

## Exchange-Traded Funds

*A Passive Past and an Active Future*

### *How are ETFs Created?*

Exchange-traded funds are generally created in response to anticipated demand for a fund to track a particular market index or industry such as the NASDAQ 100 or the Wilshire 5000. When this happens, an institutional investor or large intermediary such as Goldman Sachs and J.P. Morgan—known as an authorized participant (AP)—transfers a portfolio of stock that closely approximates the specified index to a fund manager. The manager places the stock in a trust and issues ETF shares to the AP. The AP is free to hold the new securities or sell them to other investors.

The ETF shares trade freely between investors on established stock exchanges (the New York Stock Exchange is the major player in ETFs). Small investors generally sell their shares for cash to another investor. When an institutional investor with large ETF holdings decides to exit an ETF, the securities are retired in block-sized units. The institution gets shares of the stock or stocks underlying the ETF plus some cash representing accumulated dividends.

Depending on the kind of ETF or the index being tracked there may be minimum requirements to create the fund. For example a unit of 50,000 shares is required to create Diamonds while a 25,000-share unit is required to create mid-cap SPDRs.

Since the first exchange-traded fund—the Standard and Poor’s Depository Receipt Trust (SPDR)—hit the floor of the American Stock Exchange in 1993, the interest for these mutual fund alternatives has grown exponentially. In fact, with assets climbing to more than \$725 billion in just 15 years it can easily be said that ETFs just might be the hottest investment product of the new century.

Why all the blistering interest in ETFs? In a nutshell, because they’re easy to buy, inexpensive to own, tax efficient and totally transparent in terms of portfolio allocation. ETFs enable investors to trade a portfolio of stocks with a single investment as easily as if they were buying an individual stock. Indeed, the biggest, most liquid ETFs—like the SPDR, or Spider as it’s come to be known—have emerged as some of the most heavily traded securities in the U.S.

Across their history, ETFs have generally been created to passively track a particular industry or market index, such as the NASDAQ 100 or the Wilshire 5000. But as the demand for ETFs as building blocks in multi-asset portfolios grows, so too does the opportunity for smart product development in the space. Most notable in that regard is the emergence of “actively-managed” ETF portfolios. Like any new product, these innovative funds lack track records and investors are not yet entirely comfortable with the concept.

### *Just what are ETFs?*

Simply put, ETFs are a hybrid security. The typical Exchange Traded Fund is an index investment crossed with an exchange-listed corporate security and an open-ended mutual fund. ETFs represent ownership of a portfolio of common stocks that closely track the performance of a specific index, be it broad market, sector, or international. Transparency is a hallmark of ETFs, as they’re required to disclose their holdings every day.

While ETFs compete with mutual funds for investor dollars, they have a very different operational structure. The big difference between ETFs and traditional mutual funds—some say the biggest advantage—is that ETFs trade on exchanges just like stocks. This feature allows them to be a lot less cumbersome than mutual funds as they can be bought or sold at any point during the trading day. By contrast, traditional mutual funds generally can be purchased or redeemed only at the end of the trading day.

Investors can buy or sell shares through a broker or in a brokerage account just as they would shares of any publicly traded company. And, subject to the same rules that apply to common stocks, ETFs can be bought on margin at and limit prices. Investors pay a brokerage commission on a per-trade basis to buy or sell them.

### What is an ETF?

Feature	ETF	Mutual Fund
Investor purchase/ redemption of shares	Investor buys and sells shares on a secondary market. Only market maker or “authorized participants” trade directly with the fund, typically in large blocks.	Investor contributes cash directly to fund for fund shares, and vice versa for redemptions
Funds’ investment of new proceeds or meeting requests for redemptions	ETF typically exchanges ETF shares “in-kind” with market makers in return for portfolio securities, and vice versa for redemption requests.	The fund buys securities to put new cash to work, or sells portfolio securities to meet redemption requests
Intraday requests to buy and sell shares	Investors can trade at negotiated prices (with market maker support/ intervention) on the open market intraday	Orders are executed at the end of the trading day’s NAV, directly with the fund
Shorting, buying on margin	Shorting and buying on margin allowed	Cannot short or buy on margin
Recordkeeping	Continuous pricing fluctuation. Shares held in Street name.	Daily share pricing with ability, to track underlying shareholders through transfer agent function

### How do ETFs work?

Like a mutual fund, an ETF is registered with the SEC as an investment company—either as an open-end fund or a unit investment trust. Where things differ is how shares or units are issued and redeemed and in how they are traded.

Unlike mutual fund distributors, ETF sponsors do not sell shares to the public for cash. Instead they exchange large blocks of ETF shares—called creation units—for the securities of the companies that make up the underlying index plus a cash component representing mostly accumulated dividends. The units are then broken up, generally by broker-dealers, and offered as ETF shares on the exchanges. There, individual investors can buy them in their brokerage accounts, through a broker, or an online trading account.

Sponsors continually create and redeem creation units based on investor demand and for arbitrage purposes. An ETF’s value tracks closely but does not match exactly the value of the underlying security, so institutional investors can measure the price of the underlying securities in the index against the price of the ETF. If the price of the underlying securities is higher than the ETF, investors can trade a lower priced creation unit back to the sponsor in exchange for the higher-priced securities. Conversely, if the price of the underlying securities is lower than the ETF, an investor could trade the lower-priced securities back to the fund in exchange for a creation unit. This arbitrage mechanism keeps the fund trading for more or less than the value of the underlying portfolio, eliminating the discount-to-NAV problem sometimes associated with closed-end mutual funds.

### ETF versus Mutual Fund

#### ETF

- In order to effect creations and redemption for a fund, the Authorized Participants (AP's) rely on the basket information published by the service provider.
- Most creations and redemptions are funded with securities in-kind, custodian delivers a file to the investment manager to update share amounts and cost basis on portfolio management system.
- Most trades settle automatically through CNS.
- There are three exceptions to the above:
  - Restricted security custom basket
  - All cash baskets
  - Global market execution
- Trades are transmitted to the custodian by 5:00PM trade date so that data can be included in the mark to market file for the next day's trading session.
- Tax management processing: when looking to reduce a security weighting or remove a security altogether, that carry unrealized capital gains, a unique process called a "custom basket" is utilized.
- Maintaining some level of consistency in the basket published from one day to the next is important. The AP's need to be comfortable that they can effectively hedge their risk, and institutional traders like to arbitrage the pricing inconsistency that may arise in the shares, all are good things for the liquidity of the ETF. If the basket materially changes from day to day, both of the above become very difficult, driving the institutional community away from the products.

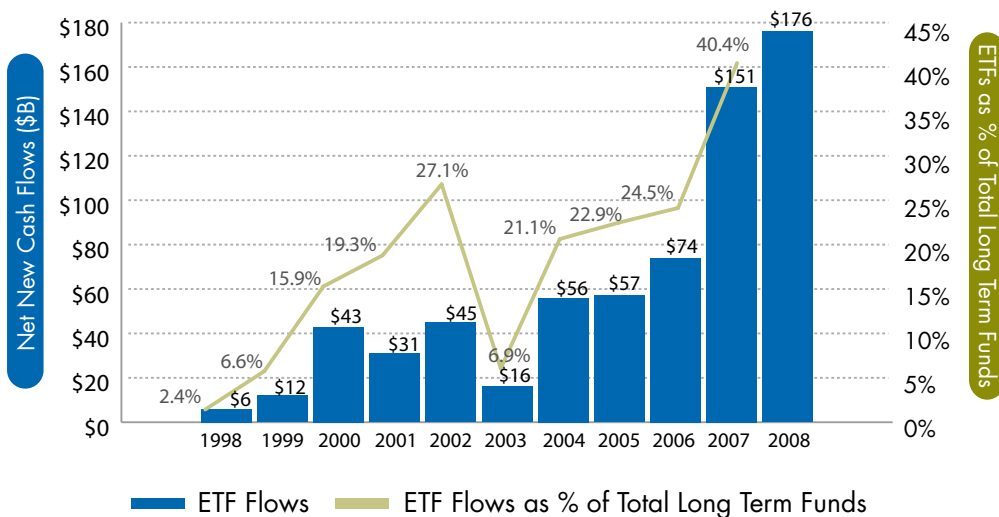
#### Mutual Fund

- Creations and redemptions are funded with cash, investment manager receives an early cash availability statement from custodian inclusive of net deposits/redemptions, corporate actions and expenses and makes trades throughout the days as desired.
- Cash is held back for liquidity purposes to fund daily net asset changes.
- Trades are transmitted in the evening or overnight batch so that they can be added to the portfolio for accounting purposes on T + 1.
- Custodian must pre-match trades and resolve trade discrepancies.
- Global trading presents no special processing with the exception of pre-funding markets.
- Only tax optimization strategy is tax loss harvesting.
- Tax issues are the only consequence of high portfolio turnover

### What's the ETF market look like today?

Along with the escalating interest in ETFs has come a veritable explosion of diverse investment strategies. There are now some 800 different ETFs trading in the U.S. Investors can use them to track everything from U.S. large-cap equities to Brazilian stocks, from gold to revenue-weighted versions of popular stock indexes. Recent hot-spots include inverse and long-leveraged ETFs, whose U.S. assets now top \$22 billion. The industry has also seen some growth in Exchange Traded Notes, or ETNs, which are essentially "ETF-like" debt instruments. Taken together, these U.S.-listed Exchange Traded Products, or ETPs, drew \$176 billion in net inflows across the difficult markets of 2008.

### ETFs Have Been an Increasingly Significant Force in the Industry



Source: Investment Company Institute, Strategic Insight Simfund, National Stock Exchange, Morningstar, as of 12/31/08.

The ETF market has grown primarily through the expansion of its buyer pool. Some 40% to 50% of ETF assets now reside with institutions, including pension funds, hedge funds, endowments, foundations, proprietary trading desks, and mutual funds. The rest are found with retail users, including financial advisors and the direct retail channel. ETFs are increasingly being used as building blocks for multi-asset class portfolios, including lifecycle-based and tactical allocation strategies implemented within regular single ETFs, or funds-of-ETFs, and ETFs-of-ETFs.

In addition to the venerable Spider, ETFs these days are known by a variety of clever names, including Diamonds, OPALs, Qubes, VIPERs, HOLDRs, and StreetTracks. The leading players in the U.S. ETF business are: Barclays Global Investors, which has the most ETFs and the most assets; State Street Global Advisor, which launched the Spider in 1993, and is now the second-largest sponsor of product; and Vanguard, the indexing giant that entered the business in 2001 with ETFs structured as share classes of its index funds.

### *What's on the ETF horizon?*

Without argument, the most interesting event in the world of ETFs is the emergence of "actively managed" product. Indeed, after many years of development, the first actively-managed ETFs, which do more than just track an index, were launched in 2008. At the end of the year, there were 13 so-called active ETFs with about \$240 million in assets.

In January 2009, Grail Advisors registered a series of ETFs that would be run just like traditional, actively-managed equity funds. The Grail funds, which like all ETFs will provide full transparency, will be the first to use traditional management techniques and allow portfolio managers to trade at any time with no restrictions on the number of trades.

Grail Advisors has moved out in front of the industry with its zeal to deliver the benefits of traditional active management to the ETF marketplace. But challenges remain...not the least of which the unwillingness of some portfolio managers to disclose their holdings. While it's likely that perceptive money managers will ultimately come to see full disclosure as a competitive advantage in today's retail marketplace, it will be the sheer asset-gathering potential of ETFs that will likely pressure more reluctant managers of traditional mutual funds to participate. It's reasonable to think innovative product providers will develop a full suite of "transparent" active ETFs—both single manager and multi-manager—with leading investment management firms over time.

### *Are ETFs really more tax efficient than mutual funds?*

The biggest difference between ETFs and mutual funds is that trading takes place between shareholders—the fund doesn't need to sell stock to meet redemptions. And since nothing in the underlying ETF portfolio changes when an investor buys or sells individual shares, the fund avoids realizing a gain on its holdings. Mutual funds, on the other hand, need to sell securities to meet a redemption request, which can result in the fund paying a taxable capital gain to shareholders—even if the overall market is trending down. The net result is ETFs have less of a tax drag than ordinary mutual funds.

ETFs do pay out dividends and any gains that arise from changes in the composition of the indexes they track—just as open-end mutual funds do. While some ETFs—such as Qubes—have made few or no distributions so far, others make distributions annually.

For investors who buy and sell their ETFs, the tax implications are identical to those for ordinary stock. If a client sells in less than one year, any gain will be taxed as ordinary income. If the client sells at a gain after a year, he or she will be taxed at lower capital gains rates. For losing trades, investors can write off the loss against other capital gains (and up to \$3,000 annually of ordinary income).

### *What's the future look like for ETFs?*

Compared to the \$9.6 trillion U.S. mutual fund industry, the marketplace for ETFs is still undersized. But ETFs are increasingly gaining a following among old-school mutual fund shops, regular investors, and financial advisers. Indeed, a recent survey of registered investment advisors by Charles Schwab indicated a full 79% say they now look to ETFs as their top investment vehicles for their clients. So, why are investors increasingly bailing out of traditional mutual funds and pouring money into ETFs? The better question may be "Why not?"

#### *ETF Growth Projected to Outpace that of Other Product Segments*

*Financial Product Segment Growth Projections - 2007 to 2012E*

Products (\$ Billions)	2007	2008	2009	2010	2011	2012	5-Yr CAGR
529 Plans	114	142	174	213	257	308	22%
Hedge Funds	1,622	1,921	2,276	2,696	3,206	3,782	18%
Managed Accounts	1,056	1,230	1,432	1,668	1,943	2,262	16%
Closed-End Funds	352	398	447	501	563	628	12%
Mutual Funds	7,868	8,710	9,633	10,644	11,751	12,962	10%
Variable Insurance	1,361	1,477	1,602	1,737	1,883	2,041	8%
<b>ETFs</b>	<b>580</b>	<b>736</b>	<b>933</b>	<b>1,183</b>	<b>1,500</b>	<b>1,902</b>	<b>27%</b>

<sup>1</sup> Note: Mutual fund assets exclude money market funds. Source: FRC Monitor, Grail Partners Research  
The growth figures above are projections, and as with all projections, are subject to change.

For virtually any investor, ETFs line up very well with the fundamentals of good investing—they're diversified, they're low cost, and they're tax efficient. They allow investors to tap into a range of investing styles, company sizes, and industries, from international and emerging markets to small-cap stocks, commodities, and real estate. Some even dissect the market into specific countries, currencies, and even obscure niches such as water and global shipping. And the newest and most innovative ETFs will rely on managers, not indexes, to choose holdings.

Considering the impressive inflows into 2008's difficult market, it seems inevitable that ETF assets will continue to multiply, especially as it comes to pass that investors in the long-term, actively-managed mutual fund segment are able to enjoy the benefits of ETFs. Market appreciation is uncertain, of course, and so are immediate flows into actively-managed funds, but it's reasonable to expect worldwide ETF assets to reach the \$1 trillion milestone in the very near term.

### Disclosure

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*Shares are not individually redeemable and that the owners of Shares may purchase or redeem Shares from a Fund in Creation Units only.*

*For more information about taxes, consult your tax attorney or accountant for advice .*

*There are risks involved with investing including possible loss of principal. The ETFs are actively managed and the Shares may trade above or below their net asset value. The trading price of shares may deviate significantly from net asset value during periods of market volatility. Shares are not FDIC insured, may lose value, and will have no bank guarantee.*

***An investor should consider investment objectives, risks, charges and expenses carefully before investing. The Prospectus contains this and other information. For more complete information about the Grail American Beacon Large Cap Value ETF or to obtain a Prospectus, call 415-677-5870 or visit [www.grailadvisors.com](http://www.grailadvisors.com). Please read the Prospectus carefully before investing.***

*Grail American Beacon Large Cap Value ETF is distributed by ALPS Distributors, Inc.*

### Definitions

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**CAGR (Compound Annual Growth Rate)** *The year-over-year growth rate of an investment over a specified period of time. The compound annual growth rate is calculated by taking the  $n$ th root of the total percentage growth rate, where  $n$  is the number of years in the period being considered.*

**CNS (Continuous Net Settlement)** *An automated book-entry accounting system. CNS centralizes the settlement of compared transactions and maintains an efficient flow of security and money balances.*

**Discount-to-NAV** *A pricing situation that occurs with a closed-end mutual fund when its market price is currently lower than the net asset value of its components. Discounts can occur in times where the market has a pessimistic future outlook and fund investors have started to sell their holdings.*

**Mark to Market** *The process of restating the carrying value of an asset or liability to equal its current market value.*

**Street Name** *When securities are held in the name of a broker or other nominee, as opposed to holding them in the customer's name.*

**T+1** *An abbreviation that refers to the settlement date of security transactions. The T stands for transaction date, which is the day the transaction takes place. The numbers 1, 2 or 3 denote how many days after the transaction date the settlement or the transfer of money and security ownership takes place.*

**Tax Harvesting** *Selling securities at a loss to offset a capital gains tax liability. Tax gain/loss harvesting is typically used to limit the recognition of short-term capital gains, which are normally taxed at higher federal income tax rates than long-term capital gains.*

