



Exchange Traded Products

Exchange Traded Products (ETPs) have increased access to various asset classes, such as commodity futures and indices. In the past, a great deal of trading and expertise was required to replicate various futures trading strategies and indexes; an example of this would be an ETP designed to track the S&P 500 Index. Investors, both institutional and individual, can now buy or sell the entire S&P 500 index in a single ETP transaction without the need to trade futures or all 500 components of the S&P 500.

Given this wide and increased variety of ETPs, investors should understand the basics of how ETPs trade and the criteria necessary to evaluate an ETP so that the ETP fits with the investment objectives of a given portfolio. A good place to begin is with a basic understanding of the liquidity and benchmark of an ETP. This will help an investor decide if the ETP is an appropriate investment. Liquidity and benchmark components are often related as the ETP's benchmark generally dictates what the ETP will hold as its underlying assets, and the underlying assets' liquidity often directly affects the liquidity of the ETP. However, one should look at the benchmark independent of the ETP's liquidity, as the ability for the ETP to track the benchmark might be affected by regulatory changes, in addition to other factors.

ETP Liquidity Differs from that of Traditional Common Stock

Investors often mistakenly assume that the ease with which one can trade into and out of an ETP is based upon the traditional metrics of average daily trading volume and total number of shares outstanding. However, various ETPs, even those that do not appear to have a significant number of shares traded on a daily basis, can, for reasons other than trade volume, be liquid and efficiently priced. ETPs trade like a stock, but they have a unique pricing mechanism. Unlike a traditional equity security where minute to minute supply and demand for a finite number of available shares determines liquidity and execution price, the liquidity of an ETP is based on the dual concepts of Net Asset Value ("NAV") and "continuous share offering" through the create and redeem process.

An ETP does not have the same market forces at work as traditional equity securities. This is because the value and liquidity of ETP shares is not based on the supply and demand of its own shares, but based upon the value and liquidity of the underlying portfolio basket of assets held by the ETP. The NAV is an independently calculated value of an ETP's shares based upon the value of its underlying core holdings, or "basket." This per share value changes and is continuously updated while the underlying market is open and is generally referred to as the Intraday Indicative Value ("IIV"). The IIV calculation "levels the playing field" between investors and professionals, because it provides the same per share pricing information to all investors in 15 second intervals. In this way, retail investors share price discovery with professional arbitrageurs and mechanized traders, potentially allowing them to make investment decisions based on the same pricing information.

The other fundamental benefit inherent in the design of ETPs is the process of “creations” and “redemptions”. Simply stated, the issuers (Sponsors) of ETPs are allowed to continuously offer new shares as demand requires (subject to certain limits defined in the prospectus). Through the continuous share offering process, market makers can sell as many ETP shares to investors as required without causing significant changes in share price. Remember, ETP shares are primarily priced in the marketplace based upon the liquidity and current or estimated price of the underlying assets of the ETP. Any additional volume of shares for an ETP demanded by investors can be met through the continuous offering process. The continuous offering process allows the ETP Sponsor to issue new shares to arbitrageurs through what is called a “creation.” Conversely, when investors wish to sell ETP shares, the price the investor receives is again primarily based upon the price and liquidity of the underlying holdings of the ETP. High volume sales of shares can be absorbed through the continuous offering process, which then works in reverse when an arbitrageur “redeems” shares with the issuer, thereby removing those shares from the marketplace. Stated another way, when buying demand for ETP shares is high, it is the number of shares, not the price, that can be adjusted through the continuous offering process to satisfy demand, and vice versa when selling demand is high.

The create and redeem mechanism inherent in the continuous offering process allows investors to generally execute large blocks of shares around the NAV, regardless of daily average trading volume of an ETP itself. Here the concept of the notional trading value of the underlying basket comes into play. For instance, the notional value of soybean futures traded on the Chicago Board of Trade (CBOT) each day on average for the past eighteen months was approximately \$13 billion¹. Because the underlying asset of an ETP containing soybeans has such large notional value, an investor could execute a trade of almost any particular size without affecting price. *The primary element investors should consider when evaluating the suitability of an ETP in terms of liquidity is not the average daily volume of the ETP itself, instead it is the price and liquidity of the ETP's underlying holdings.* An ETP's average daily trading volume is far less important than the liquidity of an ETP's underlying markets. The number of shares outstanding on any given day in an ETP is not nearly as relevant as the total number of shares authorized for issuance in the ETP. (This can be found in a prospectus and/or on the website of an ETP issuer.)

Benchmark Design

It is critical to look at the benchmark of any ETP an investor might be considering. First, such an analysis assists an investor in understanding how the benchmark will affect the liquidity of the ETP, as discussed above. For instance, some ETPs might hold thinly traded securities, commodity futures contracts, employ leverage or even inverse leverage strategies. Some ETPs may trade during hours when their underlying holdings cannot be directly hedged by market makers. This could be the case with ETPs holding securities or futures traded on foreign exchanges in different time zones, or ETPs backed by thinly traded over-the-counter instruments with limited visibility.

Whenever possible, investors should trade ETPs during the same hours as the related underlying markets that correspond with the holdings of the ETP. Market makers and arbitrageurs who are able to efficiently hedge their purchases and sales of ETP shares to investors will offer more efficient pricing than those that cannot hedge efficiently. *Prudent investors should know both what their ETP holds in its underlying basket as well as*

¹ Source: Bloomberg, all contracts for the period 12/1/11 to 5/31/12 priced at the daily price for the first-to-expire contract

when the markets for those holdings are open. This will help to increase the chances for maximum price and liquidity efficiency in an ETP.

Another factor to consider when evaluating an ETP as an investment is that of actively versus passively managed ETPs. Passively managed ETPs track a static benchmark; this is potentially more transparent and understood by investors. In addition, market makers may hedge more efficiently making pricing and liquidity more optimal than an actively managed ETP. This is because with actively managed ETPs the fund manager can modify the underlying basket and/or may invest in a thinly traded security or futures contract. Such funds are not as easily understood or hedged by market makers, and potentially can negatively affect liquidity and pricing to the investor.

Liquidity is not the only question that is important when choosing an ETP. Benchmark transparency is another and investors should know what the ETP is using for its benchmark. In some cases, a benchmark might not track what one would think it would track. For instance, in commodity ETPs, depending on the commodity, some track futures markets and some track the physical commodity or spot month prices, defined as the futures contracts with the nearest expiration and delivery. Differences in the benchmark could lead to differences in costs. For example, if the ETP is tracking the physical commodity there could be storage costs or if the ETP is futures based costs of rolling the fund or the forward pricing of the futures curve would affect the fund's NAV. Certain benchmarks may be affected by position limits or other regulatory changes. Investors should be mindful of proposed changes to the status-quo and how a fund's benchmark might be affected, and what adverse effect that would have the ETPs ability to track its benchmark.

Types of execution orders

In addition to the above factors, investors should be aware that ETP pricing and liquidity is based upon the ability of market makers and arbitrageurs to hedge their ETP share purchases and sales to the investor. "Market" orders should be avoided. Investors should place buy and sell orders with defined price limits. This is because most hedging/arbitrage activities are executed electronically through a two-step "buy ETP shares/sell underlying holdings to hedge" or "sell ETP shares/buy underlying holdings to hedge" process. This two-step electronic process can actually be interrupted by an investor's "market" order to buy or sell ETP shares because a "market" order is actually a one-step electronic process. This electronic mismatch can potentially cause price dislocations that are detrimental to the investor and should be avoided whenever possible by entering buy and sell orders with "limit" prices.

Conclusion

ETPs have opened the door for the average investor to trading strategies that only professionals could use prior to this point and time. As with any investment it is important to understand the investment, in the case of ETPs, investors should minimally know what underlying assets are held in the benchmark and the risk associated with benchmark design. Understanding the appropriate time to enter and exit the ETP, while the underlying assets are trading and when those assets can be arbitrated may help the investor achieve an execution price closer to the NAV. Doing due diligence on an ETP, and truly understanding how it trades and is constructed helps the investor decide if the ETP fits their allocation needs.

The views in this newsletter were those of Teucrium Trading, LLC as of September 15, 2012 and may not reflect the views of the Company on the date the material is first published or any time thereafter. These views are intended to assist the readers in understanding commodities and do not constitute investment advice. This should not be considered as an offer to see or a solicitation of an offer to buy any securities mentioned herein.

The Teucrium Funds have a limited operating history, meaning there is little performance history that might serve as a basis to evaluate an investment in the Trust. Investing in a Fund subjects an investor to the risks of the applicable commodity market, which investment could result in substantial fluctuations in the price of Fund shares. Unlike mutual funds, the Funds generally will not distribute dividends to shareholders. The Sponsor has limited experience operating commodity pools; a commodity pool is defined as an enterprise in which several individuals contribute funds in order to trade futures or futures options collectively. Investors may choose to use a Fund as a vehicle to hedge against the risk of loss and there are risks involved in hedging activities. **Commodities and futures generally are volatile and are not suitable for all investors. The Funds are not mutual funds or any other type of investment company within the meaning of the Investment Company Act of 1940, as amended, and are not subject to regulation thereunder.** For a complete description of the risks associated with the Funds, please refer to the applicable prospectus.

Shares of the Funds are not FDIC insured, may lose value and have no bank guarantee.

Foreside Fund Services, LLC is the distributor for the Teucrium Funds.

The Teucrium Funds have a patent pending on the methodology employed by the Funds.

A copy of the prospectus for each Fund may be accessed at the links below:

SOYB: <http://www.teucriumsoybfund.com/pdfs/schwab/soyb-prospectus.pdf>

CANE: <http://www.teucriumcanefund.com/pdfs/schwab/cane-prospectus.pdf>

WEAT: <http://www.teucriumweatfund.com/pdfs/schwab/weat-prospectus.pdf>

CORN: <http://www.teucriumcornfund.com/pdfs/schwab/corn-prospectus.pdf>

NAGS: <http://www.teucriumnagsfund.com/pdfs/schwab/nags-prospectus.pdf>

CRUD: <http://www.teucriumcrudfund.com/pdfs/schwab/crud-prospectus.pdf>

TAGS: <http://www.teucriumtagsfund.com/pdfs/schwab/tags-prospectus.pdf>