax-managed funds?

Some advisors may question the tax-efficient approach, arguing that it might negatively affect overall after-tax returns and that it will trade tax efficiency for performance. While tax-managed fund managers claim to focus on harvesting losses, any fund manager can and should be sensitive to tax issues. Opponents of tax-managed funds believe that using a tax-sensitive approach handcuffs the manager so he or she avoids buying dividend-paying stocks or is forced to sell a stock before 31 days.

A manager who sells too early to realize a gain or loss often misses out on opportunistic movements in the price of the stock. It is extremely difficult to predict short-term market price movements, and the value of realizing a loss may easily outweigh the risk of being out of the security. Tax-efficient fund managers think about the tax impact of every decision and they do not manage to maximize pretax returns. In addition, losses that are harvested may actually have an economic benefit to shareholders.

Another drawback with tax-efficient funds is the redemption fee, which some tax-efficient funds use to minimize cash flow disruptions. A redemption fee, or a fee for selling a fund within a certain time period after purchase, creates an incentive for shareholders not to transact in the fund, helping a fund manager establish a more consistent cash flow. This allows the fund manager to minimize fund cash balances as well as avoid unexpected redemptions, forcing the fund to realize gains. However, before purchasing a fund with a redemption fee, the advisor must recognize that clients develop unexpected liquidity needs. Selling fund shares early to meet liquidity needs subjects the shareholder to the redemption fee. Events that trigger liquidity needs are divorce, death, changes in the tax law, or moving from a high-tax state to one without taxes.

The advisor may also wish to rebalance the client's portfolio, requiring selling off certain fund positions that may have appreciated greatly and increasing contributions to others that may have fallen in value or risen to a lesser extent. This might be very difficult as it subjects the client to the redemption fee. Finally, in the event of a large loss, a taxable shareholder is prohibited from taking the loss for tax purposes.

PLANNING NOTE

When comparing two funds, it is important to find out whether the fund manager emphasizes tax management. For example, if one manager has a large built-in capital gain and another manager has a small or no built-in capital gain, an advisor might assume that it is better not to buy into the fund, with the large capital gain. However, this may not be correct. In fact, the manager of the fund with the large built-in capital gain may be managing with an eye toward minimizing recognition of gains whereas the manager without the built-in gain may be very insensitive to tax consequences.

Investment Planning Answer Book by Jay L. Shein, Q 10:66, How does one use mutual fund distribution structure to one's advantage?

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Mutual funds are required to distribute income and net realized capital gains annually. [IRC §852] These distributions can be reinvested and, since they are taxable, some portion is withheld for tax payments. This structure is why mutual funds are often considered tax inefficient. However, this structure also gives rise to potential benefits.

As mutual funds pay distributions, the fund's net asset value (NAV) declines and share price volatility occurs. The higher the distribution, the greater the NAV decline. A shareholder reinvesting these distributions will own more and more shares at a reasonably stable price. The value of the mutual fund investment shifts as distributions are made from fixed shares at higher values to increasing numbers of shares at a relatively flat price. Even though the price is flat, the shareholder's wealth increases as his or her numbers of shares increase. This contrasts with an individual stock whose return comes primarily from a fixed number of shares with an expected increasing price.

Taxable income and capital gain distributions, if reinvested, increase the cost basis of the original lots. At the eventual sale of the fund shares, the tax basis will have increased. The shareholder, who has been paying taxes all along, has a lower tax at the time of liquidation than if all of the gains had been deferred. The higher cost basis also means that mutual funds are much less likely to experience portfolio "lock-up," or a situation where securities can't be sold because the unrealized gain is too large. This is more likely to occur when the portfolio consists of individual securities, not mutual funds.

Investment Planning Answer Book by Jay L. Shein, Q 10:67, What are volatility-induced losses?

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A key concept for taxable shareholders is that unrealized losses are assets. Tax-exempt shareholders often consider volatility bad unless accompanied by higher returns. However, taxable shareholders will find that volatility creates opportunities for losses. This is because the government shares in losses as well as gains and the objective is to take losses to offset gains attributed to fund distributions.

Since mutual funds make annual distributions, share prices tend to be more volatile than for individual securities. The mutual fund structure, which distributes income and net capital gains, forces shareholders to hold fund shares at a higher cost basis. It also creates multiple lots with a different cost basis. This suggests that there are selected lots that have unrealized capital losses for the shareholder. If there are losses, the higher cost-basis shares will have value in offsetting gains from other investments, thus enabling the advisor to rebalance the portfolio without incurring taxes or simply raising the basis for eventual liquidation.

EXAMPLE 10-26

Mark Owens purchases Galaxy Fund whose basis, due to distributions, remains at $20 per share while the number of shares increased each time there was a capital gain distribution. At the same time, Owens also purchases an individual stock, Johnson Corp., also valued at $20 per share. Because of growth Johnson stock is now worth $40. The Galaxy Fund share, due to capital gain distributions, is still worth $20 but Owens has now many more additional shares. Now, assume that the price of both fall by 50%. In the case of the Johnson stock, the unrealized gain is simply wiped out. The loss cannot be taken because it only reduced the current capital gain. For the Galaxy Fund shares, however, the shares can be sold and the losses can actually be realized.

Investment Planning Answer Book by Jay L. Shein, Q 10:68, Should one buy shares of funds with unrealized losses?

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When a mutual fund sells securities that it held and realizes a loss, the loss cannot be passed on to shareholders. Therefore, a shareholder who buys shares in a fund with significant realized losses will be able to earn gains from the fund without being subject to a capital gain distribution. Losses can be carried over to offset future capital gains of the fund.

Over the past few years, many emerging market mutual funds have realized losses. The losses mean the funds will likely have no taxable distributions for some time and the funds will be able to use these losses to offset future gains, even if the shareholder bought the fund *after* the losses occurred. The advisor should consider purchasing these mutual funds in taxable accounts as they may be able to experience deferral of some or all of the tax liability for the near future. Of course, when the shareholder eventually sells the fund, the gains that the shareholder realized will be taxable.

Investment Planning Answer Book by Jay L. Shein, Q 10:69, Should the advisor sell shares prior to distributions?

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Funds must distribute realized capital gains at least once a year. These distributions may create phantom income tax if the fund's distributions are greater than the shareholder's actual gain. If this situation occurs, the advisor should consider, depending on transaction costs, selling the fund the day before the distribution and repurchasing the fund the day after the distribution. The gain that the shareholder realizes would be the shareholder's actual gain, not a phantom gain.

PLANNING NOTE

Unlike selling a fund to realize a loss, there is no requirement when realizing gains to stay out of the fund for 31 days. [IRC §1091]

CAUTION

Fund companies may change distribution dates and may not notify shareholders of upcoming distributions specifically to minimize the chance of a shareholder selling to avoid the distribution. Legally, there is no requirement to inform shareholders in advance. If shareholders sell in advance, the distribution is spread out over a small shareholder base. Therefore, the remaining shareholders would all have higher tax liabilities.

Investment Planning Answer Book by Jay L. Shein, Q 10:70, Should the advisor realize losses as tax-free gains?

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It is common for one asset class to be underperforming in a diversified mutual fund portfolio. If this underperformance leads to actual losses, the advisor may seek to realize these losses, especially if they are short term. By realizing these losses instead of waiting for prices to go back up, they actually become tax-free gains. There are two strategies for loss realization. The first strategy sells shares in one mutual fund with a loss and purchases shares in a similar fund that invests in the same market segment using a similar investment process. The purpose of this exchange is to avoid being out of the asset class in the event of a sharp upward movement.

The second involves selling one mutual fund and investing the proceeds in cash. If the investor realizes a loss, the shareholder may not repurchase the fund for 31 days (wash sale). Therefore, the client will be exposed to a sharp upward price movement. In the first situation, the advisor can swap one fund for a second fund that invests in essentially the same type of securities. In this case, there is no alternative fund to swap into. This may occur because there are not many funds available, such as commodity funds, or because of sales and transaction charges.

When analyzing the appropriateness of selling shares and investing in cash, the advisor must calculate the opportunity loss of not being invested for 31 days. The advisor first evaluates the worth of the unrealized loss by subtracting the current value from the current cost basis. The unrealized gain or loss is then multiplied by the client's tax bracket. Short-term losses are multiplied by the client's ordinary income rate and long-term losses are multiplied by the capital gain rate.

Assuming that the fund price remains flat for 31 days, the advisor repurchases at a lower cost basis than the previous cost basis. As the price rises back to the original level, the fund will show a taxable gain. This loss due to basis adjustment must be subtracted from the benefit of realized loss. The remaining net gain is divided by the current price. This amount is the gain in the fund necessary to break even in 31 days.

EXAMPLE 10-27

Peachtree Fund has a cost basis of $30,000 but due to short-term losses is now worth $22,500. Assume that Laura Jones is in the 39.6% federal income tax bracket. The loss currently amounts to $7,500. Jones deducts $7,500 from short-term gains and, at the 39.6% ordinary income tax rate, reduces taxes by $2,970. This $2,970 is the benefit of realizing the loss. If the price stays flat, Jones can repurchase shares in the fund 31 days later for $22,500. The change in cost basis is $7,500. If the fund returns to its earlier value, is held by Jones, and is eventually sold at 20% long-term capital gains rates, Jones would have a tax liability of $1,500. Therefore, the net gain of realizing the loss is $1,470, or $2,970 - $1,500. Peachtree Fund needs to rise by 8.17% during the next 31 days for the opportunity cost to be greater than realizing the loss and risking a price spike over the period when Jones was not invested.

Investment Planning Answer Book by Jay L. Shein, Q 10:71, How does one time the purchase?

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A consequence of mutual fund tax distributions is that shareholders must report the distribution as income, regardless of how long they have owned the shares. A long-term capital gain distribution paid by the fund will be taxed as a long-term capital gain to the shareholder even if he or she purchased the shares the prior day. Remember that a security held more than 12 months is considered long term for capital gains purposes. While the shareholder's basis increases accordingly, the taxes are due in the year that the distributions are made, not when the tax is actually realized by the shareholder. Hence, it is important to know the fund's distribution date prior to purchase and to avoid purchasing a fund just prior to the distribution date.

Since most mutual funds make their distributions late in the calendar year, a general rule of thumb is to stop buying active funds or funds that have a strong possibility of distributing a meaningful capital gain for the year during the last two months of the year. The shareholder avoids incurring a tax liability on gains earned prior to his purchase of the fund shares. The disadvantage of this strategy is that the client may be out of the market and miss a rapid appreciation.

One type of fund to consider during the last two months of the year is index funds, which generally have low turnover and low capital gain distributions. In fact, some index funds, such as the Schwab 1000 fund, are managed to avoid capital gains and year-end distributions if at all possible.

Investment Planning Answer Book by Jay L. Shein, Q 10:72, How important is asset placement?

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In general, it is advisable to place equity funds in retirement accounts and fixed income funds in taxable accounts. Expected returns on stocks are much higher than on bonds; therefore, the tax deferral on capital gains is worth far more than the tax deferral on interest income.

In addition, fixed income funds can be sheltered through municipal bond funds. The advantage to this strategy has been lessened with the new tax law and the 15 percent capital gains rate. Since IRA distributions are taxed as ordinary income, the capital gains cut to 15 percent increased the relative attractiveness of taxable mutual funds. Depending on a shareholder's tax bracket, the time it now takes for this strategy to be more effective than placing equities in a taxable account and taxable bonds in the deferred account has been extended. Consequently, it may be appropriate to reverse this strategy.

An exception is a mutual fund with a large built-in capital loss, which is better placed in the taxable account. Mutual funds with large losses can make smart investments if the fund rebounds since the losses can shelter new gains. Many international, emerging market, and gold funds began 1998 with large capital losses. These funds can generate substantial taxable gains before making a taxable capital gain distribution, which means that they will be earned tax free outside of a sheltered account. It is generally recommended that funds with large capital losses be placed in the taxable account.

In general, an advisor should choose equity funds for the taxable account that emphasize long-term capital gains with minimal trading. Some equity funds use an investment process that is more conducive to tax minimization that others. A quantitative fund typically has high turnover, creating the most short-term capital gains. Since these gains are taxed at high ordinary income tax rates, these assets may be better placed in a tax-exempt fund. Index funds or passive funds, with a focus on buying and holding, are an appropriate choice for a taxable account.

Volatile funds may be better purchased outside of a retirement account because they are more likely to produce a short-term capital loss that can be realized to offset any short-term capital gain. When deciding if the fund makes more sense in a deferred account or outside, the advisor should compare the mutual fund's pretax and after-tax returns. The rule of thumb is that the closer the numbers between pretax and after tax, the more tax efficient the fund.

PLANNING NOTE

It is also important to consider whether the shareholder can afford to pay taxes out of cash flow or will need to draw funds from the investments to cover annual taxes. Further, an advisor should inform his or her clients as to why it may be beneficial to have the portfolio generate taxable income, or the advisor may find his or her clients complaining.

Investment Planning Answer Book by Jay L. Shein, Q 10:73, What is after-tax performance analysis?

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Evaluating pretax performance for a mutual fund is a well-established process. Typically a stream of cash flows is evaluated over time and a summary return is calculated and measured against an index. This return is adjusted for risk in terms of either standard deviation or tracking error.

For taxable investors, however, the "value" of their holdings is not necessarily straightforward. While a tax-exempt investor will know the value of his or her account, the taxable investor will reduce the value by the contingent future tax liability. In addition, the index for after-tax performance is substantially more complex when taxes are involved. Two portfolios holding the exact same securities but purchased at different times and with different cash flows will show very different after-tax returns. Because of this difficulty and others, there are no standard after-tax indices, and making simplistic assumptions regarding when the fund is liquidated or the holding period will usually fail to measure results accurately. Finally, for a mutual fund, the actions of other shareholders in the fund often result in additional tax consequences, both positive and negative.

At this time, few mutual funds provide after-tax returns on their portfolios. Some commentators have suggested that advisors should require and use after-tax performance data in hiring and evaluating the performance of mutual fund managers. There are several possible reasons why fund managers do not report after-tax returns. First, the after-tax return will never look as good as the pretax return. Since mutual funds cannot pass through losses, there is rarely a situation where the after-tax return is higher than the pretax return. Second, there is no generally accepted way of measuring after-tax returns. The difficulty of measuring after-tax returns is that each shareholder will have a different cost basis, tax rate, and holding period. Third, the value of reporting after-tax performance is not primarily in the numbers themselves but in their application to investment decisions. Having an after-tax return is not as important if there were no other after-tax returns to which it could be compared. Fourth, an unexpected need to liquidate part of a portfolio will have adverse consequences on the portfolio's performance yet are completely outside the control of the fund manager.

There are several approaches currently being used to determine the after-tax return, while others are under discussion. At this time, the two main approaches used by evaluation services are to (1) net out all taxes when paid, and (2) assume that the fund was fully liquidated at the end of the period. For proper analysis, the advisor must know the investment horizon, final disposition of assets, future tax rates, future returns, and the rate at which capital gains are to be realized. For practical purposes, until an agreed-upon standard is created, it will be very difficult for the advisor to determine an after-tax return.

EXAMPLE 10-28

Joe Smith holds 2 mutual funds, Aimhigh and Bestpurchase, with identical values. Both funds have a market value of $100,000. Aimhigh has a cost basis of $70,000. Bestpurchase has a cost basis of $97,500. Although they both are *valued* at $100,000, Bestpurchase is clearly worth more than Aimhigh when taxes are applied because the market value overstates the true value of both funds. An exception to this is if the client wishes to leave shares in the fund to make a bequest or charitable contribution at death. In this case, the cost basis will be "stepped up" to market value at death. [IRC § 1014]

Net Out Taxes When Paid. Most calculated after-tax return numbers begin with a pretax return and then assume that current-year taxes are paid out of the portfolio, just like any other expense (such as the management expense). This method uses an assumed income tax rate, usually applying the highest tax rate to all shareholders' income and a capital gains rate to the net gains distribution. *Morningstar Mutual Funds*, for example, reports a tax-adjusted return using this assumption.

The after-tax return calculations for fixed income portfolios can be very complicated because of the variety of securities and the complexity of income recognition. Municipal bonds of one state may be taxable to some clients but not to others, depending on their state of residence. Original-issue discounts must be amortized and the amortization taxed as income, yet this is also used to adjust cost and thereby reduce any eventual capital gain or loss. Return of principal is not taxable, further complicating the after-tax performance calculation for pools of mortgages or asset-backed securities. If the fund's manager invests in foreign equities or bonds with associated dividends, interest, or capital gains withholding taxes, these may be claimed as credits or deductions.

CAUTION

Some rating services may report a net capital gains distribution. Unfortunately, the reported amount fails to differentiate between a short- or long-term capital gains rate. The data, therefore, overstates the post-tax return of those funds that distribute short-term capital gains. This method also fails to recognize unrealized gains and losses. A reporting service may have a second tax-adjusted return calculated. This return assumes that the fund was fully liquidated and appropriate taxes applied to all of the various types of income. In addition, unrealized gains are also fully taxed as if they had been realized.

Liquidate Fund at End of Period. Another method of calculating after-tax performance assumes that the mutual fund was liquidated at the end of the reporting period. For some mutual fund managers, such as fixed income managers investing with a high turnover style and not concerned with capital gains, using a full liquidation at end of period makes good sense. However, for a small cap manager planning on holding securities for many years, using this method will understate the returns achievable on an after-tax basis. The full liquidation method will almost always penalize the equity manager who usually benefits from long-term holding periods.

Using this method, after-tax returns between equity funds and fixed income funds are much closer than pretax returns. Also, returns appear much lower than an index, such as the S&P 500, which does not experience much turnover. In fact, an S&P 500 index fund appears to be very tax inefficient. In addition, under the full liquidation method, a manager has no incentive to minimize capital gains as the portfolio will be evaluated as if the capital gains had been realized.

PLANNING NOTE

When rebalancing a portfolio, a needs to sell mutual fund lots that are most favorable to the client. At times, this will involve selling a complete position that has a loss in order to reduce the capital gains cost of selling shares with unrealized gains. In particular, the most beneficial shares to be sold are those with a short-term loss because these losses can offset short-term capital gains. Remember that when selling a losing position, the client must wait 31 days before repurchasing that same security in order to recognize the loss. [IRC §1091] During the 31 days, the client will be exposed to potential lost opportunity losses if the fund should suddenly rise in value.

Investment Planning Answer Book by Jay L. Shein, Q 10:74, Why is the mutual fund prospectus and other disclosure documents important?

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Mutual funds must provide several legal disclosure documents as mandated by the Securities and Exchange Commission (SEC). These documents include the prospectus, statement of additional information, and annual and semiannual reports.

Prospectus. The mutual fund prospectus is considered by the SEC to be a legal document that informs investors of potential risk and rewards. The financial advisor will find valuable information in the prospectus and it should be read and carefully evaluated. The prospectus will provide information regarding fees and expenses; investment objectives, policies, and risks; condensed financial information; investment manager information; and shareholder services.

Most of the information on fees and expenses is contained in tables that are typically in the first three pages of the prospectus. A typical annual expense ratio for an average equity fund is 1.5 percent. Fees and expenses are usually divided into shareholder transaction expenses and annual operating expenses. Shareholder transaction expenses include the sales load imposed on purchases, charges imposed on reinvested dividends, deferred sales charges, redemption fees, and exchange fees. Annual operating expenses include management fees, performance fees, Rule 12b-1 fees (named after the 1980 SEC rule), and expenses for fund administration. The prospectus may also indicate that the fund advisor is earning additional compensation in the form of rebates from brokerage commissions, often called "soft dollars."

The section covering investment objectives, policies, and risks will inform the advisor as to the scope of the fund's investment opportunities as well as any restrictions on fund holdings. Typically, the objective section is broadly written to avoid creating an opportunity for adverse shareholder litigation. The fund policies are normally classified into operating policies and fundamental policies. Operating policies can be changed by a vote of the fund's board of directors. Fundamental policies are those that require majority shareholder approval.

Condensed financial information will provide a mutual fund's historical data going back 10 years or to the fund's inception. This historical data will include per-share performance results, dividend and distribution information, expense ratios, investment income, and turnover ratios. Volatility may be indicated by the annual changes in share price. An investor can examine the turnover rate to see whether the fund's turnover matches the stated investment style. The choice of accounting method will be important for tax considerations.

The investment manager section will identify the current fund manager as well as the fund manager's compensation. There is considerable turnover among fund managers, and the prospectus will indicate whether the current fund manager is the same one who built the existing performance record.

Shareholder services will indicate important information for transacting business in the fund. It may also indicate unusual situations where the fund has extraordinary powers to set fund prices or other situations that, in the interest of the fund's board of directors, are not beneficial for the majority of shareholders

Statement of additional information. The statement of additional information (SAI) is a supplement to the prospectus. This document will include very detailed information about a fund's legal status, board of directors, and other disclosures. If a fund advertises performance data, the fund must disclose the total return in the SAI. In addition, the SAI provides details on brokerage fees and other trading costs that may not be included in the prospectus. There is no requirement for the fund company to provide a statement of additional information unless one is requested.

Annual and semiannual report. The annual and semiannual reports that the SEC requires most funds to report to shareholders will provide complete fund holdings. These reports often give the fund management company the opportunity to explain results and help investors set reasonable expectations. The listing of the mutual fund holdings gives advisors clarification of the fund manager's strategic intentions.

Prospectus. The purpose of the mutual fund prospectus is to convey information about the objectives and risks of a mutual fund. The prospectus also provides information regarding sales charges, other fees, and administrative matters. The prospectus was created to be the primary disclosure document mandated by the Securities and Exchange Commission (SEC).

In practice, the prospectus is rarely read by advisors and very rarely by clients. Over the years, the document, originally intended to explain differences between mutual funds, has been changed by regulators and fund attorneys so that today the bulk of the information is designed to show how funds are similar. The prospectus is filled with boilerplate information and legal jargon.

Modern Portfolio Theory has been widely accepted and codified into trust and other laws. Yet most mutual fund houses continue to describe the portfolio risk by identifying the risks of individual securities, not the portfolio as a whole. This individual security risk is essentially worthless to most investors. With this said, the prospectus can still provide useful information.

Investment Planning Answer Book by Jay L. Shein, Q 10:75, What information is contained in mutual prospectuses and disclosure documents?

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Fees and expenses. Mutual fund prospectuses contain standardized tables outlining the fund's expenses. Expenses have continued to rise over the past decade and have become an increasingly important tool for evaluation of a fund. The average equity mutual fund now has a 1.5 percent annual expense ratio.

Most of the information regarding expenses can be found in the tables, usually in the first three pages of the prospectus. Two major areas of expenses are shareholder transaction expenses and annual operating expenses, which are discussed below.

Shareholder transaction expenses. In this section of the prospectus, the advisor or investor will find the maximum sales load imposed on purchases, charges imposed on reinvested dividends, deferred sales charges, redemption fees, and exchange fees. The advisor will also find footnotes explaining whether part of the fees have been waived and whether they will be reinstated later. Other significant exceptions will also be footnoted. For example, a redemption fee may not apply to an investor making a large purchase in the fund or may be waived after a certain time period.

Redemption fees are back-end fees and are charged when an investor sells fund shares before a specific amount of time passes. These fees normally decrease over time.

Funds often include redemption fees to discourage short-term trading, which is costly for all shareholders of the fund. Long-term shareholders are hurt by trading costs and the need to keep excess liquidity for short-term buying and selling. Excess liquidity, in the form of cash equivalents, prevents the fund from investing in higher-return securities.

Finally, mutual fund shares, due to reinvestment, often offer the option of realizing a loss and offsetting the loss against an otherwise taxable gain. These losses are available only when specific shares can be sold, usually the short-term shares first. Paying a redemption fee removes this tax advantage.

Redemption fees constrict the advisor in each of these areas. A mutual fund imposing a redemption fee should be considered carefully before a advisor or his or her client invests.

Annual operating expenses. Annual operating expenses include management fees, performance fees, Rule 12b-1 fees, and expenses for fund administration.

The term "expense ratio" represents the amount deducted by the fund's management from the *gross* interest earned by the fund, before distributions of the *net* interest income to the fund's shareholders. The expense ratio listed in the prospectus equals the maximum that the fund can charge, not necessarily what the fund will charge.

For example, the ABC Value Fund has an expense ratio of 0.71 percent. The XYZ Growth and Income Fund has an expense ratio of 0.89 percent. Although both funds purchase large cap value stocks, the ABC Value Fund has brokerage charges of 0.50 percent versus the XYZ's of 0.09 percent. Therefore, the actual expense for the ABC Value Fund is 1.21 percent and for XYZ is 0.98 percent. Advisors need to look carefully at actual expenses of the mutual fund.

The management fee includes customary charges for operating the fund such as overhead, portfolio manager expenses, and research. Management fees are based on assets under management or are a performance-based fee. Most funds charge sliding fees based on the amount of assets in the fund.

EXAMPLE 10-29

Make-Money Fund charges 0.65%, or 65 basis points, for the first $500 million of assets under management and thereafter the rate declines in specified increments. At the low, Make-Money

Fund charges 45 basis points for anything over $1 billion. A basis point is 1/100 of 1%, so 50 basis points equal 1/2 of 1%. Therefore, the lowest blended rate for Make-Money Fund, should it rise over $1 billion, is just under 50 basis points.

A fulcrum fee is the only type of performance fee that a mutual fund may use. This is the amount owed to the manager if his or her performance outperforms an index, usually the S&P 500. This fee increases or decreases according to the fund's performance over a certain time period, typically a minimum of one year and in relation to a certain market index.

In a simple arrangement, a fulcrum fee may provide compensation to the manager based on the amount by which the fund outperforms or underperforms the S&P 500 index. If the fund outperforms the index by a specific amount, for example, 10 percent, the manager is entitled to additional compensation. Alternatively, if the fund underperforms the index, the fund manager's pay would be reduced. Not all funds can have fulcrum fees, since funds must accrue fees on a daily basis to be fair to all shareholders who are making deposits and redemptions daily.

PLANNING NOTE

When examining the fairness of a fulcrum fee, the advisor must evaluate the appropriateness and volatility of the assigned index, its diversification of holdings, and types of securities owned against the fund's investment objectives.

Rule 12b-1 fees, named after the 1980 SEC rule, are used to help defray marketing and distribution costs. The 12b-1 fee is included in a fund's expense ratio and usually ranges from 0.25 percent to a maximum of 0.75 percent of assets under management plus a 0.25 percent service fee. A no-load mutual fund can have a maximum 12b-1 fee of 0.25 percent. The 12b-1 fees are used in a variety of ways. As more funds participate in mutual fund supermarkets, the 12b-1 fee becomes more important to offset annual fees charged by the supermarkets for their administrative costs. Load fund groups use the 12b-1 fee to compensate brokers. Funds with back-end sales loads often have higher 12b-1 fees. Direct marketing companies use the fee to compensate advertising and, more frequently, mutual fund supermarkets.

COMMENT

While there is an annual charge for marketing and distribution, it is hard to understand how existing shareholders benefit from this fee. This is particularly difficult to do once a fund closes.

In the prospectus, the advisor will find a required table listing a hypothetical return of five percent and what the dollar value of the fund's costs and expenses would be at different time periods. This table, which the SEC requires all funds to include, is designed to help make fee comparisons easier and for investors who understand dollar amounts better than percentages.

CAUTION

Some mutual funds subsidize their overhead or waive management fees. When a fee is being waived, the prospectus normally will have a provision, such as "The Manager can terminate these voluntary reductions and/or reimbursements at any time." This often occurs when a new fund cannot spread its costs over a large enough base or when a money market fund seeks to attract assets by offering a high yield. Although an investor can leave a fund once the waiver is lifted, there may be significant tax consequences in doing so if the fund has unrealized capital gains. Therefore, the advisor is advised to proceed with caution when facing a waiver.

Investment objectives, policies, and risks. This section of the prospectus provides the advisor a broad overview of what the fund is permitted to do as well as any investment restrictions. This section is often broadly written to protect the fund company from litigation and typically allows the fund to purchase more types of securities than are realistically contemplated.

A money market fund prospectus will discuss the quality of its holdings. A fixed income fund prospectus will discuss interest rate risk, credit risk, and income risk. A stock fund prospectus will discuss the fund's overall volatility in comparison to the broad market. Normally, the objectives will address whether the fund intends to buy large or small securities or whether it can invest outside the United States. Most prospectuses list a maximum and minimum of certain types of investments. They will also indicate whether the fund seeks capital growth or current income.

In 1995 a group of shareholders unsuccessfully sued Alliance North American Government Income Fund, claiming that the fund, although named "North American," actually invested in Argentina. During the Mexico currency crisis this fund suffered losses and these shareholders sought to hold the fund liable for investing outside of North America. However, a careful reading of the prospectus showed that the fund was required to invest 65 percent of the fund in North America, a condition that the fund met. In another example, in the prospectus for Dimension Funds, the fund company has the right to redeem an investor's holdings in cash or shares of the securities that the fund holds.

The investment policies can be either fundamental policies that can be changed only by a majority vote of the fund's shareholders or operating policies that can be changed only by the board of directors. This section will indicate whether the fund is permitted to invest in more speculative securities, such as derivatives and other "hedging" strategies.

Condensed financial information. This section of the prospectus provides a financial table covering the mutual fund's financial history for each fiscal year for the past 10 years or, if the fund is less than 10 years old, for each year back to its inception. The condensed Financial Information Section includes the history of per-share results, dividends and distributions, ratios of expenses to average net assets, net investment income to average net assets, and portfolio turnover ratios.

The annual changes in share price will give an indication of the fund's volatility. The dividend payments may be important to an investor who is relying on the fund for his or her income stream, although these dividends are dramatically reduced as interest rates and dividend yields have declined. Tax distributions may provide an indication of the fund's tax efficiency. There should also be a listing of the fund's net unrealized gains that may be distributed in the future. By knowing the mutual fund's fiscal year, the advisor may be able to determine when distributions will be paid out in order to avoid buying into the fund just prior to a distribution. While most funds pay out distributions on a calendar basis, not all do.

Net investment income is the remaining balance after dividend and interest payments are made to shareholders and the fund's expenses are paid. Expenses include fund management, recordkeeping, postage, auditing, and legal fees and consume approximately 71 percent of the average mutual fund's income. The yield of the fund is calculated as the ratio of net investment income to average assets.

Ratio data is used to compare funds. The ratio of expenses to average net assets will be the total fees paid by shareholders. When comparing funds it is important to understand that different management styles are more difficult and costly to implement. A passive style is the least costly. An emerging market strategy can be very costly, as all expenses, from analysis to actual trading costs, are higher in emerging-market countries.

There will often be either additional expenses or a reduction of expenses listed in this part of the prospectus. A reduction of expenses may indicate that the fund has earned "soft dollars," a situation wherein a mutual fund enters into an agreement with a brokerage firm that the brokerage firm will pay part of an investment firm's expenses in exchange for directing trades through the brokerage. The expenses can include anything from custodian and transfer fees to research, computers, Bloomberg terminals, and newspaper subscriptions. The fund may also pay a higher commission rate in return for these services. This practice often raises questions regarding conflicts of interest. By using soft dollars, a mutual fund is able to reduce the expenses that are reported to shareholders in the prospectus and increase the fund's yield. Soft dollars may also allow a fund to purchase research that they might not typically buy, therefore increasing the benefit to the fund and shareholders. This may be more important to smaller fund groups in order to compete with the large fund families.

The prospectus will list the firm's average commission rate. Some mutual fund managers will trade for as little as one cent per share. Any commission expense over one and one-half to two cents per share is profit for the brokerage firm. The average commission rate might rise to as much as six cents per share. Typically, this indicates that soft dollar commissions were paid and the advisor should seek to determine whether the higher commission has benefitted the shareholders or the management company.

The fund's turnover rate will help the investor determine the portfolio manager's approach and confirm whether the turnover matches the fund's stated investment style. Turnover of a fund means that securities amounting to a certain percentage of the total fund assets were bought or sold during the year.

EXAMPLE 10-30

In 2010, XYZ Fundamental Fund had $100 million in assets under management. The turnover was 35%. Therefore, Fundamental XYZ Fund had security trades equivalent to $35 million.

The term "total from investment operations" includes net investment income as well as net realized gains (losses) and unrealized gains (losses). Net realized gain (loss) on investments will occur when the mutual fund sells securities at a gain (loss). Unrealized gain represents securities that the fund holds that have a market value higher than the fund's cost basis. Net gains will be a calculation of net gains less net losses.

EXAMPLE 10-31

GiGi Growth Fund has net realized gains of $2.00, unrealized gains of $10.00, and net income of $0.25 per share. The total gain from investment operations is $12.25.

Funds are required to distribute 90 percent of all net realized income and capital gains. [IRC § 852] Funds will list the amount that was distributed to shareholders during the year. Some funds will list "undistributed realized capital gains." This occurs because funds purchase securities that are often sold for substantial profits. These undistributed capital gains will most likely be distributed by the fund company before the calendar year end. The advisor can get an estimate of the fund's capital gains exposure by dividing the realized and unrealized gains by the ending net asset value figure.

PLANNING NOTE

The amount distributed to shareholders may differ from the amounts earned by the fund. This occurs because the fund makes distributions based on a calendar year, yet the prospectus is based on a fiscal year. The amount of distributions realized in the past should give the advisor an indication of potential realized gains for the future. However, most tax information is vague in a prospectus. A typical disclosure might read, "The fund distributes annually substantially all of its net income after expenses and any capital gains realized from the sale of securities. Dividends and short-term gains are taxable to you as ordinary income; distributions of long-term capital gains are taxable to you as long-term capital gains."

In the "Notes to the financial statement" section of the prospectus, the mutual fund may list other important items. One pertinent issue to advisors will be the choice of accounting method. Not all mutual funds discuss accounting methods in their prospectus and the advisor must address this due to tax implications. Some fund families using lot selection, for example, will not indicate this in their prospectus. This is because it may not apply every time. Since the prospectus is a legal document, the fund would then be subject to this method in all circumstances.

Investment manager. This section of the prospectus discusses fund management, indicating whether the current manager is the same as the manager building the fund's track record. The section will also address compensation of the fund manager. It is important for the advisor to review how the compensation and bonus package is determined, as this can be important criteria in fund selection.

PLANNING NOTE

An interesting study conducted by CDA/Weisenberger indicated that the tenure of the investment can have an impact on the mutual fund's future performance. The study found that funds that had above-average performance and that recently changed managers were much more likely to exhibit below-average performance in the future than those with consistent management. Conversely, funds with below-average performance tended to improve performance with a change in investment manager. This study is not conclusive and will not always hold true or indicate future performance.

Shareholder services. This section of the prospectus will highlight buying and redeeming of fund shares as well as other details, including investment minimums, check-writing privileges, automatic investment programs, and minimum investment requirements.

Statement of additional information. In 1983, the Securities and Exchange Commission attempted to improve the fund prospectus by dividing the document into two parts. The first part, now known as the prospectus, was simplified. The objective was to provide a more readable document that was substantially shorter and simpler.

A detailed, more in-depth discussion of fund matters was moved to a second document, called the Statement of Additional Information (SAI). It provides disclosure about a fund's legal status, information about the board of directors, controlling persons, affiliated brokers, a fund's form of organization and state of incorporation, a fund's qualification under Subchapter M of the Internal Revenue Code, how performance data is calculated and disclosure about shareholder voting rights, senior and other classes of securities, principal underwriters, and service providers.

Details of the fund's investment objectives and policies may appear in the SAI. A fund that advertises performance data must disclose total return in the SAI. Restrictions on the type of investments that a fund may make are often disclosed only in the SAI. It includes the fund's audited financial statements, a list of securities in the fund's portfolio at the end of its fiscal year, a list of the fund's officers and directors, and other important information.

Although federal law entitles a shareholder to receive a prospectus when he or she invests in mutual funds, there is no requirement that the fund provide the SAI. Sometimes the SAI will elaborate on information in the prospectus, but it frequently contains important information that does not appear in the prospectus at all. The prospectus must include appropriate instructions as to how to obtain the SAI and whether any of the material contained in the SAI has been incorporated by reference into the prospectus.

The main fee charges not reflected in the prospectus are the brokerage fees and other direct trading costs. Trading costs are currently not revealed in the prospectus and must be found in the SAI. Mutual fund percentage brokerage costs are substantial, averaging more than 30 basis points, and make up over 20 percent of the expense ratio. These trading costs are multiplied as asset size grows. Foreign stocks have about twice the brokerage costs as U.S. funds and in many countries negotiated commissions are not available. Most mutual fund managers focus on stock picking, not on controlling trading costs. Many funds have concluded that trading costs are primarily brokerage. Trading desks therefore are working to minimize intraday market impact and commissions. But this simply shifts costs from market impact and brokerage to costs of delays and missed opportunities.

PLANNING NOTE

Larger fund companies can often negotiate better brokerage commissions than small fund groups. For example, at some fund families, one fund can simply swap securities with another and therefore have no additional brokerage costs.

CAUTION

For stocks that do not trade on an exchange, these costs are built into a bid-ask spread and, therefore, no commissions are reported. Most fixed income funds buy bonds directly from dealers and do not report commissions.

Annual and semiannual report. Mutual funds are required by the Securities and Exchange Commission to report annually to their shareholders. Included in this annual report are shareholder letters written to explain performance, to set reasonable expectations, and to educate shareholders about investment topics. It provides an opportunity for the fund management to highlight the relevant market conditions and investment strategies that materially affected the mutual fund's performance during the past fiscal year. The mutual fund must provide semiannually a listing of portfolio holdings.

Generally, the most useful section in the annual and semiannual report is the listing of the mutual fund's portfolio holdings. It provides the advisor with clarification of the strategic intentions of the fund manager. For example, a mutual fund may hold a large position in securities that the advisor did not expect, such as an international fund holding mostly U.S. domestic securities. The advisor can also find the fund's degree of concentration. A very concentrated fund will have 50 percent or more of its portfolio invested in 10 top securities. This strategy is sometimes reported but can be fairly easily calculated. Unfortunately, the mutual fund's portfolio holdings may be out of date by the time the annual report is received.

Investment Planning Answer Book by Jay L. Shein, Q 10:76, What are some of the new initiatives adopted by the SEC?

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The growth in the number of mutual funds and of investors in mutual funds, as well as increasingly complex shareholder services and investment approaches, have resulted in long and complicated fund prospectuses as funds attempt to explain their operations to investors. The Securities and Exchange Commission (SEC) recently conducted extensive research into mutual fund prospectuses. It determined that current prospectuses provide too much technical and unnecessary language that has obscured the basic informational needs of most investors. The research indicated that most investors are unaware of basic fund risks and fund operations. The SEC identified the problem as a need to provide meaningful and understandable disclosure to a potential investor.

In an effort to promote effective communications, the SEC has adopted changes to a fund's prospectus. It also proposed a document known as the fund profile prospectus that is to include summaries of key information such as the fund's investment objectives, strategies, volatility or risk, performance, and expenses. Finally, the SEC proposed a requirement that if the fund's name suggests a certain type of security or industry, at least 80 percent of the assets must be invested in these securities. Currently, only 65 percent of the assets must be invested in these securities.

Although the SEC still considers the prospectus the primary document to inform investors about the risks and rewards of investing, under this proposal the prospectus could be delivered upon request or with confirmation of the first purchase. The adopted rules include requiring funds to use plain English to help improve investors' ability to read and comprehend the prospectus.

In a 1995 study of 2,000 investors, less than half understood that high expenses can lead to lower returns; one-third believed that mutual fund money markets were insured like bank deposits; one-quarter did not know that stock market returns often exceed returns from U.S. Treasury bills; a substantial number did not know that they could lose money in a bond fund; and less than half of the investors knew that fund expenses are deducted from the fund on an ongoing basis.

Investment Planning Answer Book by Jay L. Shein, Q 10:77, What is a summary prospectus?

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On January 26, 2009, the SEC made final rule amendments that would affect the way open-end mutual fund companies prepare their prospectuses. The amendments require key information to appear in plain English, in a standardized order, at the front of every mutual fund's statutory prospectus, in place of the current risk/return summary and it is referred to as the summary section. Each fund in a prospectus must have its own separate summary section.

Additionally, the amendments permit a qualified fund to satisfy its prospectus delivery obligation under the Securities Act by providing investors with a "Summary Prospectus" containing the same key information, and making additional information, including the statutory prospectus, available on the Internet and in paper upon request

Summary prospectus is voluntary. Funds that qualify will be allowed to send a shorter version summary prospectus, instead of the full statutory prospectus, as their annual update to investors. The summary prospectus must be posted to a website and Investors must be able to request printed or electronic versions of the statutory prospectus.

Investment Planning Answer Book by Jay L. Shein, Mutual Fund Manager Questionnaire and Interview

Typically, fundamental and statistical analysis is first used in manager selection to reduce the number of potential fund candidates to a reasonable number. Although advisors will have different criteria for fundamental analysis, the first one is usually investment style. Investment style should be the primary factor that influences the risk of the portfolio. If the advisor is looking for a large cap value fund, this style determination will quickly reduce the potential universe of mutual funds. The next criteria may be brokerage availability. Commission advisors will seek funds that are available to them on a commission basis. Advisors who just charge fees for managing an investment portfolio will seek funds that may be offered through one or more mutual fund supermarkets. (Some funds will provide a new fund through a supermarket if the advisor can establish significant demand.)

Returns-based style analysis, the second step, is then used to confirm that the manager is actually purchasing securities that react according to the desired investment style, as well as to evaluate the manager's performance attribution.

A mutual fund manager questionnaire is used when the list of potential candidates is narrowed to less than five. The mutual fund manager questionnaire is a tool designed to assist the advisor in making an appropriate choice in selecting a fund manager for his or her client's portfolio. The questionnaire is used to assess qualitative as well as other factors that are not readily available to advisors through fundamental analysis and returns-based style analysis.

The mutual fund manager questionnaire is designed to both draw information on intangible issues and clarify information that the advisor has accumulated. It is also used to substantiate and explain information found in fundamental analysis and returns-based style analysis and in official documents such as the fund's prospectus. It is important for an advisor to gather all possible information about the fund and the fund manager before approaching a fund manager to complete the questionnaire. Together, all of these factors will allow the advisor and the client to make a more informed decision.

There are no set rules that an advisor would use to make a final selection. Although investing has become more of a science since the advent of Modern Portfolio Theory, it is common for seasoned professionals to disagree on what is important in fund selection. Therefore, a uniform scoring system that will allow the advisor to know how much weight to give to which factor in making a final determination does not exist.

Investment Planning Answer Book by Jay L. Shein, Q 10:78, What should be part of a mutual fund manager questionnaire and interview?

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Investment process. For many funds the investment process is the most difficult subject to understand without feedback from the fund manager. Since there are several major categories of active management, a fundamental analysis or information from fund rating services generally will not provide in-depth information. The advisor's objective is to evaluate whether the active fund manager can truly outperform a passive alternative after fees, transaction costs, and taxes are considered. The advisor must understand the process as well as the factors that could indicate future problems. Even with a questionnaire, the advisor will not have a complete grasp of the issues. However, as the advisor begins to understand the fund's management approach, he or she will begin to develop additional questions for follow-up.

The three primary investment processes for equity funds are (1) fundamental, (2) quantitative, and (3) behavioral. The five primary investment processes for fixed income funds are (1) active duration, (2) sector rotators, (3) opportunistic sector rotators, (4) mortgage specialists, and (5) international. Strategies other than these may be used by some fund managers.

The fund manager and the analyst are extremely important in the fundamental process, as it is a highly research-directed process in which the fund manager and analysts evaluate either macroeconomic policy ("a top-down" analysis) or individual securities (a "bottom-up" analysis). The sector selection will be more important than the individual securities in top-down analysis. A process that is bottom-up is very time consuming.

Quantitative fund managers take publicly available data and attempt to interpret it better than the market in order to develop better expectations of a company's prospects. They enter a significant amount of data into computer programs and typically adjust their approach as the market evolves. Behavioral fund managers use heuristics to find mistakes in the market evaluation of certain securities.

The managers of active duration fixed income funds bet on the direction of interest rates. A sector rotator fund manager bets on duration within approximately one year of their benchmark and also makes other bets such as on yield curve movements, relative sector movements, and individual issues. The managers of opportunistic sector rotator funds make the sector rotator bets but also bet outside of the benchmark. Fund managers that are mortgage specialists analyze and forecast prepayments and volatility. Fund managers that are international managers bet on currencies and countries. Due to the high expense ratios of fixed income funds, it is very difficult for fixed income managers to add value. The advisor should examine whether the fund manager is adding risk by lowering credit ratings.

Portfolio issues. In examining portfolio issues, the advisor will want to know the fund's benchmark for comparison and the fund's objectives. If the advisor uses a benchmark that is not appropriate for the manager's investment style, the advisor may not accurately evaluate performance.

Portfolio issues that an advisor would need to evaluate are the fund's use of derivatives (nontraditional securities used to enhance return or reduce volatility) and illiquid securities. Obtaining answers to these issues will be easy if the fund is prohibited from using derivatives; this information should be available in the prospectus. If, however, the prospectus indicates that derivative use is possible, the advisor must have a strong sense that this use will enhance performance or mitigate risk. Derivatives and illiquid securities have been a primary cause of major declines in net asset values. Since funds are generally chosen to implement a portion of an asset allocation model or investment policy, the use of derivatives may cause the fund to potentially earn returns considerably different from what was expected. For example, the risk of a bond with more than five percent of its portfolio in derivatives such as interest-only strips or inverse floaters may be more like an equity fund than that of a portfolio stabilizer. Illiquid securities may involve valuation and other problems.

In most cases, unexpected results, even if positive, will be considered negative by the advisor. If the fund is acting in an unexpected way, this usually indicates that the fund is out of control. If performance is significantly

better than expected through the investment process, this is good. If fund performance is significantly better because of leveraging risk, this should be considered bad going forward, since outperformance is often followed by underperformance

Operational issues. Operational issues include actions that might be taken by the fund company, although not necessarily by the fund portfolio manager, such as fund closures, cash flows, accounting processes, and ownership. While some fund companies will address operational issues in the prospectus, many of these issues will involve information that is not readily identifiable or will become quickly outdated.

The closure of a fund may indicate the fund manager's commitment to asset size. Closed funds are rarely closed to all investors, as current shareholders are often allowed to continue to invest. The advisor should be aware that the manager of a closed fund may take on the additional responsibility of also managing a new fund. The effect of the fund's closing on net assets size should be evaluated.

Fund cash flows are very important, as a fund with a small asset size may not be able to maintain its good track record if a significant amount of assets is added to it. Furthermore, investors in funds experiencing a large number of redemptions may incur tax consequences as the fund raises cash to meet the redemptions. Accounting issues are not fund management issues. Although the accounting departments of many funds use the highest-in, first-out (HIFO) method, there are still funds that do not recognize the importance of this issue.

The advisor should evaluate whether the fund is being offered exclusively to advisors or being offered to the retail public. Funds offered to the public have greater exposure to "hot money" investors, who chase funds with the highest returns and pull money out at the first sign of trouble. These actions may cause serious cash flow disruptions to a fund and cause realized capital gains to be spread among the remaining investors.

Fund management. Examining fund management will help the advisor learn about the depth of the management team as well as issues involved in managing the fund that may cause the fund to look very different from how the fund has appeared in the past. Some of the fundamental data will be available from rating services. If the advisor has access to historical information, such as size, number of positions over time, and median market capitalization, it is definitely advantageous for the advisor to obtain as much of this information as possible in advance. The question to the fund manager will then change from what the median market cap was over time to why the median market cap rose over time and what this means to the management of the fund.

The investment managers of funds with institutional clients have generally been screened by institutions with the resources and consultants to do a comprehensive screening. The advisor needs to evaluate fund size and asset growth as well as other areas of the investment firm that will compete for the attention of the fund professionals. Funds typically grow as performance improves. The advisor should look for a qualified manager who does not use multiple approaches to investing in different funds.

If an investment company is managing both a mutual fund and a hedge fund, the advisor should understand the potential for conflict. The company may have an incentive to allocate its best stocks to the hedge fund, as hedge funds typically are much more lucrative than mutual funds.

A manager can cause substantial harm to a fund by placing personal stock trades before clients (front running) delaying client orders, and misappropriating investment opportunities of the fund. Most mutual funds have a code of ethics. An area of potential conflict of interest between the manager and the shareholders is manager compensation, particularly if the manager's potential to earn a bonus creates an incentive to take additional risk. The advisor should examine the extent to which the manager's net worth is tied up in the fund or whether the board of directors is paid in fund shares. By analogy, the fact that a pilot is willing to fly a plane gives comfort to the passengers.

Fees and expenses. Fees and expense information is critical to any evaluation because fees and expenses present a major hurdle for fund managers to overcome to be successful. Often the fund company earns fees from other sources that are not readily identified by the prospectus. Understanding and fleshing out any conflicts of interest will be a good indication for the advisor of whether the fund is oriented more to the shareholder or to the management company. Many of these items are not disclosed at the present time.

The amount paid in commissions and transaction costs may demonstrate a fund company's commitment to minimizing shareholder expenses. Sometimes, when the broker acts as principal, the brokerage firm will charge the mutual fund a commission considerably in excess of the cost of the transaction. The excess commission dollars, called "soft dollars," are then rebated back to the mutual fund, which uses them to pay for "research." Research, such as Bloomberg terminals and periodical subscriptions, assists a fund manager in the decision making process. Soft dollars are permitted under the Securities and Exchange Act of 1934. These soft dollars enable the fund managers to use the clients' trading activity to pay for their research and potentially for the research of other nonmutual fund clients.

Funds often use down-market redemption fees to avoid panic selling by unsophisticated investors. A fund may also have a policy restricting the short-term trading of investors. Fulcrum fees are performance fees paid to the investment company or fund manager as an incentive to beat a benchmark. One disadvantage to fulcrum fees is that they may create an incentive for a manager to take on additional risk in the event of underperformance. If a mutual fund's fees are based on assets under management, as those of most mutual funds are, then an incentive exists to grow the asset size but not necessarily to improve performance.

Tax issues. An even greater expense than fees are taxes. For private investors, the advisor can add enormous value by acknowledging the cost of taxes and choosing funds with taxes in mind. Yet funds that advertise tax efficiency might be doing so at the expense of returns. This will be an important distinction for the advisor to assess.

If a mutual fund holds securities that have greatly appreciated, embedded gains will occur and the capital gains will be spread out among shareholders when the securities are sold, regardless of whether the shareholder was invested during the time that the gains were earned. A fund with large embedded gains and significant turnover can be expected to distribute in the very near future. If a firm has had problems with the Securities and Exchange Commission (SEC) or other regulatory bodies, this will be indicated on Form ADV.

Investment Planning Answer Book by Jay L. Shein, Q 10:79, What is the investment process?

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Some financial advisors talk about fund evaluations using the three "Ps"—process, people, and performance. The investment process is a strategy that a mutual fund manager employs to determine which securities should be purchased from the available investment universe.

It is the advisor's job to evaluate the fund manager's strategy to learn how the manager expects to add value. Further, it is the advisor's job to evaluate any weaknesses in the strategy going forward. Ultimately, the advisor seeks to determine whether past investment results were because of skill or luck.

For equity funds, the three primary investment processes are (1) fundamental, (2) quantitative, and (3) behavioral. For fixed income funds, the five primary investment processes are (1) active duration, (2) sector rotators, (3) opportunistic sector rotators, (4) mortgage specialists, and (5) international. Some managers use strategies other than these. In these cases, the advisor should evaluate the thought process being used and attempt to apply it to the fund. As managers divert from accepted practices, it becomes more difficult to evaluate the fund's process and how it led to past performance.

Equity mutual fund fundamental, quantitative and behavioral analysis/process. The fundamental investment process is highly research directed. The fund manager and his or her analysts evaluate either macroeconomic policy or individual securities. A macroeconomic policy, often called top-down analysis, occurs when the fund strategist selects the sectors most likely to outperform, generally based on the business cycle. When the business cycle is heading into a recession, these managers will purchase defensive stocks, such as food and tobacco. As the economy moves out of a recession, they will purchase consumer durables, such as automobiles and other big-ticket items. With a top-down manager, the individual security selection will not be as important as the sector selection.

A fund that focuses on individual securities is often called "bottom-up." These managers know the portfolio's companies very well. Often a fund manager visits company management and talks to and studies suppliers, competitors, and customers. The fund manager assesses the books, records, financial statements, ratios, and other data of each company. A bottom-up fundamental process is very time consuming.

At all times the market consensus is establishing an estimate of future earnings and the risk of those earnings. The fundamental analyst believes that through his or her research efforts, he or she can obtain a better estimate. When the analyst finds a security that is improperly valued too low by the market, he or she will purchase this security and wait until the market price rises to the appropriate fair market level, capturing above-average returns. If the analyst is able to do this accurately and consistently, his or her shareholders will be rewarded with above-average returns.

The most important component of fundamental analysis is the people, both fund manager and analyst. What the advisor needs to ascertain is how this fund is able to attract, retain, and motivate such well-educated and talented managers and analysts. With so many sophisticated, well-paying investment management firms, why does this firm have the best talent? Why is this team able to consistently outperform the competition?

Initially, the advisor needs to determine the investment process. Once this is understood, the advisor will be in a position to follow up. With a fundamental process, the advisor should address questions that focus on retention of managers and analysts and on the depth of the investment team.

Funds whose process is top-down are able to depend more heavily on one or two market strategists. This type of fund can hold many positions without a lot of analytical support. On the other hand, a bottom-up process will require a significant amount of hands-on individual stock evaluation. These funds rely on substantial analytical support. The advisor should look at the number of positions in the portfolio. If there are too many, it may be a sign that the management is stretched. If the number of positions has grown over the past few years, it may be

due to an increased fund size. The advisor should ask if the fund management is still able to perform as good a job of due diligence as it had previously.

If the fund manager is quantitatively based, he or she believes that publicly available information can be interpreted differently than the market can to develop better expectations of a company's prospects. Managers who use a quantitative process typically experience rapid turnover. The advisor should follow up with questions concerning transaction costs.

Quantitative managers have "black boxes," or computer programs into which a significant amount of data is entered. It is important for the advisor to know how often and how this model may have changed. If a quantitative manager frequently changes the model, this can be interpreted either positively or negatively. It will be positive in the respect that most quantitative managers continually adjust their approach just as the market constantly evolves. Processes that worked in the past may no longer work in the present. It will be interpreted negatively if the manager is currently using a model that is quite different from what was used in developing his or her track record.

A behavioral manager seeks to use heuristics, or mental shortcuts, to find systematic mistakes in the way the market is evaluating certain securities. This process can be similar to a quantitative manager's in that one can expect a high level of turnover. Transaction costs and taxes are both major factors to consider. The behavioral manager needs to be able to explain quite clearly the process that he or she uses and it should make sense to the advisor. If the behavioral manager is unable to articulate the process or if the advisor does not understand it, it may be best to pass on this type of fund.

A related question is how the fund is different from other funds with the same investment objective. By evaluating the fund manager's response, the advisor learns two things. First, the mutual fund portfolio manager will usually explain how his or her approach differs from others. Second, an advisor with limited experience with this type of fund will be provided with a basic background of features to look for.

Fixed income mutual fund processes. Fixed income managers add value through five major styles. As mentioned above, these include (1) active duration, (2) sector rotators, (3) opportunistic sector rotators, (4) mortgage specialists, and (5) international. Active duration managers bet on the direction of interest rates. Sector rotators bet on duration, but only within roughly one year of their benchmark. Other bets are taken on yield curve movements, on relative sector movements, and on individual issues. Opportunistic sector rotators follow all of the sector rotator bets; however, they can also bet outside of the benchmark, adding international bonds, emerging market bonds, and high-yield bonds. Mortgage specialists focus on analyzing and making forecasts of prepayments and volatility. International managers bet on currencies and countries.

Academic research has indicated that it is very difficult for fixed income managers to add value. This is due to the high-expense ratios of most fixed income funds. The expense ratios for fixed income funds are similar to equity funds, although the return potential and the opportunity to add value for fixed income fund managers are much less than for equity funds. In general, interest rate bets tend to add the least value because, even if they are right, the bets can only be taken a few times per year. The most opportunity for added value is with fund managers who have a great deal of flexibility or those who are opportunistic sector rotators. This style permits the most active bets and, therefore, the best opportunity to add active value. In the questionnaire or interview process, the direction of inquiry will change depending on which of these approaches is taken. Therefore, it is necessary to have as much investment background as possible.

What the advisor is looking for when evaluating a fixed income manager is the amount of risk exposure that the manager is taking. Funds that focus on active duration would be changing the fund's duration. An advisor might check the highest and lowest duration over the past 12 months. If the fund parameters are a duration of three to 12 months, the manager is trying to time the markets.

Another way for a fixed income manager to increase risk is to lower the credit ratings of the portfolio's bonds. Although the prospectus lists a minimum credit quality and a maximum percentage that can be invested in low-quality bonds, it is important to know if the manager clings to this percentage with the maximum allowable low-

quality bond. An advisor might follow up by asking, "What was the maximum percentage of the portfolio that was invested in the lowest-quality securities at any time during the past 12 months?"

EXAMPLE 10-32

Fixed Fund is a high-quality corporate bond fund. It must invest 65% of its assets in investment-grade bonds rated BBB or above. Fixed Fund, in an attempt to be aggressive, purchases 35% high-yield and emerging market debt and 65% in split-rated bonds. A split-rated bond is one that is rated BBB by one agency and BB by another. This still qualifies for listing as investment grade; however, the yield spreads for split-rated bonds are 10 to 35 basis points higher than for straight BBB.

COMMENT

With a real estate investment trust fund, it is appropriate for the manager to explain the use of funds from operations (FFO. As the fund manager discusses his or her approach in evaluating this statistic and how it is different from other managers', the advisor learns that FFO is a very important component of the decision process. In this way, the fund manager provides questions that the advisor can use to ask other mutual fund managers employing a similar process or style.

Portfolio issues. Portfolio issues are concerned with finding the proper benchmark for comparison as well as reviewing the actual holdings of the portfolio for potential trouble spots.

Investment Planning Answer Book by Jay L. Shein, Q 10:80, How is a benchmark used?

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The advisor will want to know both the fund manager's benchmark and the fund's performance objective. Since the investment style is what defines the portfolio's risk and return, the advisor should have an initial expectation of the manager's benchmark. If the advisor had not completed a fundamental or returns-based style analysis, the manager's benchmark may indicate the style. The benchmark will also indicate what the fund manager believes to be the proper measurement of alpha or added value. If the advisor is evaluating the manager based on the S&P 500 while the manager investment style is large cap value, he or she may err in evaluating performance. Another feature of the benchmark is that the same benchmark should be used internally by the fund company to compensate the manager. Advisors usually do not want the fund benchmark to be the S&P 500 while the manager is compensated based on a universe of peers.

The performance objective is stated in terms of how much value over the benchmark that the manager expects to add. This is a useful measuring tool and helps the advisor to determine whether the fund acted as advertised. If there are no performance objectives, it is difficult to know whether the objectives have been met. Often fund companies will be reluctant to provide performance objective information in writing as it might subject them to adverse litigation if they failed to meet this objective.

CAUTION

Benchmarks are pretax and the results for taxable clients will differ significantly. If the performance objective does not exceed a benchmark by a significant margin, the advisor may want to consider the use of a passive alternative.

Investment Planning Answer Book by Jay L. Shein, Q 10:81, Should there be concern when a mutual fund uses derivatives?

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Derivative securities are those that are nontraditional and may be used to enhance return or to reduce risk and volatility. In 1994, the Managers Intermediate Mortgage bond fund "blew up" due to mortgage derivatives. These investments simply did not work the way that they were supposed to. In evaluating mutual funds, the advisor should be most concerned about underperformance in an extreme and unexpected manner rather than mere underperformance. When a fund uses derivatives, there may often be questions as to how these securities will trade under adverse circumstances. A prospectus or a review of the holdings will not necessarily give the advisors an appreciation of the portfolio's risk. For example, a bond fund prospectus may say, "All securities in which the fund will invest will be either (i) issued or guaranteed by the U. S. government or one of its agencies or instrumentalities, or (ii) at the time of the investment, rated in the highest category by a nationally recognized rating agency, e.g., AAA by Standard & Poor's Corporation or Aaa by Moody's Investor Service, Inc." This description may be legally true, but it also conveys a sense of security that might not be accurate. In 1994, many bond funds carried this type of language, yet many were invested in high-risk derivatives. In fact, what the prospectus does not explain is that U.S. government bonds can be much riskier than high-yield or junk bonds. The rating of AAA applies to repayment of principal, and the derivatives were purchasing cash flows, not principal. Cash flows are not guaranteed by anyone.

A fund that puts more than five percent of its portfolio into derivatives such as interest-only strips or inverse floaters can signify that the risk of the bond fund is much more like an equity than a portfolio stabilizer. The advisor needs to look at how the derivatives are being used. Ideally, they are being used for hedging purposes, but the advisor should consider whether the derivatives are being used to get around investment policy restrictions. One way is to ask the manager whether derivatives have helped or hurt the portfolio in the past and to ask for specific examples. If the fund hasn't used them in the past, the advisor might want to avoid them. It probably is not a good idea to have client funds invested while the manager is being educated. Finally, the fund management company and the board of directors should be watching the fund's use of derivatives. It is helpful to know whether there is anyone with oversight experience.

Investment Planning Answer Book by Jay L. Shein, Q 10:82, Can illiquid securities cause problems?

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An illiquid security is one that cannot be quickly sold either because of actual restrictions in the sale of the security or because of a lack of market interest. Like derivatives, illiquid securities can also lead to potential problems. In May 1997, a small mutual fund, IAI Value Fund, which is managed by Investments Inc. of Minneapolis, recorded a one-week gain of 28.6 percent. The fund's largest position was in a small illiquid company called Pathnet, Inc. that had filed with the Securities and Exchange Commission to sell shares in an initial public offering (IPO). The fund managers decided to revalue the security using the IPO price. While investors in this small fund were certainly pleased with the reward, the shareholders who sold the day before most likely were not. A lawsuit was initiated claiming that shares redeemed prior to the revaluation were redeemed at artificially depressed prices. The problems with illiquid or restricted securities are numerous, although they usually come down to valuation. If an illiquid security is not traded frequently, the price at which it is valued, typically the most recent trade, will not necessarily be accurate. Unfortunately, the reality of the most recent trade and the next most probable trade, if the fund were to liquidate, can be two very different prices. Also, if the fund needs to raise cash for liquidations, the most liquid securities will be sold first. The illiquid securities will remain in the fund. The advisor needs to review trading strategies in the event of redemptions.

Investment Planning Answer Book by Jay L. Shein, Q 10:83, Are there operational issues to be concerned with?

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Mutual funds that grow significantly may or may not be able to continue to outperform. They almost always cannot achieve outperformance in the future the way it was achieved in the past. Some fund complexes allow their funds to stay open beyond the point at which returns suffer. One way of evaluating a mutual fund's dedication to preventing an overexpansion is to look at its history regarding closing funds.

Investment Planning Answer Book by Jay L. Shein, Q 10:84, Should a fund manager close a fund?

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Closing a fund may give the advisor an indication of the manager's commitment to asset size. The advisor should evaluate the sponsor's commitment to closing other funds and how they were affected. Generally, when a fund is closed, it rarely is closed to all investors. Often, existing shareholders or 401(k) plans are allowed to continue to invest. Sometimes, registered investment s can continue adding money for their clients. The manager may continue taking money into private accounts or even start new funds with similar objectives. Therefore, advisors may question whether the fund is being closed because of size or because it wants steadier cash flows.

Sometimes a fund is closed and, consequently, a new fund is opened. If the same managers are taking on more responsibility by starting new funds, the advisor should question whether the management team is stretching itself too thin. The fund closing itself is not as important as whether the total assets for investing with this style stop rising and whether the management company stops the process of raising new money for the fund or from private accounts. The key for the advisor is to assess what impact closing will truly have on maintaining a proper asset base. If cash inflows are offset by normal redemptions, the size shouldn't be affected.

Sometimes closing a fund can make rebalancing more difficult as fund shares can no longer be bought and sold. If a fund is completely closed, it will not permit appropriate rebalancing. It is also important to understand the investment process. High-turnover styles such as momentum funds and quantitative funds will have more difficulty minimizing costs with larger amounts of assets.

CAUTION

Another consideration for a closed fund is whether superior performance will continue since the manager no longer has the incentive to keep up the performance to attract new monies. This can also be important in the allocation of securities, such as hot initial public offerings (IPOs). Will the closed fund get the best IPOs or will the IPOs go to a newer fund in the hope of very strong early, but artificial, returns to attract significant dollars? Although funds have to allocate securities fairly, allocation is very difficult to monitor or verify. It is quite easy for a manager to allocate certain securities to certain funds with the explanation of differing cash flows. Since a closed-end fund has very little cash that flows into it, this can often be an excuse not to allocate IPOs to a closed fund.

Investment Planning Answer Book by Jay L. Shein, Q 10:85, How important are mutual fund cash flows?

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Fund cash flows are very important for the mutual fund investor and the advisor needs to address this issue. A fund that has built up a track record with a small amount of assets may have a much more difficult time outperforming with significant additional assets. If the fund has been experiencing significant redemptions, there may be adverse tax consequences to the current investor. In addition, rapid turnover typically will force the manager to sell the most liquid securities first. For example, redemptions in an Asian emerging market fund may force the manager to sell the most liquid Hong Kong market securities first, leaving the portfolio filled with illiquid and potentially very volatile securities. The turnover ratio is also based on the larger of gross redemptions or gross sales. These numbers may be incorrect if there are lopsided cash flows.

Investment Planning Answer Book by Jay L. Shein, Q 10:86, What are other questions and issues to address?

Accounting process. The accounting treatment of a fund's trading is an important component of the fund's after-tax return. At one time, mutual funds did not pay attention to the determination of lots. Today, many firms recognize the importance of HIFO, or "highest-in, first-out," accounting. These accounting issues are not fund management issues. The fund manager will buy and sell just as before. Instead, the accounting department allocates the shares to the most favorable lots. Generally, these are the highest-cost-basis shares unless the highest-cost-basis shares would create a short-term capital gain. There are still many funds that have failed to utilize this relatively simple technique.

Ownership. The financial advisor should determine whether the fund will be offered exclusively to advisors or be open to the retail public. If the public is being marketed, one must assess the possibility that the fund will have "hot" money that will leave at the first sign of market trouble. Hot money is where investors chase the funds with the highest most recent return. These investors stay in the fund as long as returns remain high but withdraw from the fund the moment another sector seems more promising. This extreme cash flow can seriously disrupt the fund management as well as create negative tax consequences. As the fund realizes capital gains, those gains are spread among the shareholders of record at the distribution date. If many investors have left the fund by this time, the remaining investors will have an increased potential tax liability.

Fund management. More hundreds of fund managers change jobs every year. In addition, mutual funds are being created so quickly that some people question whether competent managers can be hired quickly enough and trained well enough to justify their fees. A star fund manager can cost a fund complex over $2.5 million. This star can be very attractive in raising assets, but when a high-profile manager, leaves, the opposite effect can occur. For these reasons, many fund groups have begun to use a team management approach. If a fund uses just one manager, it must disclose the name of that person and, if the person leaves, the fund must update its prospectus. A star manager approach is not necessarily better or worse than a team approach. Usually, a star manager is backed up by a team of analysts. If the star leaves, he or she generally leaves the analysts behind.

The advisor should seek to determine who is running the fund and what the fund company is doing to maintain its investment discipline. Also, it is important to know that the people in charge of performance still have an excellent track record. A manager might have done very well because he or she had a terrific technology analyst. If this analyst left, it might have a very negative effect on the fund even though the manager is the same. The advisor's objective is to flush out what could go wrong and, in this instance, who could leave, which might create the same effect.

Institutional clients. It may be comforting to see a list of big clients, but it is really important to know that the investment managers have been scrutinized by pension plans that are subject to the Employee Retirement Income Security Act of 1974 [P.L. 93-406] (ERISA). Institutions have the resources and consultants to do a comprehensive screening of investment managers, something that many advisors are unable to do. Looking at the number of accounts will give the advisor an idea of how much client servicing is being conducted by the fund managers. If there are too many clients, the advisor may find that the fund managers are doing more servicing and less managing.

Fund size and asset growth. The advisor should pay special attention to asset growth. If the performance track record is what initially attracted the advisor, it is important to know that the fund manager is still investing with the same investment process and using the same investment style. The advisor should check on the number of positions and market cap (both median and weighted average market cap. If the fund has increased the number of positions or the median market capitalization, this may indicate that the fund size has grown. As fund size grows, future returns are often affected. This can occur because the fund manager can no longer buy the smaller companies or their best ideas. Size does matter, especially for less liquid areas of the market.

As a fund's performance improves, its asset growth typically will increase. If it does not, this will also be a red flag. Compare the fund's median market cap today to that of a year ago. Many funds do not close when they should and the added net cash flows may force the fund manager to buy more and more securities. A fund that increases position size from 50 securities to 90 securities probably will not have the same conviction for stock number 90 outperforming as it might for stock number 50. Finally, if the fund is too small and does not raise enough money, it might be closed or merged into a different fund.

PLANNING NOTE

Cash flows and liquidity are not as important in the fixed income market to some managers, for example, U.S. government bond managers who can easily purchase and utilize bond futures. However, if a fund manager's primary method of adding value is through credit analysis, then liquidity can become very important. A municipal bond or corporate bond fund with billions of dollars of assets may be unable to add value through credit analysis because it will be restricted to only the largest credits. The largest credits are those securities that have been issued in very large amounts.

The advisor should evaluate the maximum amount of assets that the fund manager feels can be managed effectively. Although there is a significant amount of controversy in determining what would be the maximum asset size, an important prospective should come from the fund manager. By asking the fund manager to explain the rationale for choosing a certain asset size, the advisor may gain additional perspective regarding the ease or difficulty of managing in this asset class. The advisor should also keep in mind that if or when there is a large market decline, a manager may be in a position to take on additional assets that he or she would not otherwise be able to invest during a normal or high market.

Professional staff. The professional staff can often become distracted if it has too many products to manage. If the manager believes in value stocks, he or she should not be managing both a value and a growth fund or a growth and a gold fund. The advisor should look for consistency in the approach and should not choose a manager who uses multiple approaches to investing different funds. It is wise to look for a manager who is not managing too many products or who has perhaps spread his or her resources too thin.

A review of the manager's qualifications is important. This will help the advisor to assess the fund manager's competency. The advisor should look detailed information on the manager's experience. Professional designations such as Chartered Financial Analyst (CFA) or others are a plus. Ask about the fund manager's educational background. With the massive growth in the number of funds, some newer funds are being managed by fund managers with very limited experience. The advisor should also look for the depth of resources. If the fund relies on one star analyst and the analyst leaves, it might be difficult to replace him or her. When a manager leaves a fund, it is not always easy to leave with him or her because of transaction costs, commissions, and tax consequences. Therefore, it is important to assess the depth of management.

Investment Planning Answer Book by Jay L. Shein, Q 10:87, What is a hedge fund?

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A hedge fund is a private investment partnership. Many investment companies are now managing both mutual funds and hedge funds. For investment companies, managing a hedge fund can be much more lucrative than managing a mutual fund because a typical hedge fund earns a one-percent to three-percent management fee plus up to 25 percent of the hedge fund's profits. Compare this to a one-percent or so mutual fund management fee and the advisor will easily observe that an investment company might have an incentive to allocate the best stocks or hottest initial public offerings to the hedge fund, not to the mutual fund. If the investment company manages both a mutual fund and a hedge fund, and particularly if the fund manager is the same in both cases, the advisor should proceed with caution and understand the opportunities for conflict.

Investment Planning Answer Book by Jay L. Shein, Q 10:88, What code of ethics must a manager abide by?

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The manager of a mutual fund portfolio is permitted under federal securities laws to personally profit by purchasing or selling for him- or herself the very same securities that are being purchased or sold on behalf of the fund. It is also legal for a fund manager to maintain an individual account completely outside of the mutual fund that he or she is managing. Although abusive practices rarely occur in the mutual fund world, when they do, they are highly publicized.

The SEC has not established standards regarding personal trading and, as pointed out above, does permit managers to buy securities in their own account as well as in the funds that they manage. But by placing personal stock trades before clients (front running), delaying client orders, and misappropriating investment opportunities that properly belong to the mutual fund, a manager can cause substantial, quantifiable harm to the mutual fund. Furthermore, it might be better if a fund manager does not purchase individual securities for his or her own account. This keeps the fund manager concentrating solely on the mutual fund's assets.

Most mutual funds have a code of ethics and keep records regarding compliance with the personal trading restrictions imposed by the code. A code of ethics has also been established by the Association for Investment Management and Research and the advisor can use this for comparison purposes. This is one area that is strongly supervised by the SEC.

A recent example occurred at Dreyfus Corp., where the fund manager, Michael Schonberg, who managed the Premier Aggressive Growth Fund and Aggressive Growth Fund, purchased large quantities of a small cap stock called Chromatics Sciences International. When he began purchasing the stock for the mutual fund, he held 20,000 shares in his personal account. Dreyfus has stated that Schonberg complied with internal regulations, but whether the stock was purchased for its investment merits or to boost the personal holdings of the fund manager was suspect. In 1995, John Kaweske of Invesco Inc. was fined for trading in his own account shares held by the funds that he managed.

Investment Planning Answer Book by Jay L. Shein, Q 10:89, How should a manager be compensated?

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Manager compensation will often bring out conflicts of interest between the manager and the shareholder. If, for example, a fund manager is paid a relatively small salary of $50,000 for managing the portfolio but given a bonus of $500,000 if he or she is in the top 10 percent of a peer universe, the manager will have a strong incentive to ratchet up the risk of the fund if he or she finds that the fund is trailing the pack. The advisor should know if the bonus is based on a single year or a longer time period, such as three years. Since an advisor generally wants the fund manager to employ a long-term focus, a three-year bonus period with a penalty for going below a certain point will probably be preferential to a short-term bonus. Bonuses are usually based on beating a benchmark or a universe of peers. However, a fund generally prefers to give a fund manager a performance bonus based on a benchmark rather than on a peer universe because it is much more difficult to beat a benchmark. Comparing a fund manager's performance to a peer universe can lead to accepting mediocrity as the basis for evaluation.

The manager should be compared against a real benchmark that is investable. If the benchmark is not investable it does little good for the advisor, since a custom benchmark would not be a viable alternative investment option. The advisor should check to make sure that the benchmark or peer universe used to determine compensation is the same benchmark that is used to evaluate the fund's performance as stated in the prospectus and as determined from the advisor's own research. If the manager's incentive is different from the proposed objective, this is a strong indication of where the manager's motivation may lie. Another major point is to know whether the fund manager looks for the long term. A compensation structure that is long term with equity can be a sign that the fund manager has incentives to stay for the long term and not jump ship at the next opportunity.

Investment Planning Answer Book by Jay L. Shein, Q 10:90, What should the manager’s financial commitment be?

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It is comforting to know that when one flies on a commercial airliner, the pilot on board is an expert and understands airline maintenance and the dangers of flight. If the pilot is willing to fly the plane, the plane must be okay. The same logic applies to mutual fund managers who have the bulk of their net worth tied up in the fund. It is also comforting when the fund's board of directors is paid in fund shares.

For example, a fund, the investment restricts may restrict its employees from investing in any equities except the three Long Leaf mutual funds.

Investment Planning Answer Book by Jay L. Shein, Q 10:91, What are the typical fees and expenses?

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When evaluating a mutual fund, financial advisors need to be aware of and understand the various fees and expenses associated with the fund. Discussed below are commission and transaction costs, soft dollars, redemption fees, frequent trading prohibitions, and fulcrum fees.

Commission and transaction costs. The amount that a mutual fund pays in commissions may provide clues as to whether a fund company is paying attention to minimizing shareholder expenses and whether the fund is paying in soft dollars (discussed below). The cost of commissions has fallen for large investors and can be as low as one cent per share.

The advisor should look for inconsistency between transaction costs and the manager's style. Value stocks tend to have lower costs than growth stocks. A momentum-based manager or quantitative manager will be trading frequently. A fundamental, long-term investor should be trading less frequently. If the manager claims to have very long holding periods and low turnover, this strategy should be reflected in the trading costs.

Soft dollars. When a mutual fund manager buys or sells stock, the price of executing the transaction includes the price paid or received for the stock and the brokerage commission. The brokerage commission includes the actual cost of the trading function, principally executing the trade, clearing, settling, custody, and the brokerage firm's profit. The brokerage firm sometimes charges a mutual fund a commission considerably in excess of the cost of the transaction, or an additional "spread" or "discount," when the broker acts as a principal. The broker acts as a principal when the security sold is owned by the brokerage firm. However, instead of this "excess commission" going to the brokerage firm's profit, it is rebated back to the mutual fund, which then uses these rebates to pay for "research." The commission dollars are called "soft dollars" and are permitted under Section 28(e) of the Securities Exchange Act of 1934. "Research" refers to services that assist the fund manager in his or her decision-making process and includes items such as Bloomberg terminals, periodical subscriptions, performance measurement evaluations, computer software, PCs, conference fees, and some travel expenses. In essence, the fund pays the brokerage firm an additional fee in the form of higher commissions than was required in return for research services.

Paying higher commission rates may help the fund manager maintain access to top security analysts. If the fund manager relies on Wall Street research and comes from a fairly small investment management firm, he or she may not be able to obtain access to the biggest firms' analysts unless he or she pays higher commission rates. The advisor needs to decide whether research ideas can be better generated by original research or by original research supplemented by Wall Street research.

Soft dollars allow fund managers to use clients' trading activity to pay for their research and potentially the research of other nonmutual fund clients. Many critics of soft dollars believe that this research should be paid by the fund manager out of the management fees as a cost of doing business and not paid by shareholders as a "hidden" fee. For example, a Bloomberg terminal could be considered valuable to shareholders although most shareholders would expect the Bloomberg terminal to be a cost of the advisor, not a cost of the shareholder. Brokerage firms receive commissions, money management firms receive free research, and research services sell more product.

The Securities and Exchange Commission (SEC) requires that a fund family seek out the best execution and best prices for its trades unless it receives something else that would be valuable to shareholders.

Redemption fees. The use of a down-market redemption fee is a very shareholder-friendly device. It helps the fund manager avoid panic selling by unsophisticated investors, which increases the transaction costs to all remaining shareholders.

For example, a fund may charge a two-percent redemption fee on their index products (micro-cap index) for shareholders who redeem in a down market. The fund could then define a down market as any time the S&P 500 index declines by five percent over a five-day trading period.

Frequent trading prohibitions. Most fund shareholders are long-term investors. However, if some shareholders frequently trade in and out of the portfolio, this will cause transaction costs and tax consequences for the remaining shareholders. It might also force the fund manager to retain more cash than he or she desires. In some circumstances, funds will have a policy restricting short-term trading, which is sometimes defined as two purchases and sells of the fund per year. If this occurs, the shareholder is sometimes asked to disinvest.

Fulcrum fees. A fulcrum fee is a performance fee. The investment company or fund manager is paid a certain minimum fee plus an incentive. If the fund manager beats the benchmark, compensation goes up. If the fund manager underperforms the benchmark, compensation goes down. There can be negative aspects to fulcrum fees. First of all, they require a significant amount of legal description in the prospectus. More importantly, they may create an incentive for the underperforming manager to take extra, perhaps excessive, risks. For example, a manager who is well below the benchmark in the first half of the year may take on additional risk in the second half. Likewise, a manager who has performed well in the first half may take precautions going forward in order to avoid losses.

Most mutual funds' management fees are charged based on the amount of assets under management. Therefore, there is every incentive for the fund company to try to grow the assets, not necessarily to improve performance. In fact, over the past few years, even performance well under the benchmark has been rewarded by a doubling of investment management fees as fund sizes keep increasing. The concern for the advisor should be whether this fee arrangement creates an incentive for the fund company to keep growing a fund beyond the point where size matters. This concern has not been elevated during the past few years because most individual investors are not conscious of the basic fee that is adjusted based on the total return performance of fund versus the S&P 500.

Performance-based fees were most likely started with hedge funds in the 1950s. Since the fund managers were both long and short, they were, in theory, unaffected by the markets and should have been able to make money in both up and down markets. The minimum fee charged was intended to cover operating expenses and the performance fee was to produce profits. Today, this structure remains in the hedge fund industry, although it works differently than originally conceived. First, the minimum fee of one or two percent covers much more than profits. Second, the performance fee once used for realized gains is now based on account appreciation.

Tax issues. Taxes are often a larger expense for clients than are transaction fees, management costs, or inflation. Because the impact of taxes is sizable, it is important for the advisor to evaluate the after-tax performance of a mutual fund and the steps that a fund manager takes to minimize taxation. The advisor should remember that the objective is to maximize after-tax returns, not minimize taxes. If a mutual fund claims to be tax aware or tax efficient, one of the ways that the advisor can assess the impact of the tax strategies is to understand the differences between the fund's process for tax-exempt clients and its process for taxable clients.

Embedded gains. Embedded gains occur when the mutual fund holds securities that have greatly appreciated. These capital gains will be spread out among shareholders when the securities are sold, whether the shareholder was invested during the time that the gains were earned or not. The larger the gain, the larger the potential distribution. Gains may also indicate a fund manager's awareness of taxes. A large embedded gain may mean that the fund manager is aware of the negative consequences of realizing capital gains. Likewise, a small embedded gain may be indicative of a manager who does not consider taxes in the management of the fund.

If the fund has large embedded capital gains and significant turnover, this might be a red flag. This fund can be expected to distribute its gains shortly. A low or nonexistent level of capital gains will exist in a new fund.

A fund can have what amounts to a "tax life cycle." New funds tend to be very tax efficient because they have a small base of shareholders. As the base grows, the gains are spread out over a larger and larger shareholder

base, even though the gains are earned by just a few. The early buyers minimize taxes on gains. As the fund size decreases, later buyers are forced to accept gains spread out over a smaller shareholder base.

Form ADV. Form ADV will alert the advisor to any problems that the firm has had with the Securities and Exchange Commission or other regulatory bodies. The ADV Part 2 will describe the fund's investment process, risks, and other valuable information.

Investment Planning Answer Book by Jay L. Shein, Alternative Assets

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Alternative assets are asset classes or investments outside of the normal mix of U.S. and international equities. The primary categories of alternative assets seen in mutual funds are "long-short," real estate, and commodities. Alternative assets are commonly used by financial advisors in developing their clients' portfolios. These asset classes offer new ways of diversifying as well as different investment opportunities for advisors who believe that traditional equities are reaching fair or overvalued levels.

Portfolio theory teaches us that if we could find two investments that move in opposite directions, or that are perfectly negatively correlated, and these same two investments have positive returns over time, we could buy them both, earn the average of their returns, and take no risk. Unfortunately, there are no such investments. No two investments are perfectly negatively correlated. Nonetheless, there are alternative mutual fund investments that, over long periods of time, have lower correlations to most mutual funds and are beneficial for diversifying a multifund portfolio.

Investment Planning Answer Book by Jay L. Shein, Q 10:92, What is long-short strategy?

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Long-short strategies are investment approaches that simultaneously buy and sell stocks. At times the funds take positions by overweighting the buys and underweighting the short sales. At times the fund manager designs the portfolio to perfectly match long purchases and short sales. When long purchases and short sales are matched perfectly, the fund is called "market-neutral." Market-neutral strategies hold out the promise of large positive returns year after year regardless of the direction of the market. Since long purchases and short sales offset each other, the potential benefit to market-neutral funds comes from the skill that a manager has at security selection. If the long purchases go up in a rising market by more than the short sales go down, the fund and its investors will profit. Likewise, in a declining market, if the short sales go down by more than the long purchases, the fund will rise in value. The key ingredient in a market-neutral fund is that it does not matter whether the market is rising or falling. The fund has placed bets in both directions. Whether the investor benefits will depend on the results from the security selections and a short interest rebate.

In a long-short portfolio, the three primary components are a (1) long position in securities, (2) short position in the same asset class of securities, and (3) risk control process aimed at eliminating market risk by matching the long and short portfolios. A long-short fund has a margin account established at a brokerage firm and uses most of its assets to purchase long securities plus the full proceeds from the short securities as collateral for those short sales. Unlike a typical fund manager, the manager of a long-short portfolio seeks only active positions and does not use any funds to replicate an index. If an investor wants exposure to the market, the investor can purchase futures. Disadvantages of this type of fund include potentially unexpected market exposure, higher expense ratios, and higher potential tax liabilities.

Long-short. Prior to the Taxpayer Relief Act of 1997 (P.L. 105-34) (TRA '97), mutual funds were subject to the "short-short" rule, which prohibited them from earning more than 30 percent of their income from short sales or from stocks held less than three months. TRA '97 removed this restriction, creating an opportunity for long-short and market-neutral mutual funds. [IRC § 851] Market-neutral funds balance long stock positions with short stock positions to avoid market risk. Long-short funds can be neutral or they may make concerted bets on either the long or the short side.

Like any actively managed mutual fund, market-neutral funds seek to find undervalued, or "positive alpha," stocks and overvalued, or "negative alpha," stocks. When long and short portfolios are combined, the long return earns the market return and the short portfolio loses the market return, and so, together, the market cancels itself out. The return from market-neutral funds comes from picking stocks with positive alpha that outperform the market on the upside and selling securities with negative alpha that underperform the market on the downside. Hence, these funds are often called "double alpha." In addition, there is interest earned on the proceeds from the short sales. In theory, market-neutral funds will not be affected by either rising markets or declining markets since they will have no exposure to market or systematic risk.

EXAMPLE 10-33

Assume that Wasserman Fund is a $100 million market-neutral fund. Assume that the stock market rises by 10%. Through skillful stock selection, the fund's long positions rose by 12% and the short positions underperformed the market, rising by only 8%. Therefore, the long positions are now worth $112 million and the liability for the short positions is $108 million. There has been a $4 million increase in portfolio value ($112 million - $108 million). If there were no skill at security selection, the long portfolio would have risen to $110 million and the short liability would also be $110 million. The fund also earns interest on the initial $100 million short proceeds.

Due to the risk profile of market-neutral funds, many of them use U.S. Treasury bills as their benchmark even though these funds may be subject to losses that will not necessarily occur in U. S. Treasury bills.

Investment Planning Answer Book by Jay L. Shein, Q 10:93, What is the basic structure and advantage of the long-short strategy?

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The three primary components of a long-short portfolio are a (1) long position in securities, (2) short position in the same asset class of securities, and (3) risk control process that attempts to match the long and short portfolios to eliminate any systematic or market risk. This creates a portfolio that is "market-neutral."

EXAMPLE 10-34

Middle of the Road Fund invests in long and short positions in the U.S. equity market. The risk characteristics of the long securities are matched with the risk characteristics of the short portfolio. In theory, there would be no exposure to the U.S. securities market.

Proponents of long-short portfolios believe that this structure is advantageous in several ways. First, they claim that the short side is less efficient than the long side and that they can take advantage of this lack of efficiency. Second, the long-short portfolio can take advantage of both undervalued and overvalued stocks. A traditional portfolio can only take advantage of long positions. Third, if the fund manager can add value through security selection, the long-short portfolio can have positive returns year after year, regardless of the market direction. Fourth, a long-short portfolio has the potential to have a higher alpha than a long-only portfolio. Fifth, the long-short portfolio allows the advisor to build a more efficient frontier. Market-neutral funds have very low correlations to other asset classes and are ideal for diversifying a multifund portfolio. Sixth, the long-short portfolio adds "pure alpha" that can then be moved to other asset classes. This is sometimes known as equitized market neutral. Finally, it is much easier to evaluate the value added that a fund manager brings with long-short market neutral.

Mechanics. With a long-short fund, a margin account is established at a brokerage firm. The mutual fund uses most of its assets to purchase long securities plus the full proceeds from the short sales as collateral for those short sales. A short sale occurs when a fund borrows stock and sells it with the hope of repaying the stock by buying the stock later at a lower price. The remaining assets from the original portfolio are used to provide liquidity for marking to market the short sales. The total return on a long-short portfolio is made up of the total return from the long portfolio including dividends, minus the total return on the short portfolio (before shorting) including dividends, plus the short interest rebate.

EXAMPLE 10-35

Market Neutral Fund has $100 million in assets. The long portfolio is valued at $90 million. The short portfolio is also worth $90 million. The $90 million long portfolio plus the proceeds from the $90 million short portfolio are used as collateral for the short sales. The remaining $10 million is used as a liquidity buffer to meet the daily mark to market. The $90 million in proceeds from the short sales plus most of the $10 million (some is retained by the brokerage firm and lender of the securities as a liquidity buffer) earns interest for the fund. This interest is called "the short rebate."

Leverage. In a typical long only mutual fund, a portion of the fund's assets are used to buy securities that will give the fund asset class exposure and a portion of the fund's assets are used to divert from the index. For the most part, the fund is passively managed. Only where there is divergence from the index is the manager making an active bet. This passive index weighting normally represents a large portion of the portfolio.

EXAMPLE 10-36

Cobra Fund, with $100 million in assets, uses a benchmark index with 50 stocks. The majority of the fund is invested in 48 of these stocks in equal weighting to the index. If every stock in the index had a 2% weighting, then the manager would invest $96 million (48 stocks at 2% each) of the portfolio exactly like the index. Stock #49 is the manager's undervalued selection, so the manager would use 3%, or purchase $3 million of this stock, thereby overweighting the stock (the

index would have a $2 million weighting, yet the fund has purchased $3 million). Stock #50 is the manager's overvalued selection, so the manager invests only $1 million, which is less than the 2% index weighting. In essence, the fund is very much like the index with the exception of 2 securities. In this example, the manager is making a $2 million active bet by overweighting stock #49 and underweighting stock #50. Every other dollar is invested passively in securities at their index weighting.

In a long-short portfolio, the manager seeks only the active positions and does not use any funds to replicate the index. Therefore, the fund manager could obtain the same active exposure by buying only the stocks that he or she thinks will outperform and sell short the stocks that he or she believes will underperform. In long-short, the investor is paying only for the active bets. If the investor wishes exposure to the market, he or she looks to purchase this exposure as cheaply as possible. This is usually done via futures.

EXAMPLE 10-37

Assume the same facts as in the previous example, except that Cobra Fund's manager buys $1 million of stock #49 and sells short $1 million of stock #50. For only $2 million, the fund has achieved the same active bets.

If the investor wishes the asset class exposure as well, he or she can purchase futures. If the index is made up of the S&P 500, the market-neutral fund could buy futures in the S&P 500 very cheaply. The index can be an asset class for which futures of forward contracts are available. Therefore, the active manager is being paid for the active portion and the passive portion is being bought at a low cost. The process of adding the passive index is known as equitized market-neutral.

EXAMPLE 10-38

Sharpe Fund is a $100 million equitized market-neutral fund. The fund is invested in a long-short portfolio as well as a portfolio equivalent to $100 million in S&P 500 futures. Assume that the market rose by 10%. Assume that the market-neutral portfolio earned 4%. The total return for the portfolio is approximately 14% (10% + 4%).

Investment Planning Answer Book by Jay L. Shein, Q 10:94, What are the disadvantages of long-short?

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While there are many claimed benefits to market-neutral, there are also downside risks, including potentially unexpected market exposure, higher expense ratios, and higher potential tax liabilities.

A truly market-neutral fund will have a zero (0) or close to zero beta. Beta is a measure of the fund's systematic or market risk. If the manager does not properly offset the long positions with short positions, the fund might have some level of systematic risk. This is often the case with market-neutral funds. Although most fund managers will be sector neutral, they may not be style neutral. This may occur if the manager has a value or growth bias.

PLANNING NOTE

When conducting a style analysis of a market-neutral fund, there should be no exposure, either long or short, to any style indices. For a true market-neutral fund, the style analysis should show 100 percent weighting to Treasury bills.

The expense ratio for a market-neutral portfolio will exceed that of a normal mutual fund. This may be due to the significant impact that security selection has on the returns. In a typical fund, the fund manager's security selection is usually responsible for no more than 20 percent of the return, with the market movement responsible for the remainder. With these funds, there is no market return; hence, the overwhelming majority of the return is due to the manager's skill in security selection and the short interest rebate. Additionally, a private long-short account charges a one-percent to two-percent asset management fee plus 20 percent of the gross profits. These funds commonly have expenses of two percent to three percent annually.

Investment Planning Answer Book by Jay L. Shein, Q 10:95, What benchmarks do market-neutral funds use?

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Many market-neutral funds use U.S. Treasury bills as their benchmark due to the risk profile of the funds. When the fund sells short a security, interest is credited to the fund for the sale proceeds, called a short rebate. These funds will be held at a brokerage account and will earn approximately the three-month U.S. Treasury bill interest rate. Therefore, in theory, any return over this rate will indicate manager skill. Returns below this rate will mean that the manager was not able to overcompensate for high expenses or lost value due to security selection.

CAUTION

Although three-month U.S. Treasury bills are used as a benchmark, market-neutral funds will be subject to losses that will not necessarily occur in U.S. Treasury bills. U.S. Treasury bills are backed by the full faith and credit of the U.S. government and have a fixed rate and a short duration. Market-neutral funds do not. Further, market-neutral funds may not be truly neutral and may in reality be subject to a small amount of market risk.

Investment Planning Answer Book by Jay L. Shein, Q 10:96, What is a real estate investment trust mutual fund?

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Real estate investment trusts (REITs) have been around for some time, yet REIT funds have only recently gained widespread visibility and exposure. Investors have traditionally bought real estate through direct purchases and limited partnerships. This was done because of the tax advantages associated with using debt, or leverage, to purchase the real estate and then deducting the debt service as well as generous depreciation to create tax losses. The Tax Reform Act of 1986 [P.L. 99-514] eliminated these benefits and, after a long decline in property values, REITs became a viable alternative to raise equity. REIT mutual funds have grown with the growth in REIT stocks, and advisors have increasingly considered including real estate investments in their clients' portfolios. Advantages that REITs offer over traditional real estate investments include liquidity, security, and performance.

Traditionally, real estate had a low correlation to stocks and bonds and had performed well during periods of widespread inflation. Today, however, REITs are different from the REITs and other real estate investments of the past. Because REITs are stocks, they are subject to the same considerations that any sector of the equity market is subject to. These include concentration risk and growing concerns about large REIT funds operating successfully within an essentially small or micro-cap marketplace. While investors would not consider investing in many $5 billion small cap funds, they have not focused much on large REIT funds investing in such small securities. Another criticism of real estate mutual funds is their lack of liquidity.

Real estate investment trusts. Real estate mutual funds are nondiversified sector funds that invest in real estate investment trusts, or REITs. They purchase dozens of companies but all are involved in real estate. REITs, much like mutual funds, pool their investors' funds to make real estate investments. Some REITs are diversified in the types of properties that they buy and others specialize in areas such as shopping centers, multifamily housing, office buildings, or nursing homes. Some funds invest in home-building companies or construction companies. When the sector does well, these funds will outperform. When an advisor invests in a REIT fund, he or she is taking the sector choice away from an active manager and specifically deciding to emphasize the real estate sector. This may be appropriate because most funds invest only small amounts of their assets in REITs. In theory, REIT funds also add significant diversification to a portfolio of equity and fixed income securities. Also, a large component of their return is income.

REITs cannot grow much internally since they pay out the majority of their income. They are very capital intensive because they seek to acquire additional properties and there is an ongoing need to raise capital. It is also important for the advisor to realize that REITs tend to be small cap investment with many having market capitalizations of less than $1 billion.

Background. Real estate securitization has been going on for over 200 years. The first precursor to today's REIT was the North American Land Co., started by Robert Morris and John Nicholson. Congress created REITs in the 1960s to allow small investors to invest in large-scale income-producing real estate projects. Despite the new structure, their development was limited for over 30 years. One reason was that REITs were permitted to own real estate but not permitted to manage it. This meant that REITs had to find third parties with different economic interests to manage the properties. A second reason was that the Internal Revenue Code allowed significant benefits for the ownership of real estate and investors purchased real estate through limited partnerships. By purchasing properties with debt and using aggressive depreciation schedules, investors could take generous interest and depreciation write-offs. In some cases, these were "paper losses" used to shelter ordinary income. REITs, on the other hand, specifically create taxable income on an annual basis and, as a mutual fund, cannot pass losses to investors.

This legislative balance changed when Congress passed the Tax Reform Act of 1986 [P.L. 99-514] (TRA '86), which eliminated many of the tax benefits of owning real estate. TRA '86 limited the deductibility of interest, increased the depreciation schedule, and restricted the use of passive losses. Real estate had to have economic

value to make it a worthwhile investment. TRA '86 also allowed REITs to not only own but, to a limited extent, to manage the properties.

The development of a REIT market still took time. Real estate lending continued for several more years, leading to overbuilding, which was eventually stopped. By 1990, the combined influence of TRA '86, the savings and loan crisis, and additional regulatory constraints on real estate loans led to a dramatic decline in real estate values. As developers began to look for other sources of capital, they began to tap into REITs.

Institutional investors have paid increasingly close attention to publicly traded REITs since initial public offerings began in earnest in 1993. The number of publicly traded REITs increased from 68 to 100 securities during the period January 1993 to January 1994.

Investment Planning Answer Book by Jay L. Shein, Q 10:97, What are the advantages of REITs?

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REITs offer investors several advantages over traditional real estate investments, including liquidity, security, and performance. Most REITs are traded on major exchanges as well as over the counter.

REITs are highly transparent compared to the real estate investment vehicles of the past. They have to conform to Securities and Exchange Commission disclosure requirements and reports that inform investors about management, business practices, and financial conditions. REITs typically have leverage significantly below those in private transactions.

CAUTION

Real estate funds should be examined for actual real estate exposure. Some funds are called real estate funds but actually own many companies in addition to their REIT holdings.

One of the recent criticisms of real estate mutual funds is that the underlying investments have expanded from pure real estate in the form of REITs to realty shares. If real estate mutual funds are no longer strictly hold properties and own stock, then their correlations to an equity index such as the Russell 2000 would increase and hence decrease the attractiveness as a vehicle for diversification.

Liquidity. Another criticism of real estate mutual funds is the lack of liquidity. Some people divide REITs into two asset classes: (1) large capitalization REITs with a market capitalization of $100 million or more, and (2) small capitalization REITs with a market capitalization of under $100 million. This reduces the potential REIT universe.

PLANNING NOTE

When considering the size of a real estate fund, especially its liquidity, it is important to consider the size of both the mutual fund and any separate accounts that the firm may be managing. All of the accounts combined will affect the firm's overall liquidity.

CAUTION

When evaluating liquidity, it is important to examine the individual fund positions and the average trading volume of these individual securities. "Average" liquidity will not be beneficial.

Investment Planning Answer Book by Jay L. Shein, Q 10:98, Are there benefits to commodity funds?

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Commodities have historically diversified investment portfolios because they tend to move differently than stocks and bonds. When stocks and bonds are headed higher, commodities tend to go lower. Commodities can benefit a portfolio because they provide an opportunity for diversification, they provide a hedge against inflation, and they take advantage of global demand.

Unfortunately for most investors, investing in commodities was limited to high-risk leveraged bets on commodity futures. This made commodity investing beyond the reach of most mutual fund investors. This changed, however, with the introduction of the first commodity mutual fund. The Oppenheimer Real Asset Fund, with a unique investment approach, offers the benefits of commodity investing to mutual fund investors. The managers of this, perhaps soon-to-be-replicated, fund use structured notes, a type of derivative, to try to match or exceed the returns from the Goldman Sachs Commodity Index. These notes create the opportunity to provide mutual fund investors exposure to this index in a tax-preferential, non-leveraged manner.

Since commodity producers try to eliminate risk and the holders of a commodity fund will be accepting the commodity risk, a commodity fund should earn equity-like returns over time. In evaluating a commodity fund, the advisor might look for an r-squared to the commodity benchmark that exceeds 95 percent. The effect of any leverage on the portfolio should be understood, and fees and expenses should also be considered.

Investment Planning Answer Book by Jay L. Shein, Commodity Funds

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Commodity exposure has become popular for mutual funds. The mutual fund for commodities was started on October 31, 1997, by Oppenheimer Funds™. The three primary benefits of adding commodities to a portfolio are that they (1) provide an opportunity for diversification, (2) provide a hedge against inflation, and (3) take advantage of global demand.

Academic research on commodities as an asset class has shown that commodities have, over the long term, a low or even negative correlation to both equity and fixed income markets. Yet they still offer positive returns. Some asset classes such as fixed income securities or gold are often held in portfolios to reduce the risk level. Yet these asset classes come at a price and they tend to detract from the portfolio's return. Commodities, on the other hand, have been able to demonstrate long-term, equity-like returns and provide diversification without diminishing long-term returns. At least this is the theory.

When equity and fixed income markets fall, commodities commonly rise. Intuitively, when prices go down on commodities, the expectation is that prices will go up on equities. This is because when the raw materials for producers and manufacturers go down, profit margins go up. Commodities have tended to do well toward the beginning of the business cycle, during periods of inflation, and during times of serious political or economic crises, which are normally when financial assets perform poorly. Therefore, commodities can be particularly useful in portfolios with a high percentage of equities.

COMMENT

Correlation indicates the strength of a relationship between two variables such as a fund and an index. A correlation of one (1) indicates that the variables move in perfect tandem, a correlation of negative one (- 1) means that the variables move directly inverse, and a zero (0) indicates that there is no relationship between the two variables. An example is owning one company that makes swimsuits and one that makes umbrellas. When it rains, the umbrella company will do well but the swimsuit company will do poorly. Conversely, when it does not rain the swimsuit company will do well and the umbrella company will do poorly. This is ideal, as the risk of rain occurring or not occurring is eliminated by buying half the portfolio in swimsuits and half in umbrellas. If both companies expect a return of 10%, the investor earns 10% regardless of whether it rains.

Historically, commodities have been highly correlated to rising consumer and producer prices. Therefore, commodities are expected to perform well during periods of rising inflation. Finally, with increasing industrialization of emerging markets such as China, standards of living are increasing and the demand for products such as grains and oil should increase. Supply and demand factors work in commodities as well as other products over time and this should help boost commodity returns.

Commodities are expected to boast returns very much like traditional equities. One reason for this is because the holder of a commodity fund will be accepting the commodity risk, something that most commodity *producers* are trying to eliminate. There are many more commodity producers looking to hedge away the commodity risk than there are market participants who are seeking to take this risk and these producers are willing to pay a premium. As a commodity producer hedges away risk, he or she is able to lock in a profit on his or her production. This is why commodity futures markets are in a "backwardation" two-thirds of the time. Backwardation is where the future price is lower than the current price or spot price. In periods of backwardation, commodity producers are willing to forego a riskless profit in order to have surety that there will be commodities on hand to deliver to the market. A commodity fund can take advantage of this potential profit.

Another factor that influences the return for holders of commodity risk is that it is difficult to arbitrage commodity derivatives. With a mutual fund accepting the commodity risk, the fund portfolio should earn equity-like returns over time. Therefore, commodities should not be considered as antistocks that simply diversify away return

or be considered as selling short stock. These factors contribute to positive returns over time while providing substantial diversification benefits.

The usual way of providing commodity exposure for mutual fund investors has been in gold or natural resource funds, but studies have shown that these funds track the broader stock market more than individual commodities or inflation. One reason that this occurs is because the operating companies that the fund invested in tend to hedge away some of the commodity exposure to try to reduce the volatility of earnings and stock prices.

Traditional commodity investments are made through futures markets usually using plenty of leverage and are bought and sold based on the manager's expectations of trends in commodity prices. Mutual funds are required to invest in securities. Futures are not securities. For a mutual fund, purchasing futures is very expensive and has negative tax consequences because futures expire every month. The mutual fund would be constantly rolling over its contracts, since it would not, for example, want delivery of live pigs or some other commodity. This rolling over would incur significant transaction costs. Further, since the gains would all be short term, the fund would be subject to short-term capital gains, which are taxed as ordinary income.

In evaluating any commodity fund, it is important to understand the true exposure that the advisor is getting. The advisor might look for an R-squared to the commodity benchmark that exceeds 95 percent, especially if he or she is using the commodity fund as a financial planning tool to offset equity and fixed income risk and is seeking index-like returns. Also, the advisor might want to understand the effect of any leverage on the portfolio.

The original Oppenheimer Fund was structured to perform like a bond fund, with returns designed to match or exceed the return of the Goldman Sachs Commodity Index. This index tracks the prices of 22 global commodities, is unleveraged, is "long only," and is weighted according to the value of the commodities' worldwide production over the last five years. The largest component represented is energy, which makes up close to 60 percent. The other main sectors are agriculture, livestock, industrial metals, and precious metals. In order to closely track the index and to hold to within a 10-percent index weighting of every commodity, the fund purchases derivatives or commodity-linked notes, commodity-sensitive equities and options, short-term fixed income instruments, and commodity futures. Transaction expenses might be reduced by using commodity-linked notes, which have been around since 1993, a situation in which the manager deals directly with the producer and sometimes avoids an intermediary investment banker. These notes are privately negotiated contracts between commodity producers and the fund. The producers might include companies such as Cargill, Incorporated and Exxon or intermediaries such as Goldman Sachs and American International Group. The notes are structured to earn a return based on the index and to mature in 18 months. Therefore, they are treated as long-term capital gains.

Investment Planning Answer Book by Jay L. Shein, Q 10:99, Is there a sample mutual fund questionnaire?

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This type of questionnaire is generally filled out by a senior representative of the mutual fund firm. If the planner's firm is small, the fund may refuse to complete it or will address the issues very superficially. Therefore, it might be helpful to join forces with several other planners or advisors or use questions during manager conference calls or with the firm's wholesaler.

1 Background Information

Fund Name:_____

Fund Address:_____

City:_____State:_____Zip:_____

2 Contacts

Questionnaire completed by:_____Title:_____

RIA Primary Contact:_____ Title:_____

Phone Number:_____ E-Mail: _____

3 Important Dates

Date fund was effective with SEC: _____

Date investment style initiated: _____

4 Investment Process

a Explain your fund's investment approach or philosophy.

b What distinguishes your fund from other funds with the same investment objective?

c What do you consider the fund's benchmark to be?

5 Portfolio Issues

a Comment of the use of derivatives.

b Is the fund permitted to invest in illiquid securities? If yes, what is the maximum percentage allowed and what was the highest percentage of illiquid securities held at any time over the past 3 years? How will these securities be valued?

6 Operation Issues

a Has the fund company ever closed a fund? If so, who was permitted to continue investing in the fund?

b What were the fund's gross redemptions in 2010? What were the fund's gross sales in 2010? What about 2008?

c Explain the fund's accounting process? (i.e., does the fund use HIFO accounting).

d What percentage of your fund is owned by institutions, 401(k)s, registered investment planners, or the retail public?

7 Fund Management

a Is the fund managed by certain individuals or by a team? If team managed, who are the team members? How long has the team been in place and what changes have occurred in the past five years?

b List your five largest institutional clients. Provide the number of separate account clients broken down by institutions and individuals.

c What were the assets, number of positions, and median market caps at the following dates for both the fund and separate accounts?

	Fund	No. of Positions Held	Median Market Cap
12/31/2006	___	_____	_____
12/31/2007	___	_____	_____
12/31/2008	___	_____	_____
12/31/2009	___	_____	_____
12/31/2010	___	_____	_____

Separate accounts with similar strategies:

12/31/2006	___
12/31/2007	___
12/31/2008	___
12/31/2009	___
12/31/2010	___

d What are the maximum dollar amount and/or number of assets you feel you can manage in this strategy? Explain how you arrived at this figure and how and what may change this over time?

e List all of the products your firm offers?

f How many professionals are in your firm? Which professionals manage which products?

g What are the qualifications of your professionals?

h Does the fund manager also manage a hedge fund? If yes, describe how securities are allocated?

i Is the fund portfolio manager personally allowed to invest in shares of securities that the fund might potentially own? Please provide a copy of the fund's code of ethics?

j How does the fund compensate the portfolio managers? Does the manager own equity in the firm? Explain the company's long-term compensation and retention plans?

k How much of the fund is owned by the portfolio managers?

8 Fees and Expenses

a What is your firm's brokerage commission rate and how do you monitor transaction costs?

b Does the fund enter into soft-dollar arrangements? If so, how much did the fund pay in soft dollars? What did they buy?

c Does the fund have a down market redemption fee? If so, what is the purpose?

d Does the fund have a short-term redemption fee? What is the fee and were does it go?

e Does the fund have a policy to discourage shareholders from frequent trading fund shares?

f Does the fund use a fulcrum fee structure? If so, describe the structure. If not, why?

9 Tax Issues

a What efforts does the fund make to minimize taxation? How does this vary from managing a tax-exempt account?

b What are the fund's embedded capital gains?

10 Additional Information

a Please provide a copy of your Form ADV Part 1 and 2.