

# The Morningstar Guide to Alternative Investments

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When people think of investing, they usually think of traditional investment vehicles, such as stocks or mutual funds. But there's an ever-growing array of specialized choices available to investors. These nontraditional investments can add new opportunities to a portfolio heavy in U.S. stocks and mutual funds—diversifying assets and sometimes reducing volatility.

Your patrons may soon be asking you about these alternative vehicles. To prepare you, we are pleased to provide this complimentary report covering three such investments: [options](#), [exchange-traded funds](#), and [closed-end funds](#). The articles contained herein were written by Morningstar experts specializing in each investment category.

We hope you and your library users find this report helpful.

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# The Morningstar Approach to Options: Be an options investor, not an options trader

By Philip Guziec

The mere mention of the word “derivatives” conjures a mixture of fear and confusion among most conservative investors. Discussing my new role as a derivatives strategist with Morningstar customers, I’ve learned that a typical investor’s only exposure to the term “derivative” is in the context of a press story about financial catastrophe. The most common response is, “Derivatives? Aren’t they risky?” In truth, the only appropriate answer to that question is, “It depends.”

The technical definition of a derivative is a security whose value is derived from the value of some underlying security. That covers a broad reach of investments, and you could even argue that a stock is just a derivative of the underlying value of the company. In practice, the term derivative describes a massive and ever-growing universe of securities, including equity index options, cocoa futures, collateralized debt obligations, and credit default swaps.

Like any tool, however, derivatives can be used in many ways to achieve many different objectives. The risk depends on what kind of derivative is used and how it is used. But we hope to make you comfortable with derivatives as tremendously flexible tools. Their use varies greatly, from taking risks on extremely levered, highly vol-atile commodities to risk reduction, hedging, or income generation.

We’ve chosen to wade into derivatives research by tackling equity options, which are commonly available to retail investors. Our objective is to make options approachable. To that end, we will:

## **Explain options in plain English.**

Longtime users of Morningstar’s research are quite familiar with the matter-of-fact, plain-language style that Morningstar analysts use in their reports. We’ll be using the same style in our options research.

## **Emphasize options investing rather than trading.**

There is an endless supply of hawkers selling “technical” analysis (charting) for “trading” options, and many ads talk about trading in an attempt to invoke visions of the glory days: swashbuckling open-outcry option market makers who spent their days yelling out buy and sell orders and who swaggered out and bought a Ferrari after a big winning session.

Those traders did exist, once upon a time; however, they were primarily making money on the spread between the bid and ask price, not making directional or volatility investments. They made money regardless of the direction of the stock, and had an occasional windfall as well because they could see big moves in the option trading pits and “got in front of” the momentum. Unless you are a market maker, you won’t be making that bid-ask spread, and those spreads have been narrowing anyway. Most trading is now computerized, so the open outcry pits are a thing of the past. In short, you won’t be making money as a “trader” the way those guys did, and neither will they.

Instead of trading, I’ll be focusing on options investing by bringing the rigor associated with Morningstar stock research to the options market. I’ll be discussing calculated investments

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in companies, and the volatility on those companies, through options. You may have to make a trade to make an investment, but we'll be investing through options, not just trading them.

I once heard an explanation of the difference between investing and gambling. If your expected return is positive, it's investing. If it's negative, it's gambling. Think of this in terms of Las Vegas. The house always has an edge, or it doesn't allow the bet. Buying stock in a casino that owns all the games, and has that edge, is investing. Going to Las Vegas and playing the games is gambling. Some options investments may be very risky, but we'll make those investments only if we have an edge and understand it—we'll be doing options investing, not options gambling.

**Distill the volumes of options data into intuitive concepts.**

To the uninitiated, options data can look like a bunch of messy numbers. Even viewing a single options chain (a list of price quotes) can be overwhelming to the new options investor. Options are also known for complex math. In fact, the use of Greek letters is common, making many investors feel it's all Greek to them. But we're going to do the dirty work for you by translating the complex math and massive data streams into far more intuitive images. At Morningstar, we've been finding graphical, intuitive solutions to present complex data on mutual funds, stocks, and other investments for years. We plan to bring everything we've learned to make options investing just as comprehensible and useful, whether you're new to derivatives or are a more experienced investor.

**Use our fundamental stock research to identify the best option opportunities.**

There are more than 100 equity analysts at Morningstar covering about 2,000 companies. We think our analysts' fundamental research into these firms gives us an edge in understanding not only the stocks on those same companies, but also the options on the stocks on those companies. In fact, our analysts' understanding of a company's fair value and their richer comprehension of the potential range of outcomes are even more valuable for understanding the potential investments in the options market than they are in the stock market. By combining that with a firm grasp on the underpinnings of options theory, we hope to identify some great opportunities. You can think of Morningstar's options research as fundamental stock investing—with some fancy math tacked on at the end.

**Develop tools and methodologies to integrate derivatives into investor portfolios for return enhancement and risk reduction.**

Investing through options isn't as straightforward as buying great companies at great prices and holding them. Options expire, introducing timing into the equation, and many different risk levels and payoff scenarios can be structured by using different options on a single company. We'll be tackling these issues systematically and developing a total portfolio approach to options investing, including a clear understanding of the potential risks of different strategies. For the risk averse, we'll help to develop an understanding of how to use options to protect a stock portfolio from disaster.

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Overall, we're putting together all of our existing knowledge and research to build an intuitive options resource and bring a fresh, fundamental investor's perspective to the options marketplace. There may be some fancy math involved, and we may be developing and adjusting our methodologies as we go along, but we'll stick to the same principles of trying to find a dollar selling for 50 cents, and we'll be calling out options investing opportunities as we find them.

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# Options Commentary— The Morningstar Option Strategy Map

By Philip Guziec

Investing in stocks is both a complex and a simple exercise. The complex part is figuring out what a stock is worth. The easy part is comparing that fair value with the price Mr. Market is serving up, and then investing accordingly. If the two prices match, you do nothing. If Mr. Market is offering the shares on the cheap, it's time to buy. On the other hand, if Mr. Market is really crazy and has priced the shares at twice their worth, maybe you consider selling him the shares, expecting to buy them back once he comes to his senses.

Investing in options is a bit more complicated, but all of the complexity really boils down to a basic framework. I'll explain that framework to you now.

The key difference between stock investing and option investing is the addition of a second dimension that is needed to put a price on an option, and that second dimension is uncertainty about the price of the stock in the future. Uncertainty is commonly measured in implied volatility. It's enough to know that implied volatility is the unit of measure for uncertainty. Both the stock price and the uncertainty are set by Mr. Market, and these two inputs combine to determine the price of an option.

We can approach the uncertainty dimension for options like we approach the price dimension of stocks: Figure out a value for the uncertainty and compare it with the price the market is charging for it. Just like the objective of stock investing is to buy undervalued stocks and sell overvalued stocks, the objective of options investing is to buy undervalued uncertainty and sell overvalued uncertainty. So, an implied volatility that is too low

means we want to buy the options and an implied volatility that is too high means we want to sell the options.

## The Morningstar Option Strategy Map

We can summarize our three potential conclusions about underlying stock as follows:

- ▶ Overvalued Stock: Bearish
- ▶ Fairly Valued Stock: Neutral
- ▶ Undervalued Stock: Bullish

Similarly, we can summarize our three potential conclusions about the uncertainty:

- ▶ Overvalued Uncertainty: Sell Options
- ▶ Fairly Valued Uncertainty: Neutral
- ▶ Undervalued Uncertainty: Buy Options

If we put the stock valuation dimension on the vertical side of a table and the option volatility valuation dimension on the horizontal side, we can fill in the grid with the potential option investment strategies, creating the Morningstar Option Strategy Map found on the following page.

There are more complexities to options investing, but the valuation of the stock and the valuation of volatility are the big hitters that should get you started on fundamental investing in options. How does one value uncertainty? I'll admit it's not simple, and I'm working with our stock analysts to more fully align Morningstar's risk rating with uncertainty about the fair value, and to quantify that risk rating. However, you can think of

**Option Volatility**

Low	Fair	High	
<p><b>Buy Bearish</b></p> <ul style="list-style-type: none"> <li>Put</li> <li>Put Spread</li> <li>Put Backspreads</li> <li>Split Strike Combo</li> <li>Protective Put</li> </ul>	<p><b>Bearish</b></p> <ul style="list-style-type: none"> <li>Sell Stock</li> <li>Short Stock</li> <li>Short Combo</li> <li>Split Strike Combo</li> </ul>	<p><b>Sell Bearish</b></p> <ul style="list-style-type: none"> <li>Call</li> <li>Call Spread</li> <li>Call Backspreads</li> <li>Split Strike Combo</li> <li>Covered Call</li> </ul>	Over
<p><b>Buy Neutral</b></p> <ul style="list-style-type: none"> <li>Collars</li> <li>Straddles</li> <li>Strangles</li> <li>Butterfly</li> <li>Condor</li> <li>Ratio Spreads</li> </ul>	<p><b>Volatility Structure Trades</b></p>	<p><b>Sell Neutral</b></p> <ul style="list-style-type: none"> <li>Straddles</li> <li>Strangles</li> <li>Butterfly</li> <li>Condor</li> <li>Call Buy/Write</li> <li>Ratio Spreads</li> </ul>	Fair
<p><b>Buy Bullish</b></p> <ul style="list-style-type: none"> <li>Call</li> <li>Call Spread</li> <li>Split Strike Combo</li> <li>Call Backspread</li> <li>Protective Put</li> </ul>	<p><b>Bullish</b></p> <ul style="list-style-type: none"> <li>Buy Stock</li> <li>Long Combo</li> <li>Split Strike Combo</li> </ul>	<p><b>Sell Bullish</b></p> <ul style="list-style-type: none"> <li>Put</li> <li>Put Spreads</li> <li>Call Backspreads</li> <li>Split Strike Combo</li> </ul>	Under

Underlying Security Valuation

sions can have an impact on any options investment, and they open up the potential for the volatility structure trades discussed in the middle box of the Option Strategy Map. However, logical fundamental investing and risk tolerance often provide guidance on what duration or what strike to choose for a fundamental investment.

This little three-by-three table may not capture every nuance of option investing, but as a way to structure your thinking, it's a pretty good start.

Morningstar's risk rating as a very rough guideline for the long-term valuation of uncertainty.

**Other Dimensions**

Just for completeness' sake, there are two other dimensions to consider in options investing, the timing dimension and the strike/stock dimension. The timing dimension is introduced by the different expirations of options creating the potential for implied volatility to vary across duration, and the strike/stock dimension is introduced by the different strike prices allowing implied volatility to vary across strike prices as well. These dimen-

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# Mutual Funds vs. ETFs: Is a conventional or exchange-traded fund right for you?

By Dan Culloton

ETFs have a lot to offer investors. They're versatile, cheap, and their underlying portfolios are protected from the impact of investor trading. Beware, though, many ETFs are too narrowly focused and concentrated to be of much use to the average investor. Moreover, transaction costs can add up quickly and erode returns. Let's take a closer look at some of these pros and cons.

## ETF Strengths

Low expenses are an obvious benefit. Because ETF sponsors deal directly with just a few, very large investors, they save money on many administrative costs. For example, they don't need call centers to handle scores of calls from retail investors and don't have to take care of hundreds of small accounts. On average, ETFs have large expense ratio advantages over the typical passive and actively managed mutual funds in many Morningstar categories.

ETFs also can be tax-friendly. ETFs are not immune from capital gains distributions. They have to sell stocks to adjust for changes to their underlying benchmarks. But their structure allows them to greatly minimize their tax impact. Currently all ETFs are index funds, which usually trade less than the average actively managed fund and therefore generate fewer capital gains.

ETFs' tax efficiency is also helped by the fact that only large institutional investors (known as authorized participants) are allowed to trade directly with the fund—everyone else buys or sells shares from each other over an exchange—so the ETF portfolio is largely insulated from the need

to sell securities (and possibly realize capital gains) to raise cash to meet redemptions from small investors. Further, when an authorized participant redeems a block of ETF shares, the ETF manager gives it a basket of the underlying securities owned by the ETF, not cash. This allows the ETF manager to continually offload its lowest-cost-basis shares of securities, thus reducing the fund's potential capital gains exposure. It also shields the fund from having to sell securities—and potentially realize capital gains—to raise cash to meet redemptions from these large investors

ETFs also offer greater trading flexibility than mutual funds. Mutual fund share prices are set once a day at the close of trading and any purchases or sales placed after their prices are set (typically, 4 p.m. Eastern Time) are supposed to be executed at the next day's price. In contrast, ETF investors can buy or sell their shares without limit throughout the trading day, and ETFs, like stocks, are priced continuously, enabling ETF investors to know the price of the fund at the time they are trading. As proponents of long-term investing, we don't view this intraday trading ability as an advantage, but some may find it useful.

Just as they can with stocks, investors also can set market, limit, stop-loss, or stop-buy orders on ETFs. They also can sell them short, or sell borrowed shares with the intention of buying them back at lower prices and pocketing the difference; buy them on margin, and buy and write options on ETF shares. These are tricky tactics that can do more harm than good in the hands of novice investors. Many professionals argue,



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however, that such trading techniques allow them to hedge their portfolios against sudden losses.

Finally, the fact that ETFs are not susceptible to the kind of trading abuses uncovered in the mutual fund industry in 2003 has won a few converts among scandal-weary investors. Simply put, because ETF prices are set throughout the day by the market, there is no opportunity for late trading or NAV arbitrage.

### **ETF Drawbacks**

Despite their advantages, there is nothing about ETFs that guarantees they'll perform better than traditional mutual funds. Because most ETFs are index funds, they simply try to mimic the returns of their benchmark indexes, like their conventional index fund counterparts. When the indexes do well, so should the ETFs that track them. When the benchmarks do poorly, so will their corresponding ETFs. Low costs and diversification give ETFs a very good shot at beating the average comparable actively managed fund over the long term, but you could say the same for many regular, no-load index mutual funds. Furthermore, ETFs have a number of features that can trip investors up.

Commission costs are ETFs' biggest nemesis. Brokerage costs can range from a few dollars at some cut-rate online brokers to as much as \$30 per trade at full-service brokerages. Even at the discount brokers, though, transaction costs can pile up quickly and negate ETFs' expense advantage for investors who trade frequently or make regular investments. Many brokerages also saddle account

holders with additional account maintenance, inactivity, and minimum balance fees.

Yes, online brokerage fees have fallen. Nevertheless, given roughly equal expense ratios, most long-term investors are still better off with the traditional open-end index fund. For example, assuming an online brokerage commission of \$12 (the current average according to Consumer Reports) and a return of 7%, someone who makes an initial investment of \$10,000 in Fidelity Spartan 500 and subsequent monthly contributions of \$250 would have \$2,000 more in his or her account at the end of 10 years thanks to cost savings and compounding than if he or she followed the same plan with iShares S&P 500.

Gaps also can open between ETF prices and NAVs. Unlike traditional open-end mutual funds, ETFs don't always trade exactly at the net asset values of their portfolios. Some infrequently traded, highly specialized ETFs can trade at discounts or premiums to their NAVs, often to their shareholders' disadvantage.

Dividends can be a drag. Some older ETFs that are organized as unit investment trusts instead of open-end funds cannot reinvest the dividends they receive from their holdings and must hold them as cash until they are distributed quarterly. That can provide a cushion in down markets, but also restrain the fund when stocks rise. Also, some brokerages don't let investors automatically reinvest dividends in their ETF portfolios, and those that do may charge a fee for the service.

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ETFs are ripe for misuse. Some of the broadly diversified, low-cost ETFs can be decent core holdings, but many of the more specialized offerings are concentrated and narrowly focused and therefore extremely volatile. Indeed many sector and region ETFs seem of marginal use in building a diversified portfolio. They often are marketed to those who wish to speculate on certain industry groups or geographic areas, which, at best, can be extremely costly and difficult to do successfully over the long term.

Not all index managers are created equal. There is evidence that skilled open-end index fund managers, such as Vanguard's indexing team lead by Gus Sauter, can outperform their underlying index and be very competitive with ETFs tracking the same boggy, despite the ETFs' lower costs. For example, through July 31, 2006, the Vanguard 500's trailing five-year gain of 2.7% was within 2 or 3 basis points, or hundredths of a percent, of the returns of the S&P 500 SPDR and the iShares S&P 500 Index. Not bad when you consider the Vanguard 500's expense ratio is nearly twice that of those ETF competitors. Clearly an index fund managers' ability to minimize tracking error, the amount by which an index fund trails its benchmark, matters.

Finally, though they are cheap, ETFs aren't always the cheapest option. It's possible to find traditional mutual funds with expense ratios as low as or lower than those of ETFs and that can be bought without the commission or bid-ask spread that you must pay to trade ETFs. There are

several no-load mutual funds in Morningstar's database that are still open to new investors and have expense ratios as low or lower than the median ETF levy of 0.30%. Most of them are (not surprisingly) from Vanguard and include offerings that also can compete with the vaunted tax efficiency of ETFs, such as Vanguard's series of quantitatively run tax-managed funds. There are some worthy offerings from other shops, too, such as Fidelity Spartan 500, Fidelity Spartan U.S. Equity, Fidelity Spartan International, and Bridgeway Blue-Chip 35 Index. Once you factor in the brokerage commissions you have to pay to trade ETFs, these funds are often as cheap as or cheaper than ETFs.

### **What's Right for You?**

So, given their advantages and disadvantages, when should an investor consider an ETF? We think they are excellent options for lump-sum investments that you plan to hold for a long time. ETFs also can be compelling in categories where the traditional mutual fund options are scarce, expensive, or run by managers with little experience. ETFs also are viable alternatives for investors who want to minimize taxes or make opportunistic bets on particular segments of the market. In the latter case, investors should limit such bets to a small portion of a diversified portfolio.

Should you decide on an ETF, not just any one will do. When selecting an ETF, investors should consider the same fundamental factors that are key to choosing conventional mutual funds:

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### **Expenses**

Like conventional index funds, ETFs aim to match the gross returns of a given market segment and then rely on low costs to differentiate themselves. So for ETFs, the lower the expense ratio the better. Keep in mind, however, that with any ETF, you will need to pay brokerage commissions when you buy and sell shares of the fund. I can't emphasize enough that if you trade even a few times a year, these extra costs can easily wipe out any expense ratio advantage the ETF has over a regular index mutual fund. To make ETFs work you have to keep your trading level low and hold your shares for a reasonably long period of time. If this doesn't apply to you, you may well be better off with a mutual fund from a total cost perspective, regardless of ETFs' low annual expense ratios.

### **Taxes and Turnover**

ETFs have the potential to be more tax-efficient than traditional mutual funds. As I stated earlier, however, it's theoretically possible for ETFs to issue capital gains. An ETF that tracks an index that frequently changes its constituents, such as some of the style- or market-cap-based benchmarks, can realize gains and transaction costs as it changes its portfolio to keep up with its benchmark. So treat ETF turnover like expenses: the lower the better.

### **The Benchmark**

You want to make sure the ETF is tracking a diversified index that does a good job of capturing the gross returns of the asset class it hopes to measure. If it's too narrow, top-heavy, or

concentrated in one or more industries, the benchmark could fail to accurately represent its market segment.

### **Management**

Look for management firms with a lot of experience running index funds. Seasoned skippers know how to reduce tracking error and turnover, and thereby enhance the total return and tax efficiency of their offerings.

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# ETF 101—Basics of Exchange-Traded Funds

By Dan Culloton

As my colleague Russel Kinnel has pointed out, exchange-traded funds are running rampant. Not only are they growing in number and assets, but they have become nearly regular and enthusiastic advertiser in the print, television, and Internet media. Yet, I still hear from a lot of people who know little more about ETFs than my soon-to-be-12-year-old son who refers to them as Extraterrestrial Funds.

For those who still regard ETFs as something alien here's a quick primer on ETFs and some suggestions for analyzing them and working them into your investment mix.

## The Basics

ETFs are essentially mutual funds that can be bought and sold throughout the day like stocks on an exchange through a broker. Consequently, unlike conventional mutual funds, ETF share prices are determined throughout the day by supply and demand instead of once per day at 4 p.m. Eastern Standard Time. Anything you can do with a stock you can do with an ETF: You can sell them short (or sell borrowed shares with the intention of buying them back at a lower price and pocketing the difference), write options on many of them, and set market, limit and stop-loss orders on them.

## How They work

Most individual investors never deal directly with an ETF the way they would with a traditional mutual fund. Individuals and financial planners buy and sell ETFs among themselves via a broker. In this way they are similar to closed-end funds. But

the similarities end there. Closed-end fund shares can trade at large premiums or discounts to the net asset values of their underlying portfolios. ETF discounts and premiums tend to be much smaller, though, because ETFs can do something closed-end funds can't: continuously create and redeem shares in-kind. This means the ETFs exchange fund shares for baskets of their underlying securities and vice versa.

The in-kind creation/redemption process creates an arbitrage opportunity for large institutional investors and market makers, known as authorized participants, who deal directly with the ETF. This helps keep ETF premiums and discounts narrow. When ETF shares trade at a discount to the NAVs of their underlying holdings the APs buy the ETF shares and sell the underlying securities. If the ETF shares trade at a premium the APs buy the underlying securities and sell the ETF shares.

## Advantages

As you might guess, ETFs' flexibility is one of their key attractions. Many institutional and individual investors have been drawn to the ability to pick their own entry and exit prices, as well as the chance to use fund portfolios in various trading and hedging strategies. Another advantage is transparency. Because all ETFs currently are index funds, it's easy to know what your own. ETFs also come in more exotic flavors. While conventional mutual funds still vastly outnumber ETFs, funds that drill down into specific sectors, industries, regions, countries and asset classes make up a greater percentage of the ETF universe; offering relatively inexpensive access to investments,

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such as currencies, precious metals, or emergent industries, that heretofore have been the sole province of larger institutional and wealthy investors.

From Morningstar's (typically long-term) viewpoint, though, low expenses and tax efficiency are the most attractive features of ETFs. They are able to offer much lower expense ratios than conventional mutual funds because they're index funds that typically don't hire professional (and often expensive) researchers and stock-pickers in an effort to beat the market. Furthermore, because investors purchase ETFs via a broker on the open market instead of from the fund companies, the ETFs don't have all the record keeping and shareholder servicing costs that conventional mutual funds incur.

When it comes to taxes, the ETF structure has a lot of advantages, too. Index funds in general tend to be more tax efficient than actively managed funds because they don't trade as often. The in-kind creation/redemption mechanism also gives ETFs additional tools to sidestep capital gains, though. Because no one redeems fund shares for cash, ETFs don't have to sell securities to pay off departing shareholders. Furthermore, ETFs can use in-kind redemptions to flush low-cost-basis shares out of the portfolio, thereby reducing the chance of realizing capital gains when the ETFs have to sell securities to keep up with changes in their benchmarks.

### **Disadvantages**

There are hidden costs to ETFs though. They can be more costly to use than conventional mutual funds after you factor in commissions. You can find

discount brokerages, but even there transaction costs can pile up quickly and negate ETFs' expense advantage if you trade frequently or make regular monthly investments. Many brokerages also saddle account holders with additional account maintenance, inactivity, and minimum balance fees. And don't forget the bid-ask spread, or the difference between the price you offer to pay for an ETF share and what the market is willing to give you. ETFs spreads often are fairly tight, but it's still an additional cost you don't incur with traditional funds. Lastly, ETFs, especially very narrow ones, are prone to be misused. Many of the more specialized offerings are concentrated, volatile, and more expensive. Indeed, the average non-sector ETF has an expense ratio of 0.36%, while the average sector ETF cost 0.45%. Sector ETFs also tend to be more volatile as measured by standard deviation. Many sector and region ETFs seem of marginal use in building a diversified portfolio.

### **How to Use ETFs**

The ability to trade, short, and buy ETFs on margin is alluring, but these are speculative tactics that require accurate short-term market calls, which few, if any, can get right consistently over the long term. Similarly, market-timing and sector rotation strategies don't get any easier just because you use ETFs to implement them.

Core and explore approaches, which involve using diversified funds or ETFs as your portfolio cornerstones and deploying more specialized ETFs around its edges to enhance returns, seem reasonable. But they require strict discipline and attention to

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detail lest you sabotage yourself with increased complexity and costs.

As is usually the case it's best to keep it simple. Resort to ETFs when the conventional mutual fund options in a given category tend to be limited, expensive, and run by managers with short tenures. For example, in the some of the small-cap categories, conventional funds with decent expenses, managers, strategies and track records often close soon after investors discover them. ETFs can be a viable alternative in this area.

Of course the simplest way to use ETFs is for a lump-sum, buy-and-hold investment. For example, if you've decided to go aggressive and put 80% of your money in stocks and 20% in bonds, you could use the Vanguard Total Stock Market Vipers for the equity portion and the iShares Lehman Aggregate Bond, which tracks virtually the entire bond market, for your helping of fixed income. If you're an even more adventurous sort, you could throw in the iShares MSCI EAFE Index, which tracks most of the major developed markets outside of the United States, or even a smidgen of Vanguard Emerging Markets Stock.

ETFs also have become popular tax management tools. Some investors and financial planners use them to maintain exposure to areas of the market while they realize tax losses.

You can sell your losing funds and use up to \$3,000 of net investment losses to offset income in the current year and capital gains indefinitely. (There's no limit on the amount of losses you can use to

offset capital gains.) The problem is you can't buy that fund back within 31 days without running afoul of IRS rules. That's where ETFs can come in; you can use them to maintain exposure to the style or market segment while you wait.

### **Analyze This**

As you sort through the burgeoning list of ETFs, don't forget to pay attention to fundamentals. There is no reason you shouldn't apply many of the same standards you would to a conventional fund to ETFs. Understanding a funds' management, expenses, taxes, strategy, risk/reward profile, and long-term record should lead you to decent options.

ETFs are innovative tools that can help investors reach their goals in a variety of ways. You can use them to manage risk, taxes, and style, region, and sector exposures. ETFs, however, can also do some damage if you're not careful. As always, know what you own and keep trading and commission costs to a minimum.

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# Using ETFs in a Stock Portfolio—Using exchange-traded funds to diversify your holdings

By Dan Culloton

Some investors buy funds and others buy stocks, and never the twain shall meet. That has been the conventional wisdom. But the rising popularity of exchange-traded funds, especially among those who prefer to pick their own equities, proves what we at Morningstar have known for a long time: Investing doesn't have to be a choice between investing directly in stocks or indirectly through mutual funds. Investors can—and many should—do both. The trick is determining how your portfolio can benefit most from each type of investment.

It's pretty clear why stock investors are warming to ETFs. Their low costs and ability to be bought and sold throughout the day enables stock-pickers to diversify their portfolios on the fly, stay fully invested while they research new ideas, hedge their bets, and employ tax-management strategies. Be careful, though. As we mentioned in our article on building ETF and fund portfolios, the more exotic the strategy the higher potential costs and risks. That's why we favor using ETFs to provide stability and diversity to a stock portfolio. Here are a few of the many ways to use ETFs in a stock portfolio.

## ETFs as Stabilizers

Adding a broad equity ETF to your holdings can smooth your portfolio's flight path. The chance of an individual stock taking a big plunge is greater than that of a diversified ETF. For example, in the 12 months ending July 31, 2005, more than a fourth of the nearly 7,000 domestic stocks in Morningstar's database fell by more than 20%, while none of more than 100 domestic-equity ETFs dropped that hard. If you have only enough money

to buy a couple of stocks and funds, a broad-market ETF, such as iShares S&P 500 or Vanguard Total Stock Market Viper, could be a cheap and easy way to help control portfolio volatility.

## ETFs as Trailblazers

Many stock investors favor household names, such as software titan Microsoft, industrial conglomerate General Electric, or healthcare giant, Johnson & Johnson. It's pretty easy to find annual reports, financial data, and other research on those mega-cap stocks.

But what about micro-caps such as International Shipholding or foreign companies such as Japan's Nippon Telegraph & Telephone? Such off-the-beaten-path securities aren't within most stock investors' comfort zones. Nor are such stocks easy to analyze, buy, or sell. That's where an ETF can help. Some funds, such as First Trust Dow Jones Select MicroCap ETF, invest in tiny stocks, others invest around the globe, and still others focus on markets, such as real estate, that have their own quirks. These ETFs can give stock investors affordable, diversified exposure to hard-to-reach areas like these without forcing them to learn a whole new set of analytical skills.

## ETFs as Balancers

Everyone has an individual investment style. Perhaps you have a health-care industry job and thus are familiar with and own a number of pharmaceutical and biotechnology stocks. Or maybe you're a devotee of Warren Buffett and stick to dominant, easy-to-understand businesses such as Home Depot and Coca-Cola. Or you could be a

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true believer in the broadband revolution with a portfolio full of tech and wireless stocks.

No matter how convinced you are that time will prove your predilections are prescient, there will be periods when your style falters, at least temporarily. Biotech underwent a fierce correction in early 2000. Investors who stashed their money in Buffett-like businesses found it tough to profit in 1999. And new economy tech and telecom stocks have eaten the dust of old economy energy and utility shares in the past five years.

The market is constantly shifting. No one style remains in favor forever. There is an alternative, though, to frantically trying to master value investing, or growth investing, or whatever styles you don't use and happen to be in favor at the moment. You could use an ETF designed to track the territory with which you're not familiar. That way, your portfolio will have some protection when your style slumps.

Take the health-care worker with a portfolio full of biotech names, for instance. A diversified-stock ETF is a natural first choice, adding some variety in one swoop. A value ETF, such as iShares Russell 3000 Value or Vanguard Value Vipers, probably won't have much biotech exposure, so you could get diversity with little overlap with what you already own.

### ETFs for Tax Swaps

Similar to mutual funds, you can use ETFs to maintain exposure to a portion of the market while harvesting tax losses to use as offsets to any real-

ized gains or up to \$3,000 in ordinary income. Say you're holding Dell with an unrealized loss (a loss on paper only), but still like the computer maker's long-term prospects. If you sell the stock to book the losses, you can't buy the shares, or any "substantially similar" security, back for 31 days, or you'll violate the IRS' "wash sale rules" and the agency won't let you use the loss to cancel out gains. To maintain some exposure to Dell, and other tech stocks, you could move into a technology sector ETF, such as the Technology SPDR. The SPDR is similar enough to keep your asset allocation in line, but different enough to keep you out of trouble with the IRS. Of course, as with all tax-related decisions, it's a good idea to consult with a professional tax advisor before attempting a tactic like this. As always, you should also pay attention to transaction costs. They can wipe out any benefit if you aren't careful.

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**Disclosure:** Barclays Global Investors (BGI), which is owned by Barclays, currently licenses Morningstar's 16 style-based indexes for use in BGI's iShares exchange-traded funds. iShares are not sponsored, issued, or sold by Morningstar. Morningstar does not make any representation regarding the advisability of investing in iShares that are based on Morningstar indexes.



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# What Are Closed-End Funds?

By Morningstar Analysts

Closed-end funds aren't very popular these days, especially when compared with their well-known cousins, open-end funds (which are more commonly known as mutual funds). However, closed-end funds have actually been around longer, and they have some benefits that make them worth a look—as well as some disadvantages that must be taken into account. As investments, they act a little like stocks, and a little like mutual funds.

## What's the Difference?

Like open-end funds, closed-end funds gather money from large and small investors alike. The combined assets are managed by portfolio managers from investment firms, some of which are the same fund companies familiar to mutual fund investors. The value of one share of this pool of money is called the closed-end fund's net asset value, just like with open-end funds.

Until the late 1990s, closed-end funds determined their NAVs only once a week, unlike mutual funds, which figure the value every day. Now, though, a large number of closed-end funds provide their NAVs daily. Before too long, all probably will do so.

One big difference between the two formats is that open-end funds sell new shares and redeem existing shares for investors every day, causing net assets to fluctuate—often wildly—even if the NAV isn't changing much. But, with some exceptions, closed-end funds sell shares to investors only once, in an initial public offering. When shareholders want to sell their closed-end fund shares, they must sell to other investors through brokers,

as with a common stock. Most closed-end funds are listed on the New York Stock Exchange.

The broker—whether discount, full-service, or online—gets the same commission it would if it were trading a stock. This commission is the only charge for buying the fund on the market, but it can't be avoided. For that reason, there are no "no-load" closed-end funds—or "load" funds, for that matter, except arguably at their IPO, as explained below.

Because they trade on exchanges, closed-end funds have a second price besides their NAV. The price at which investors buy and sell shares is called the market price. Investors can learn the market price of a closed-end fund at any minute of the day, as with a stock price. To get a fund's current share price on Morningstar Investment Research Center just type the ticker or name of the fund and click Get Report.

It's almost never a good idea to buy a closed-end fund at its IPO. A built-in underwriting charge is included in the initial price—something akin to a load, in fact. And unlike some IPOs, a closed-end fund is extremely unlikely to rise sharply soon after its IPO. So there's no hurry. By waiting and buying shares on the market, investors can avoid paying that underwriting charge, which can be as large as 7%.

## Premiums and Discounts

The two prices of a closed-end fund means that it usually is bought and sold at a price higher or lower than its NAV. (The two prices could

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be identical, but they rarely are.) Most closed-end funds sell at discounts to their NAV. For years, academics and other researchers have come up with a variety of theories why that's so, but none of the theories has proven itself consistently enough to be considered a definitive explanation.

For buyers, the opportunity to purchase a fund at a discount is a key advantage of the closed-end structure. If a fund performs well, investors may push the share price to a premium, or at least a narrower discount. Thus shareholders reap the benefits not only of the fund's NAV advance, but the exaggerated effects of its market-price movement.

Of course, there is a downside to this premium/discount phenomenon. A manager could do a fine job, boosting the fund's NAV return, but if investors grow skittish for whatever reason, the fund's market price could fail to keep up—giving shareholders a smaller gain than the portfolio itself achieved.

A discount makes closed-end funds particularly attractive to bond investors, which explains why the majority of closed-end funds are invested in bonds. Funds pay out income based on the share's lower net asset value, not the market price. That's one reason a closed-end bond fund often pays a higher yield than a comparable open-end fund.

Another reason is that many closed-end bond funds use leverage, which pumps up their income. But it also increases a fund's volatility and therefore its risk. When interest rates fall, the

returns on leveraged bond funds are superior. When interest rates rise, leveraged bond funds get slammed.

Buying shares of a closed-end fund that is selling at a premium isn't very popular. But some investors still do it in the hope that the market price will continue to rise. Or a bond fund's leverage might make its yield attractive, compared with alternative investments, even when the fund is bought at a premium.

### **No Redemptions, No Inflows**

The managers of closed-end funds have one advantage over their open-end counterparts. Because closed-end funds have fixed asset bases, their managers don't need to meet sudden redemption requests from panicky shareholders, nor can they be forced to invest vast new inflows of cash in a market that already seems pricey.

This stable asset base allows a manager more peace of mind when investing in securities that trade infrequently, also known as "illiquid" securities, and would be hard to sell in a pinch. By contrast, an open-end manager is more exposed to fickle investors either flooding the fund with cash that the manager may not be able to quickly invest, or pulling out cash when stocks drop (which is the precise time many managers would like more inflows with which to buy shares at a bargain).

Sometimes closed-end funds do raise more money through a process known as a rights offering. This complicated step, which more or less forces shareholders to pony up more money to buy more

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shares at a time of the fund's choosing, is unpopular with many closed-end fund share-holders. In a "transferable" rights offering, the right to buy more shares can be sold to another investor, and thus the shareholder can avoid having to buy more shares in order to maintain the same stake in the fund.

### **The Discount Dilemma**

In recent years, many closed-end fund shareholders have become unhappy that their funds have traded at persistent discounts that seem only to get deeper. They—along with activist investors who purposely buy such funds, sensing an opportunity—put pressure on a fund's advisor to take action to narrow the discount. Many closed-end funds have a clause in their prospectuses that forces them to consider the problems of persistent discounts, but those clauses are often loosely worded and do not require specific action.

When a fund faces a persistent discount, the advisor's choices are:

- ▶ Ignore it until angry shareholders force the fund to do something.
- ▶ Hold a tender offer or buy back shares on the open market to reduce the number of shares outstanding.
- ▶ Merge the closed-end fund into a similar open-end fund.
- ▶ Convert the fund to an open-end structure.

The latter is the most popular option for the community of arbitrageurs who have shaken up the closed-end world in recent years. They typically buy shares of a closed-end fund trading

at a deep discount and try to rally fellow shareholders to force the fund's board to switch to the open-end structure. This would allow all investors to immediately get a boost of, say, 11%, if a fund's NAV is \$10 but the market price is \$9 on the day of conversion.

In some cases, the activists have gotten themselves elected to the fund's board of directors.

Few individual investors can hope to make money consistently on closed-end funds in this way. It's just too difficult to predict which ones will open-end, and even if you do guess correctly, the fund's price could decline in the long period before the official open-ending date so much that the potential gain can be wiped out. That's a particular danger with funds that invest in volatile areas such as emerging markets.

In general, then, closed-end funds aren't better or worse than open-end funds. For certain investors who want a particular fund, a higher-yielding alternative, or who simply like the idea of buying at a discount, though, they can provide a worthwhile addition to a portfolio.

### **Closed-End vs. Closed**

A closed-end fund should not be confused with a closed fund. The latter is an open-end mutual fund that has decided to stop taking in new money—temporarily or permanently—because its management thinks that the size of its asset base has become more of a burden than an advantage.

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# ETFs vs. Closed-End Funds: Which Are Better for You?

By David Kathman, CFA

Some firms out there would have you believe exchange-traded funds and closed-end funds are the same thing. Don't buy it.

Though there are some key similarities between ETFs and closed-end funds, there are some crucial differences. Understanding these differences can make you a better investor and help ensure that you choose the type of fund that's right for you.

## How They're Similar...

Both ETFs and closed-end funds represent portfolios of securities (stocks, bonds, cash, etc.), just like open-end mutual funds. These portfolios can represent many different styles and combinations of asset classes, also like open-end mutual funds. There are ETFs and closed-end funds representing all the areas of the domestic-equity style box, as well as many foreign markets, many specific sectors (such as telecommunications), and various types of bonds. However, the distribution of the two types of funds among categories is rather different; whereas almost half of closed-end funds are bond funds, there are currently only a handful of bond ETFs.

Another similarity between ETFs and closed-end funds—and a key way they differ from open-end mutual funds—is that they are traded on an exchange. Many ETFs are traded on the American Stock Exchange, while most closed-end funds are traded on the New York Stock Exchange. That means you can sell them short, buy them on margin, or do anything else you could do with a stock. At least, that's true in theory; in practice, many ETFs and closed-end funds are so thinly traded that

it may be hard to find shares to borrow in order to sell them short.

Closed-end funds and ETFs share at least one advantage over conventional mutual funds due to their exchange listings. Because individual investors buy their shares in the secondary market instead of directly from the fund, closed-end fund and ETF managers don't need to hold cash or sell securities to meet sudden redemption requests from panicky shareholders or market-timers, nor can they be forced to invest vast new inflows of cash in a market that already seems pricey.

However, the fact that these funds are traded on an exchange also means that you have to pay brokerage commissions every time you buy or sell them, on top of whatever fees the funds charge. That means that they're not good for investors looking to do a significant amount of trading, or planning to buy more shares on a regular basis for dollar-cost averaging purposes. Some ETFs have recently tried to make dollar-cost averaging more feasible, but in general, anyone wishing to make regular additions to their investments will find open-end funds a cheaper option.

## And How They're Different

The most obvious difference between ETFs and closed-end funds is cost. The average ETF in Morningstar's database has an expense ratio of 0.43%, while the average closed-end fund has an expense ratio of 1.27%. Why the discrepancy? It's mainly due to the fact that all ETFs are index funds, whereas most closed-end funds are actively managed. Actively managed funds cost more in

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general, because they require analysts and other kinds of research.

The reason there are no actively managed ETFs has to do with another key difference between ETFs and closed-end funds—namely how their shares are issued. A closed-end fund issues a set number of shares in an initial public offering, just like a stock, and it issues more shares only if it makes a secondary offering, also like a stock. After the IPO, the fund's shares can be traded only on the secondary market.

Because there are a set number of shares to go around, there can be a difference—either a discount or a premium—between the market price of a closed-end fund and the net asset value of the securities in its portfolio.

ETFs, on the other hand, are designed to avoid such discounts and premiums as much as possible. With most ETFs, large investors called “authorized participants” can buy or redeem shares directly from the fund company, but only in blocks of 50,000 shares, which they then break up and sell on the open market to retail investors. Furthermore, when these authorized participants redeem one of these 50,000-share blocks, they get not cash, but the equivalent value in the underlying stocks. That means that the fund's holdings will always be known, unlike in open-end mutual funds, which have to disclose their holdings only once a quarter. Such transparency is possible and often desirable for index funds, but is virtually unheard of in actively managed funds.

Such “in-kind” transactions result in an arbitrage mechanism that keeps the ETF's market price from deviating too far from the value of its underlying securities. If the ETF shares trade at a discount, the authorized participants can trade the cheaper ETF shares for the more valuable stocks; if the ETF shares trade at a premium to their NAV, the authorized participants can trade the cheaper stocks for the more valuable ETF shares. The process can be quite a bit more complicated than this simple example, but you get the picture. This mechanism isn't perfect, so there can still be differences, but nothing like the double-digit discounts and premiums one often finds with closed-end funds.

There are other differences. Closed-end funds have been around longer. The oldest ETF was born in 1993, while the eldest closed-end fund predates the Great Depression and 1929 stock market crash.

Index ETFs also just try to match the returns of their benchmarks, which commonly focus on large, frequently traded stocks. Many closed-end funds, however, engage in more esoteric strategies. They often dabble in illiquid securities that can be hard to sell in a pinch. Many closed-end funds also use leverage; which means they invest with borrowed money. That pumps up the funds' income, but it also increases the offerings' volatility and therefore risk. When interest rates fall, the returns on leveraged closed-end bond funds are superior. When interest rates rise, leveraged bond funds get slammed.

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### **Pluses and Minuses**

There are advantages and disadvantages to each type of investment. If you buy a closed-end fund at a significant discount to its NAV and that discount narrows or becomes a premium in a rally, then you'll make extra gains that you wouldn't get in an equivalent ETF or open-end fund. On the other hand, the discount could persist or even get worse, which isn't likely to sit well with shareholders. In fact, one of the factors in the explosive growth of ETFs in recent years was shareholder dissatisfaction over closed-end fund discounts.



225 West Wacker Drive  
Chicago,  
Illinois 60606

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