

SPECIAL REPORT

How to Inflation Proof Your Nest Egg with ETFs



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by Robert C. Carlson

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How to Inflation Proof Your Nest Egg

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Sizing up ETFs: The Nuts and Bolts of the Expanding Universe of ETFs

Exchange-traded funds are one of the newest investment vehicles and also one of the fastest growing. They have rapidly found their way into many portfolios. ETFs are used by a wide range of investors, from sophisticated financial institutions to newcomers investing in small portfolios. ETFs have many investment uses, from the sophisticated to the basic.

The growth in both the number of ETFs available and the amount of money invested in them is so rapid that the numbers are obsolete within months. Hundreds of ETFs are on the market and billions of dollars are invested in them.

The Mechanics of ETFs

Much occurs in the back offices of ETFs and brokers when ETF shares are bought and sold. Investors do not need to be concerned about these activities when they trade shares but knowing the process clarifies what is different about ETFs and their advantages and disadvantages. When an investor wants to buy or sell shares of an ETF, the transaction appears to the investor to be just like the sale of an individual company stock or a closed-end mutual fund. The investor puts in the order through a broker, and the trade is executed. In a purchase, the investor sees cash leave the account and the shares enter. In a sale, the shares exit the account and are replaced with cash.

Behind the scenes, the activity is different from that of a transaction involving company stock or a closed-end fund. Those investments have a fixed number of shares issued. New shares are issued only through a new offering of shares. An ETF is more like an open-end mutual fund in that it does not have a fixed number of shares issued. Shares can be issued and redeemed routinely.

ETF transactions have an additional party known as an authorized participant. These generally are major broker-dealers, market makers and specialists. When an investor sells ETF shares, the sale is to an authorized participant who transfers the shares to the issuing fund in return for the underlying stocks in the ETF. The ETF cancels the shares it receives. The tax law allows the fund to exchange shares in this manner without treating it as a taxable sale of the underlying stocks. This structure allows ETFs to be more tax efficient than mutual funds, even index funds. An ETF has to make taxable sales of stock in its portfolio only when there are changes in the index it is tracking. A similar process occurs when an investor buys shares of an ETF.

ETF Advantages

One frustration of traditional open-end mutual funds is that shares of the funds are priced only after the major stock exchanges are closed for the day. No purchases or redemptions of a fund's shares occur during the trading day. Instead, the fund collects orders from investors during the day. After the market is closed, the fund values its portfolio and determines the price, or net asset value (NAV), of each share. Purchase and sale orders received during the day are executed at the net asset value.

End-of-day pricing can be frustrating and occasionally costly to investors. When the markets are volatile for the day, an investor does not know how the funds he or she owns are affected until after the close. Though many funds now post their share prices on their websites each day, the net asset value might not be available until into the evening in the Eastern Time zone.

More importantly, when an investor decides to buy or sell an open-end mutual fund, the price of the transaction won't be determined until after the market closes. The investor in an ETF, on the other hand, has the trade executed soon after the order is issued. He or she knows the approximate price of the shares when the order is issued and learns the value at which the trade is made shortly afterward. In volatile markets when the market indexes move 1% to 2%, and sometimes more, during a day, continuous pricing can have a significant effect on an investor's returns.

There is another potential advantage to continuous pricing and the unique structure of ETFs. The net asset value of the portfolio underlying an ETF is repriced for the authorized participants every 15 seconds. It is a factor used to determine the prices at which shares are issued or redeemed. Because the information is public and current, market participants know if the ETF shares are trading above or below the value of the underlying portfolio (that is, trading at a premium or discount to net asset value). Hedge funds, market specialists and other investors constantly search for times when premiums or discounts open up between an ETF's share price and its NAV. When such price discrepancies are discovered, the investors try to take advantage of them through trading strategies known as arbitrage. The investors bet that the discrepancies will be corrected quickly and make investments that will be profitable after the anomalies are corrected.

This matters to regular investors, because the arbitrage strategies prevent an ETF from trading at a significant premium or discount to the net asset value of its portfolio. In a closed-end fund, on the other hand, there is no correcting mechanism. The shares of a closed-end fund are traded continuously, but the number of shares is fixed. Because of this difference, the shares of a closed-end mutual fund can trade at a significant premium or discount to the net asset value of the fund, and that price discrepancy can continue for a considerable time.

In other words, continuous pricing coupled with regular increases and decreases in the supply of shares make ETF prices efficient during the trading day.

Slicing and Dicing the Markets

Before the explosion of ETFs, index or passive investors had limited choices. They generally could invest only in open-end mutual funds that replicated the major market indexes, such as the S&P 500, Russell 2000 and a few others. Vanguard offered mutual funds that divided those major indexes into their growth and value indexes. Beyond that, however, a passive investor could buy only broad baskets of stocks.

This regulation restricted investors' choices. A passive investor could not overweight a portfolio to particular sectors of the market. Internationally, an investor could shift weights between developed country stocks and emerging market stocks. But individual country weights could not be adjusted. An investor who was strongly positive or negative about a sector of the stock market or a country's stock index could not make an efficient, easy and appropriate adjustment to the portfolio.

The disadvantage of this approach became clear after the bull market ended in early 2000. At that time, the S&P 500 was heavily weighted toward technology stocks and large company growth stocks generally. These also were the most highly valued sectors of the U.S. markets. The broad-based indexes declined with those sectors for the next several years and only returned to their prior peaks in 2007. Index investors had to ride this cycle.

The abundance of ETFs available today opens many options to investors. While most ETFs available track benchmarks or indexes, the variety of benchmarks tracked provides a great deal of flexibility to the investor. Any positive or negative beliefs an investor has can be reflected in the portfolio using ETFs. Now using only ETFs, an investor can choose among the following investment categories:

- Small-, mid-, large- and broad stock capitalization
- Growth, value and core stocks
- Global and international stocks, including divisions by market sector or country
- U.S. stock market sectors, including many subsectors
- Fixed income
- Commodities, both broad indexes and several individual commodities
- Currencies
- Leveraged versions of many types of ETFs
- Inverse or short selling of many stock benchmarks

The investor also is not restricted to a single benchmark provider. Investment professionals often debate which index provider offers the better index for investing in a particular market or sector. For example, an investor looking to invest primarily in large company U.S. stocks can consider the S&P 500, Russell 1000 and Dow 30 indexes, among others. The ETF universe reflects this diversity of index choices. In many instances, the ETF investor can choose not only which sector to invest in but also can choose from several benchmarks tracking that sector.

It should be noted that in many cases an ETF does not perfectly replicate a benchmark. The idea behind index investing is that the index fund buys all the stocks of an index in the proportions in the published index. Often this is not possible. In small stock, sector and some foreign indexes, a stock might not have enough liquidity to be purchased in a widely held fund. Or the fund might fail the diversification requirements of the securities laws by exactly replicating a benchmark. The law prohibits a fund from having more than 25% of its portfolio in one stock. In these cases, the fund uses various techniques known as optimizing to replicate the index instead of exactly replicating it. Then, the ETF's returns will have some difference from the benchmark's return. The difference is known as tracking error, and we will discuss it in more detail later.

Diversification

ETFs increase diversification in several ways. An investor, of course, can purchase a broad-based index ETF such as one replicating the S&P 500 and get instant diversification regardless of the amount of money invested. An investor who wants to own fixed income securities does not have to buy individual bonds. The purchase of a fixed income ETF provides the yield of the index with its diversification.

Suppose an investor knows a small number of companies well and wants to own their stocks. The small number of stocks does not provide enough diversification for safety. Despite the investor's confidence in the companies, he realizes that unknown factors could cause losses. Incurring losses in even one stock could result in poor returns for the entire portfolio. Instead, the investor puts part of his capital into the individual stocks and invests the rest in a diversified ETF.

ETFs also provide diversification for investors who are optimistic about a particular market segment or country index. The investor does not have to build a portfolio of individual stocks from the segment or country or try to select the companies that will do well. Instead, purchasing the appropriate ETF provides diversification while allowing the investor to profit from the insight.

Low Cost

One of the appeals of passive investing is that trading costs and management fees are low. The reduction in such “friction costs,” also known as the direct and indirect costs of executing financial transactions, makes it easier for an investor to increase investment returns. Index funds have lower fees and expenses than actively managed mutual funds. In many cases, ETFs have lower expense ratios than comparable open-end index mutual funds. Some open-end mutual funds reacted by reducing their fees on some index funds, but the index funds with the lowest fees do not offer the range of investment choices available in ETFs.

Investors should remember that expense ratios are only part of the cost of investing in ETFs. Since they are bought and sold as stocks, each ETF transaction carries brokerage commissions or trading fees. The cost depends on the broker used, the size of the trade and perhaps other factors.

Tax Harvesting

Careful use of ETFs allows a taxable investor to lower tax liability without affecting a portfolio's performance or allocation. One reason this is easy with ETFs is that in many asset categories there are ETFs from different issuers that attempt to replicate similar indexes or assets. Traditional year-end tax planning is to sell investments with paper losses and deduct the losses on the year's tax return. This takes the asset out of the portfolio. The wash-sale rules prevent an investor from selling an investment to recognize a loss, and then immediately re-purchasing the stock. In that case, the loss is deferred by adding it to the tax basis of the newly purchased stock.

The wash-sale rules apply only if the two investments are substantially identical. Stock of the same company is substantially identical. But stocks of two companies in the same industry are not substantially identical. Likewise, two mutual funds from different fund companies and with different managers are not considered substantially identical, even if they have the same investment goals or track the same index. Though the IRS has not specifically ruled on this issue, tax advisors generally agree that ETFs from different issuers are not substantially identical even if they attempt to replicate the same index.

Investors can use this aspect of ETFs to their advantage. Suppose as a year nears a close, the investor has a paper loss in holdings of the S&P SPDR ETF. The fund can be sold, and the proceeds used to purchase iShares S&P 500 ETF. The investor's portfolio positions essentially are unchanged, but the loss can be deducted on the tax return. The costs of taking the loss are the commissions to sell and purchase the ETFs.

Even non-ETF investors can use ETFs to engage in tax-loss harvesting.

Suppose an investor holds a stock with a paper loss. The investor believes the stock remains a good long-term holding and does not want to sell it. Because the stock is volatile, the investor is not willing to be out of the stock for the more than 30 days required to avoid the wash-sale rules. An alternative is for the investor to sell the stock and purchase an ETF that covers the sector or subsector in which the stock is listed. The ETF won't exactly track the stock, but it should be close. After more than 30 days have passed, the investor can sell the ETF and repurchase the stock. Or the investor might find that the additional diversity of the ETF is better than owning a single stock. In each case, the investor needs to ensure that the benefits of deducting the tax loss are greater than the costs of buying and selling the stocks and ETFs.

Other Key Features

Like most stocks, an ETF can be sold short. This can be done on either an uptick or downtick in price. An ETF also can be purchased on margin, leveraging the investor's capital. Also as with many stocks, brokers allow the use of stop-loss orders to trigger automatic sales of ETFs and limit orders as part of purchase orders. Some ETFs also have option contracts available to further leverage investments in the ETF.

Risks and Disadvantages of ETFs

No investment vehicle is perfect. ETFs have their drawbacks and risks. While the risks unique to ETFs are not significant, investors need to be aware of them and use them to determine when it is and is not appropriate to use ETFs in their portfolios. There is the potential for the investor to purchase or sell an ETF's shares at a price that is different from its net asset value. For most ETFs, the difference is insignificant. But in times of market turmoil, it could be significant, at least for some funds. In addition, for ETFs that are not widely traded and have few shares issued, there might not be enough activity by arbitragers to keep the price close to the NAV.

Regulations impose a diversification requirement on ETFs. Specifically, no more than 25% of a fund's assets may be invested in a single company. For the major U.S. indexes and even a number of other indexes, this is not a problem. But it can hamper an ETF that tracks a market sector or any of a number of foreign country indexes. These indexes might have only a handful of stocks and be dominated by one or two companies.

Another problem that leads to tracking error is when the index holds stocks that are not readily investable by a fund. This is most likely to happen when there are few shares issued to the public or most of the issued shares are held by a small number of investors who do not trade their shares. An example would be the founding family of the company.

In these cases, the ETF seeks other ways to replicate the index. It might increase its allocation to other companies in the index. Or it might purchase companies that are not in the index but that are believed to be comparable. For example, it might buy a U.S. company that's performance is believed to be comparable to a company in the same industry in a foreign country. Some ETFs might use futures or options on the index to help replicate performance. In some cases, the ETF simply will not purchase all of the companies in the index. This is quite common for small company stocks that do not have much trading volume and that are a small portion of the index.

Many investors are surprised to learn that dividends and changes in the index result in tracking error. There often is a lag between when dividends are declared and when the ETF actually receives the cash and reinvests it. The published index assumes it received and reinvested the dividend immediately. An ETF might be able to reduce this tracking error through the use of futures and options. That is not possible with all stocks and is an imperfect solution.

Publishers of indexes often change them. Some change the indexes at the same time every year. Others change the indexes as needed (because of bankruptcy or mergers) or when the publisher decides changes should be made. In almost all cases, there is a lag between when the changes are announced and when they are effective in the published indexes. Stock prices often move during this lag period, because investors know that the index funds must purchase and sell the stocks by a certain date.

Investors try to take positions before the effective date and take advantage of the extra buying and selling that will occur. Studies have shown that index fund investors lose quite a bit of money over time because of the artificial changes in stock prices resulting from the index changes. ETFs have various methods of trying to cushion the effects of this turmoil, but the methods are not 100% effective. The result is that there often is tracking error when changes are made in an index.

Keep in mind that tracking error can be positive. A fund might earn more than the index it attempts to replicate. When a fund uses futures or options to counter the effects of declared dividends or changes in the index, the positions can earn higher returns than simply owning the stock. Though few index funds manage their positions with this intention, at times they do exceed the return of the index.

The expenses and trading costs incurred by the fund also result in tracking error. A published index does not incur these costs. Unless the index manager finds a way to offset them, the fund will earn less than the published index. ETF shares also have a bid/ask spread as many other stocks do. This roughly is the difference between what the seller received for a stock and what the buyer paid. With highly liquid stocks and ETFs, the bid/ask spread is quite narrow. The market is efficient, and the market specialists and other

middlemen do not take much out of the transaction. But some ETFs are not traded much and have inefficient markets. The spread on these shares can be several percentage points.

Of course, the ETF investor pays brokerage commissions when buying and selling the shares. An investor in an open-end, no-load index mutual fund purchased directly from the fund issuer would not incur this cost. The amount of the fee depends on the broker used, size of the trade, and perhaps other factors. One study found that an investor can take a long time to overcome this cost versus the cost of purchasing a no-load index mutual fund. If the investment were for \$10,000, an investor using an online broker would take six years before the after-cost return of the ETF equaled that of the no-load index fund. For larger investments, the commission is a lower percentage of the total investment, so it does not take as long for the ETF investor to catch up with the no-load fund investor. Because of the commissions, generally small accounts should not consider using ETFs instead of traditional mutual funds purchased directly from the fund company or through a no transaction fee program of a broker. Most ETFs invest only in a market benchmark or index, though there are some actively managed ETFs and plans for more to be issued. Currently, there are relatively few ETFs available for someone who believes there is value in active fund management and wants that value in his or her portfolio.

Types of ETFs

There are several different types of exchange-traded securities that are referred to generically as ETFs. Sometimes the differences matter only to the lawyers, the regulators and the people who have to administer the daily details. Other times, the differences have an effect on investors.

Most ETFs are set up as either unit investment trusts or open-end ETFs. Both types of funds are able to continuously create and redeem shares through the process discussed earlier. The number of shares outstanding changes daily to reflect demand. Because of this feature, these funds rarely will trade at large premiums or discounts to their net asset values. Both types are registered with the Securities and Exchange Commission as investment companies, the regulatory term for mutual funds.

Most of today's ETFs use the open-end ETF structure. But the earliest and still most popular ETFs are unit investment trusts, including the Dow Diamonds, Nasdaq 100 (QQQ or cubes), and S&P 500 SPDR (or spider). There are some minor differences between the two types. Unit investment trusts cannot reinvest dividends as they are received. They accumulate the dividends for quarterly reinvestment. The open-end ETF can reinvest dividends as they are received. This should enable the ETF to earn a slightly higher return than a comparable UIT. The greater the dividend yield from the portfolio, the greater the disadvantage to the UIT structure.

Another advantage to the open-end ETF is that it can use futures contracts to invest its dividend stream and other cash. UITs cannot "equitize" the dividend flow in this way. That is another factor that will slightly depress the long-term return of the UIT.

There was a form of ETF structured as grantor trusts. Merrill Lynch had the largest group in its HOLDERS funds but terminated these funds in 2011. Investors in the gold grantor trust ETFs should be aware that the gold owned by the trust is considered a collectible by the IRS. Therefore, sales do not qualify for the long-term capital gains rate of 20%. Instead, profits are taxed at a maximum rate of 28%. The IRS has issued a private ruling to the ETFs, however, that the ownership of bullion is not considered ownership of bullion by any IRAs. The IRAs own shares of stock, which is taxed the same as corporate stock.

Another form of ETF owns futures contracts to invest in a specific asset or index, such as the United States Oil Fund or the PowerShares DB Commodity Index Tracking Fund. The assets of these funds will consist of treasury securities and futures contracts. The futures contracts are not considered securities and are not regulated by the SEC, so these funds are not registered as investment companies with the SEC. Instead, the futures regulators oversee the investments in these funds.

Some ETFs now are offering the ability to either leverage or sell short a given index. These funds primarily are from the ProFunds group. For example, a fund attempts to earn twice the return of the S&P 500. Another ETF attempts to earn the inverse return of that index by selling it short, while a different fund seeks to earn twice the inverse return of the index. ProShares has dozens of these ETFs. The funds invest in major indexes, as well as sector indexes. These leveraged and inverse funds use futures contracts to generate their returns. They are not registered as investment companies with the SEC or regulated by them.

A version that once showed promise but quickly lost investor interest is the exchange traded note (ETN). Barclays, the leading issuer of ETFs, is issuing ETNs to provide investments in assets that are not appropriate for ETFs. The ETNs are under the iPath brand and focus primarily on commodities and some single-country stock indexes. ETNs were developed to present opportunities in investments that are not practical for ETFs and mutual funds, such as currencies, commodities and possibly emerging markets. It is possible that ETNs might be developed to invest in indexes such as those for residential housing and antique cars.

An ETF is a fund that owns securities or other assets, and the ETF shares represent ownership in the securities owned by the fund. An ETN is debt issued by a company such as Barclays. The debt is senior, unsecured, unsubordinated usually with a duration of 30

years. The debt does not pay interest. Instead, it is a promise to pay the holder at liquidation the net return of the underlying asset or index minus expenses.

Investors can buy and sell the ETNs just like stocks through a broker. There is an expectation that the prices of ETNs will closely mirror changes in the underlying assets or indexes. But this is not guaranteed with ETNs, and they do not have a mechanism to limit premiums and discounts the way open-end ETFs and unit trusts do.

Investors need to be aware that with an ETN they have no underlying interest in an asset. They are buying only the promise of the issuer to pay a return equal to that earned by the named asset or benchmark. As investors learned in 2008, while a bank might be considered a solid bank, a lot can change in 30 years. Sometimes, for a bank, a lot can change in a week or two.

An advantage of an ETN over an ETF is that the security issuer takes the risk of tracking error relative to an index. The investor in an ETF suffers if the manager is unable to reduce or eliminate tracking error, and the fund earns less than the index. But with an ETN, the investor is promised the return of the index or asset minus a set expense ratio. The expenses for ETNs generally are less than those for ETFs.

The tax treatment of ETNs was uncertain, but the IRS started to clarify the situation in late 2007. The IRS ruled on three, specific currency based ETNs issued by Barclays. It ruled that investors had to accrue and recognize income each year, even if the security was not sold, and that the gain is taxed as ordinary income. The IRS indicated that it was considering a broad ruling that would apply this ruling to all securities involving “prepaid forward contracts.”

ETNs also might not make distributions, so it appears that if the IRS carries through on its initial rulings, investors will owe taxes on gains they have not converted to cash. This would put the currency ETNs on the same footing as other currency ETFs, such as the Rydex CurrencyShares ETFs. These are unit trusts that own currencies through interest-bearing accounts at JPMorgan Chase Bank in London. The shares pay monthly interest, which is taxed as ordinary income to shareholders. Gains or losses in the ETF due to currency moves are taxed at a 35% rate, according to Rydex's literature.

The creativity of ETF issuers gives investors access to investment opportunities previously only available to those who had the capital, risk tolerance and resources to invest in futures contracts or other specialized investments. This also complicates decisions for investors. The investor first has to decide which asset class or type of investment to put in a portfolio. Then, if there is a choice of different types of ETFs, the investor must decide which is more appropriate. Even if there is no choice of different types, the investor still must be

aware of the type of ETF in which he is investing and the consequences of using that vehicle.

The ETF Indexes

The first ETFs were set up to track established, known market indexes such as the S&P 500, Dow 30, Russell 3000 and other traditional benchmarks. Some ETFs set up their own indexes or benchmarks and attempted to replicate them. In some cases, these are "managed indexes" instead of the more passive traditional indexes. The new indexes also use criteria other than market capitalization to decide how to weight the stocks in the portfolios.

WisdomTree ETFs use what are called "dividend-weighted indexes." The indexes are weighted either by total cash dividends the companies pay or by dividend yield. The higher the cash dividends or dividend yield, the greater a company's weighting in the index. WisdomTree has a range of funds covering many market sectors and international stock markets.

PowerShares also has its own weighting system for its indexes. The PowerShares Intellidex system uses a proprietary blend of 24 different company fundamentals to select stocks to include in the index and weights the stocks equally. The indexes are rebalanced quarterly. A separate fund, the PowerShares FTSE RAFI US 1000 Portfolio, uses a "fundamentals-based index." This system was developed by a firm known as Research Affiliates and weights stocks based on sales, revenues, book value and earnings. Powershares was purchased by Invesco and now all of its ETFs are under Invesco name.

These and a few other ETFs attempt to overcome the disadvantages of capitalization-weighted indexes. We will not delve into the details of those arguments. They are contained in my book, "Invest Like a Fox... Not Like a Hedgehog." Investors need to look beyond the name of an ETF to understand exactly how the portfolio is invested.

How to Invest with ETFs

ETFs are compatible with a number of investment strategies, so there are a number of ways they can be incorporated into a portfolio. ETFs were first used by large investors, such as pension funds, to fill specific needs. For example, a pension fund might have cash that needs to be invested. But the cash will be needed to pay benefits or expenses within a few months, so the fund does not want to give it to a money manager who will incur brokerage commissions and management fees to invest the money for a few months. Yet, it also wants the opportunity to earn a higher return than is available through short-term treasury bills and wants to maintain the asset allocation of its portfolio. The cash can be used to purchase one or more ETFs at low cost. The ETFs can be sold quickly and cheaply when cash is needed.

ETFs also come in handy when a large investor is changing money managers or adding a new asset class to the portfolio. Initially, cash can be used to purchase one or more ETFs. When an active money manager is found who meets the investor's needs, the ETF is sold and the cash transferred to the money manager. An ETF can be used to cheaply and efficiently establish a niche position in a portfolio. Suppose an investor wants to overweight a market sector, either temporarily or for the long term. A diversified portfolio of stocks in that sector could be acquired. Or the investor could purchase the appropriate ETF. The ETF world is so vast that almost any sector or subsector that interests an investor can be purchased with one trade. The expanded offerings of currency and commodity ETFs expand an investor's ability to add a niche position that is very liquid and costs little to acquire.

Sophisticated Strategies

Hedge funds and a few other investors are using ETFs in some ways that might not have been contemplated when ETFs were developed. But these strategies prove useful to some investors, and there is speculation that a fair amount of the trading activity in ETFs is the result of hedge funds and others using these strategies.

Shares of ETFs can be borrowed from investors and used to sell short a market or sector. This tactic is a way to hedge an entire portfolio or a stock position. For example, a fund might have a sizeable equity position that it wants partially hedged. It could use futures or options to hedge, or it could sell short ETFs. Likewise, if a fund owns a particular stock and wants to partially hedge the position, it could sell short the ETF of that company's market sector.

Hedge funds that take macro or big picture positions on the markets also use ETFs. They can purchase the sectors or markets on which they are bullish (using margin if they are very bullish). ETFs also can be sold short for sectors or markets on which the fund is bearish. The variety of ETFs available allows a fund to take positions in most international stock markets and U.S. market sectors, as well as some non-equity investments.

Income investing

There are ETFs that replicate the major bond indexes, generating the yields from those indexes for their investors. In addition, there are ETFs that seek out the higher-yielding stocks. The bond ETFs pay interest that is taxable as ordinary income, while the equity ETFs pay dividends that generally qualify for the 20% maximum dividend tax.

Inflation Hedging

Investors didn't have to worry about inflation for many years, but in 2021 and 2022 inflation rose to levels not seen in decades. It's now clear how long those high rates of

inflation will last, but it's clear investors need to be more aware of inflation hedges than they have in the recent past.

When you want one or more inflation hedges in your portfolio, take a look at ETFs. They are liquid, low-cost ways to hedge against inflation, and there are a wide variety of potential ETF inflation hedges from which to choose.

Historically, no one inflation hedge is reliable consistently. They all have periods in which they don't rise with inflation. But there are four asset classes that are the most reliable inflation hedges. Investors concerned about inflation should own a diversified portfolio of these asset classes to effectively hedge against inflation.

The asset classes are gold, broad and diversified commodities, Treasury Inflation-Protected Securities (TIPS), and real estate investment trusts (REITs). There are ETFs dedicated to each of these asset classes, and it's easy and inexpensive for an investor to build a solid portfolio of inflation hedges.

You can own precious metals through the iShares Gold ETF or SPDR Gold Trust, among others. If you want to leverage a precious metals investment, you can choose an ETF that holds shares of gold mining companies.

There are several ETFs and ETNs that track different commodity indexes. You can choose from broadly diversified indexes to those that are more focused on particular commodity sectors or types of commodities (such as agricultural or industrial).

You can choose from a number of funds that specialize in either TIPS or REITs.

Another less reliable way to hedge against inflation is to invest in currencies other than the U.S. dollar. The idea is that when inflation is high in the U.S., the dollar will decline in value against currencies of countries in which inflation is not as high.

You can invest in currencies through a number of ETFs that have different strategies. Some funds invest in only one currency; others own a variety or trade the currencies. Some use futures contracts while others have different strategies.

There are some ETFs that bill themselves as inflation-fighting funds. In early 2022, there were 10 ETFs with "inflation" in their names. Many were relatively new and untested. Most were simply ETFs that invest in stocks, TIPS, or balanced portfolios with an objective of seeking investments that tend to rise with inflation.

However, you want to hedge against inflation, there is at least one way to implement the strategy through ETFs.

Long-term Investing

Both individual and institutional investors benefit from buying and holding ETFs for the long term. Purchasing ETFs might be cheaper for an individual investor than purchasing traditional no-load index funds through a discount broker. An investor whose accounts are at a discount broker will pay a much higher fee to add Vanguard's index funds to a portfolio than to buy ETFs that track the same indexes. The institutional investor will find that an ETF does not have the same restrictions as a separate account or fund at an index fund manager. For example, such investments usually require advance notice of additions and withdrawals. The ETFs could make it easier to rebalance the portfolio regularly and also to take advantage of any short-term opportunities in other asset classes the investor spies.

Another advantage of ETFs to the long-term investor is that they do not close to new investors. Among traditional mutual funds and money managers, quality choices may close to new investors. This is especially true among small company and emerging market stock investments. A potential disadvantage of using ETFs in this manner is that almost all of the funds will be indexed or benchmarked. The investor often foregoes any advantage from locating and investing with active managers who can earn higher returns than an index over time.

A variation of investing long-term with ETFs is known generally as the core and satellite approach. In this strategy, the bulk of a portfolio is invested in a diversified collection of index funds that is held for the long term. The rest of the portfolio can be used in several ways to take advantage of other opportunities to earn higher returns. In most cases, the investor uses a few mutual funds or money managers who are likely to earn better-than-index returns over the long term. Or the satellite portfolio can be moved in and out of different asset classes as those become undervalued and overvalued.

ETFs probably should not be used by the long-term investor who is adding to the portfolio in regular increments through dollar-cost averaging. The investor has to pay a brokerage commission on each purchase. On small purchases, the commissions can be a substantial percentage of the investments. A dollar-cost averaging investor is better off using traditional no-load mutual funds. An alternative is an extremely low-cost broker, also known as a fractional share broker. Examples of these are Sharebuilder.com and Foliofn.com. They usually charge very low commissions or fixed annual or monthly fees. These brokers also have trading restrictions that are not important to most long-term investors.

Tactical Asset Allocation and Sector Rotation

Some investors adjust their allocations to different asset classes based on intermediate-term trends. There are different ways investors decide when to change their allocations. Some use broad economic data, such as interest rates. Others use technical indicators of

the markets or sectors, such as moving averages. Fundamental factors such as valuations also can be used. Some investors use a combination of these and other methods to make their decisions.

ETFs are a good way to implement these strategies. The funds can be traded any time during the day, and the trading is inexpensive. Investors using these strategies usually do not care about active management; they use market and sector indexes to invest. ETFs do not have redemption fees or trading restrictions. ETFs also offer access to market sectors and other investment classes that are not available in mutual funds or even futures and options. An investor with an asset allocation system can include most markets and sectors, plus a number of asset classes other than equities.

Trading and Momentum Investing

ETFs also are ideal for shorter-term investing systems and for trading. The variety of choices, continuous trading on major exchanges, liquidity, pricing efficiency, low cost of trading and low management fees all are beneficial to a momentum investor or a trader.

ETFs are an excellent because they cover a host of available asset classes and can be traded at low cost any time the markets are open. The pricing for most ETFs is efficient, meaning there is little difference between an ETF's price and the values of underlying assets. The traditional mutual funds are less appropriate because many funds have imposed redemption fees or trading restrictions. Trading fees at discount brokerages also are higher for mutual funds than for stocks, such as ETFs. Many quality mutual funds and those in several categories (such as small stocks and emerging markets) are closed to new investors because of capacity constraints.

A momentum-based system such as this is the best way to trade ETFs. Such a system should not be used with the bulk of a person's portfolio. It should only be part of an aggressive portion of a portfolio, which for most people should be 5% or less of a portfolio or perhaps as much as 10% of the portfolio. It usually is best to execute a trading system within a tax-advantaged account such as an IRA or Roth IRA. Most gains under the system are likely to be short-term gains taxable as ordinary income. It is best to let such gains compound within a tax-advantaged account and avoid taxes as long as possible. Otherwise, the excess returns earned by the system are likely to be taxed away.

Three Warnings

In this section, a few of the disadvantages merit highlighting and more extended discussion. These potential problems do not mean that ETFs are bad investments or need to be avoided. They are problems that are likely to occur in a few ETFs or during brief

time periods. They do mean that investors need to choose carefully among the available ETFs.

Niches within Niches

ETF issuers rushed to create as many ETFs as possible. Some issuers seemed to want to be the first with an offering in particular market sectors or niches. The issuers became very creative and perhaps ventured into areas that are inappropriate for ETFs. The original idea behind ETFs was to offer low-cost ways to invest in known benchmarks or indexes. That provides transparency, diversification and efficiency for investors. A narrowly focused index, such as one that targets an industry subsector or a single currency versus the dollar, might not be appropriate for ETFs. There is little diversification and the potential for inefficiency.

Also, as ETFs cover market niches, there is the potential for the ETF to dominate that asset class. Take, for example, the Claymore-Sabrient Stealth ETF, PowerShares LUX Nanotech and PowerShares WilderHill Clean Energy. Each fund, if it exists when you read this report, covers small industry sectors, and the companies in these indexes tend to be small with thinly traded stocks. The ETFs probably account for much of the trading volume within those sectors. Trading of the ETFs can disrupt the individual stocks and distort market prices in ways that might not happen if these ETFs did not exist. These narrowly focused ETFs also can lead to the problems addressed in the rest of this section.

Fast Cash Whiplash

Since ETFs are useful for implementing trading strategies, they often are used by hedge funds. The rapid trading of hedge funds and their use of 24-hour markets around the globe can distort the prices of ETFs for periods of time. Investors can get caught in the flow of fast money and incur losses they were not aware of. Some ETF providers estimate that about 80% of the trading in their securities is by large, professional investors such as hedge funds.

The effect of these substantial pools of fast money (some of it leveraged) can be to distort prices of ETFs for varying periods of time. In fast-moving markets with a lot of trading volume, an ETF's share price can be meaningfully different from the value of the underlying assets. To date, these discrepancies have been corrected in a day or two. But ETF investors, especially those using trading strategies, need to know the potential for inefficient pricing and short-term losses.

Poor Replication

The tracking error in some ETFs can be long-term and not just the short-term discrepancies caused by fast money. The long-term discrepancies are likely when a fund uses a synthetic way to try to track the price of an asset or index.

Consider the crude oil market. Several ETFs have existed that attempt to track the price of oil. One of the largest is U.S. Oil Fund (USO), issued and managed by Victoria Bay Asset Management. The fund does not buy crude oil. Instead, it invests in futures contracts on crude oil and other oil-related securities. Unfortunately, the price of crude oil is not exactly mirrored in the prices of futures contracts. Trades in futures contracts are based on investors' anticipation of and forecasts about the direction of oil's price. As a result, sometimes the prices of crude oil and futures contracts can move in opposite directions. In addition, the cost of rolling over a futures contract can increase because fast-moving speculative markets have pushed up the futures prices more than crude prices.

For example, on April 19, 2007, the U.S. Oil Fund was trailing the price of crude oil by about 15 percentage points for the year. Over shorter periods, this fund and others designed to track the price of crude oil can move in the opposite direction of crude prices.

These kinds of anomalies do not occur with the largest, traditional ETFs. Those funds buy baskets of stocks that duplicate the indexes they track. Those funds can have smaller tracking errors, as we discussed earlier in this report. More significant tracking errors can occur with ETFs that cannot purchase the assets underlying the benchmarks they seek to track. Small company and emerging market ETFs often cannot purchase all the securities in their benchmarks. Leveraged funds use futures contracts, so they are unlikely to meet exactly their goals of doubling the returns of indexes. Many currency and commodity ETFs use futures contracts or other imprecise methods to replicate market prices. These funds are the most likely to have extended discrepancies between their returns and those of their targets. At times, they will move in the opposite direction of the prices of the assets they are targeting.

Mutual Funds vs. ETFs

Should an investor use index mutual funds or ETFs? The answer depends on the investor's goals. Traditional index mutual funds have lower costs if purchased directly through a fund company, such as Vanguard. There are no trading fees or commissions, and the management expenses of the funds are low, though the ETFs usually have lower annual expenses than the index funds. A long-term investor has no need for the continuous pricing and trading of an ETF. A traditional mutual fund also is likely to earn a higher return. This

might change as ETF issuers become more skilled in the nuances of managing a portfolio to meet an index. But generally, the Vanguard index funds earn higher returns than ETFs seeking to replicate the same indexes.

The ETF also will be more expensive if the investor makes any trades while owning it. The ETF could be particularly expensive in retirement if the investor makes trades on a regular basis to obtain spending money. On the other hand, ETFs offer access to many indexes and assets that are not available in traditional mutual funds. These choices might be unimportant to most investors. If an investor is content with broad-based index funds, there is little reason to stray from a traditional fund family into ETFs. An investor with other goals should consider using an ETF portfolio or adding ETFs to supplement the traditional index funds.

ETFs can add greater tax efficiency, as we discussed earlier. This would be important to an investor who actively engages in tax-loss harvesting and invests in such a diversified portfolio that there are likely to be assets with paper losses to harvest each year. A long-term buy and hold investor is likely to have no paper losses after holding the portfolio over a few years. ETFs are best for investors who want to trade the portfolio, want to add market niches or a broader array of assets to their portfolios, or have short-term needs that are best filled by the addition of an ETF.

Sources & Information

There are many details about ETFs, and the field is changing rapidly. Investors need to consult sources about ETFs to stay abreast of the details and the changes. Most information about ETFs is internet-based. The sources tend to fall into two categories. One category consists of the stock exchanges on which ETFs are listed and of independent issuers of comprehensive ETF information. The other category is composed of websites run by ETF issuers offering details of their ETFs. These sites contain prospectuses and other documents with all the information an investor could want to know about the securities.

Exchanges and independent sources:

www.etfconnect.com, www.morningstar.com, www.nasdaq.com, finance.yahoo.com

ETF Sponsors

www.currencyshares.com, www.fidelity.com/goto/oneq, www.ishares.com,
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www.vanguard.com, www.wisdomtree.com

Biography



Bob Carlson is editor of the monthly newsletter and website, *Retirement Watch*. He has served on the Board of Trustees of the Fairfax County Employees' Retirement System since 1992 and been chairman since 1995. The system has more than \$4 billion in assets. Carlson was a member of the Board of Trustees of the Virginia Retirement System, which oversaw \$42 billion in assets, from 2001-2005. He was appointed to the Virginia Retirement System Deferred Compensation Plans Advisory Committee in 2011.

His latest book is the revised edition of “The New Rules of Retirement” (Wiley, 2016; first edition 2004). He also co-authored “Personal Finance after 50 for Dummies” (with Eric Tyson; Wiley, 2015) and wrote “Invest Like a Fox...Not Like a Hedgehog” (Wiley, 2007).

He has written numerous other books and reports, including “The New Rules of Estate Planning,” “Securing Your Lifetime Stream of Income,” “Tax Wise Money Strategies, Retirement Tax Guide,” “How to Slash Your Mutual Fund Taxes,” “Bob Carlson’s Estate Planning Files” and “199 Loopholes That Survived Tax Reform.” He also has been interviewed by or quoted in numerous publications, including *The Wall Street Journal*, *Reader's Digest*, *Barron's*, *AARP Bulletin*, *Money*, *Worth*, *Kiplinger’s Personal Finance*, the *Washington Post* and many others. He has appeared on national television and on a number of radio programs. He is past editor of *Tax Wise Money*.

Carlson also was a Commissioner on the Fairfax County Redevelopment and Housing Authority. Carlson is an attorney and passed the CPA Exam. He received his J.D. and an M.S. (Accounting) from the University of Virginia and received his B.S. (Financial Management) from Clemson University. He also is an instrument rated private pilot. He is listed in many editions of *Who's Who in America* and *Who's Who in the World*.