

Index ETF Basics

An index ETF is an investment structure that pools the assets of its investors and uses public indexes to invest the money to meet clearly identified objectives, such as current income or capital appreciation. Index ETFs are essentially passive index funds, similar to traditional index mutual funds, that allow investors to trade a portfolio of securities in a single transaction.

An index ETF is created when an institutional investor deposits securities into the fund in return for creation units. In return for the deposit, the institutional investor receives a fixed amount of shares, some or all of which may be traded and priced throughout the day on a stock exchange. Historically, the American Stock Exchange (AMEX) has been the favored exchange for listing index ETFs, although the New York Stock Exchange (NYSE) and the Chicago Board Options Exchange (CBOE) have also recently listed these funds. Retail investors who wish to buy or sell fund shares do not purchase or redeem directly from the fund - rather, they buy or sell fund shares on the stock exchange in a process identical to the purchase or sale of any other listed stock. All the strategies associated with stocks, such as market orders, limit orders, stop orders, short sales, and margin buying can be used in the purchase and sale of index ETFs.

These funds offer retail and institutional investors efficient trading of style-specific index exposure on domestic indexes such as the S&P, Russell, Dow Jones and various international indexes. The specific investment style of an index ETF can represent a specific sector or industry such as consumer goods, a broad market index such as the S&P 500, or a specific basket of stocks. In addition, various funds may focus on differing investment styles such as value or growth.

The price of an index ETF typically resembles, but is independent of, the underlying net-asset-value of the fund. When demand for fund shares exceeds supply, the market price at which an index ETF trades may be higher than its underlying net-asset-value. When there are more fund sellers than buyers, the market price may be lower than its net-asset-value.

Unlike Closed-End ETFs, the shares for an index exchange-traded fund can be created or deemed on a daily basis by market specialists. Also, institutional investors can redeem 50,000 share lots in-kind if there is a gap between the net-asset-value and the market price of the fund. These arbitrage opportunities typically create enough demand to minimize the gap between the fund net-asset-value and the fund price.

Legal Structures

There are three main legal structures for index ETFs:

1. Exchange-traded open-end index mutual fund - This type of fund is registered under the SEC Investment Company Act of 1940. Dividends are reinvested in the fund on the day of the receipt

and are paid out quarterly in cash. Funds are allowed to use derivatives and can generate income from loaning securities. Although there is no minimum amount an investor must purchase or sell, institutional investors can create or redeem shares in-kind in 50,000-share lots. Examples of this structure include the Select Sector SPDRs and iShares.

2. Exchange-traded unit investment trust - This type of fund is registered under the SEC Investment Company Act of 1940 ("the 40 Act"), and must fully replicate their benchmark indices. However, diversification rules in the 40 Act sometimes force these funds to deviate from the exact index holdings. The 40 Act stipulates that no fund can invest more than 25% of its assets in any single issuer. It also requires that in diversified funds, securities that have an asset weighting of 5% or more cannot compose more than 25% of the total fund. For non-diversified funds, the aggregate limit is 50% of the total fund assets. As some indexes contain company stocks at weights higher than this threshold, several funds statistically optimize their holdings to reflect the index weightings while still adhering to the diversification rule.

Dividends are not reinvested in funds with this legal structure, and are paid out quarterly in cash. Although there is no minimum amount an investor must purchase or sell, institutional investors can create or redeem shares in-kind in 50,000-share blocks. Examples of this structure include the QQQs (Qubes), DIAMONDS, S&P 500 SPDR and S&P 400 SPDR.

3. Exchange-traded grantor trust - This type of fund is not registered under the SEC Investment Company Act of 1940, although this structure is the most similar to actually owning the underlying shares of the fund. The fund composition does not change, except to reflect corporate actions. These funds can be redeemed for the underlying securities, and investors have voting rights to the underlying securities. Dividends are distributed directly to the shareholders, not reinvested. Fund shares can be purchased/created and sold/redeemed in 100-share lots. Examples of this structure include the HOLDR funds.

Advantages

There are several characteristics of index ETFs that can help investors meet their investment goals:

- Annual expense ratios - Due to the passive nature of index investing, and sometimes reduced marketing, distribution and accounting expenses, the expense ratios for index ETFs are typically lower than those for many traditional mutual funds. For index ETFs that are registered investment companies, annual management fees or trustee fees are collected, ranging from 0.09% to 0.99% of fund assets. For index ETFs that are not registered investment companies (i.e. HOLDRs), an annual custody fee of 0.08% is charged if any of the underlying stocks pay dividends.

However, investors must still pay a brokerage commission to purchase and sell shares for all index ETFs. Investors who trade frequently can have significantly higher trading costs, and thus higher total costs for investing in index ETFs.

- Tax Efficiency - Since index ETFs are passively managed portfolios, they generally realize fewer capital gains than actively managed funds. Index ETFs offer in-kind redemptions, which can avoid realizing capital gains in the fund. However, the redeemer still pays taxes when each of the underlying securities are sold (at the investor's cost basis, not the fund's cost basis), although the fund owes no taxes based on these redemptions.
- Continuous pricing - Unlike traditional mutual funds, which are only priced at the end of each day, index ETFs are priced and can be purchased and sold throughout the trading day.
- Cash Equitization - Portfolio managers that seek to track benchmarks often need an efficient way to quickly invest cash, preferably in an instrument that has a high correlation to their benchmark. Index ETFs provide a clearly beneficial choice, given the variety of sector, style and industry categories available.
- Trading Fees - Because exchange-traded are purchased and sold just like regular stocks, only brokerage fees paid to purchase or sell shares. Index ETFs typically do not impose annual 12b-1 fees.
- Portfolio Transitions - Many investors may move assets between funds and investment styles, but may wish to stay fully invested in the market. Rather than allowing assets to sit idle in cash, index ETFs provide a mechanism to stay fully invested in a particular market segment while evaluating further investment opportunities.
- Completion Strategies - Managers may wish to quickly gain exposure to specific sectors, styles or industries, but do not have the prerequisite expertise in these areas. Index ETFs may be able to provide exposure to the preferred segment, given the variety of sector, style and industry categories available.

Investment Risk

All investments involve risk. Like other investments, index ETFs carry a certain level of risk for investors, including:

- Market Pricing - Because the market share price is determined by market supply and demand forces, not the underlying net asset value, investors may purchase shares at a premium or discount to their net asset value.

- Tracking Error - An exchange-trade fund typically pays out dividends received from the underlying stocks on a quarterly basis. However, the underlying stocks pay dividends throughout the quarter. Therefore, these funds may hold cash for various time periods throughout the quarter, even though the underlying benchmark index is not composed of cash. This is especially true with index ETFs that are organized as trusts (i.e. HOLDRs), which cannot reinvest dividends and must hold them as cash.

In addition, because transactions occur at market prices instead of at net asset value, an index ETF's performance may not completely replicate the performance of the underlying index.

- Market Risk - Market prices for securities and index ETFs fluctuate daily based on many factors such as economic conditions and global events, investor sentiment and security-specific factors. The degree of general market volatility has increased over the last several years. The prospect of a market decline and its impact on security and fund prices should be considered as general market risk.
- Credit Risk - Credit risk refers to an issuer's ability to make payments of principal and interest when due. An interruption in the timely payment of principal and interest (such as on a corporate bond) may adversely affect a fund's net asset value and ability to pay dividends.
- Interest Rate Risk - Prices of bonds tend to fall as interest rates rise, and rise as interest rates fall (bonds with longer maturities tend to fluctuate more in price in response to such changes). For index ETFs that hold bonds in their portfolios, this risk can be significant, although most funds hedge this risk through various market instruments.

Buying and Selling

Retail investors who wish to buy or sell fund shares do not purchase or redeem directly from the fund - rather, they buy or sell fund shares on the stock exchange in a process identical to the purchase or sale of any other listed stock. All the strategies associated with stocks, such as market orders, limit orders, stop orders, short sales, and margin buying can be used in the purchase and sale of index ETFs.

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Net Asset Value and Premium/Discount

The net asset value (NAV), which is the value of all the fund assets minus the value of the liabilities, all divided by the number of shares outstanding, determines the value at which open-end funds (such as mutual funds) are purchased and sold. However, index ETFs are purchased and sold at market prices, which are determined by supply and demand forces on exchanges. The price of an index ETF typically resembles, but is independent of, the underlying net asset value of the fund.

When demand for fund shares exceeds supply, the market price at which an index ETF trades may be higher than its underlying NAV. When there are more fund sellers than buyers, the market price may be lower than its NAV. For example, if the net asset value of a fund is \$20, and the fund is selling for \$18 on an exchange, the fund is said to be at a 10% discount to net asset value. If the same fund is selling for \$22 on an exchange, the fund is said to be at a 10% premium to net asset value.

Performance and Fees

Shares of an index ETF are listed on a national exchange, and the market price is typically published daily in the financial listings of most newspapers. Since the market value is determined by factors including relative market supply and demand and general market and economic conditions, there is no way to predict whether shares will trade at, above or below their net asset value.

Portfolio Trading

The basic idea of trading an entire portfolio in a single transaction originated in the late 1970s and early 1980s. Portfolio trading was the then-revolutionary ability to trade an entire portfolio, often consisting of all S&P 500 stocks, with a single order placed with a major brokerage firm. Some modest advances in electronic order entry technology at the NYSE and the Amex, as well as the availability of large order desks at some major investment banking firms, made these early portfolio or program trades possible. At about the same time, the introduction of S&P 500 index futures contracts at the Chicago Mercantile Exchange provided an arbitrage link between the futures contracts and the traded portfolios of stocks. It even became possible, in a trade called an exchange of futures, for traders to exchange a stock portfolio position, long or short, for a stock index futures position, long or short. The effect of these developments was to make portfolio trading, either in cash or futures markets, an attractive activity for many trading desks and institutional investors.

As a logical consequence of these developments for large investors, interest grew for a readily tradable portfolio or basket product for smaller institutions and individual investors. Futures contracts were relatively large in notional size and the variation margin requirements for carrying a futures contract were cumbersome and relatively expensive for small investors. Perhaps even more important, there are approximately ten times more securities salespeople than futures salespeople, making the distribution of such a product more practical via a securities exchange.