ETF mechanics

An **Exchange Traded Fund (ETF)** is a type of investment vehicle that in many ways is a hybrid of a mutual fund and a stock. Like a mutual fund an ETF can be built to track the performance of an index or can be actively managed. Similar to a stock, an ETF is bought and sold on an exchange.

The first ETF was launched in the US in 1993. There are now more than 8,000 different ETFs available worldwide[1]. ETFs have grown to a universe worth more than $8.5 trillion globally as of March 31, 2021.[2]

Why are ETFs used?

Key Benefits

Tactical allocation – Quick and easy to transact, ETFs can be bought and sold the same as a single stock.

Cost – ETFs are considered more cost effective than mutual funds as they have typically have lower expenses

US tax efficiency[3]

- Through the creation/redemption mechanism, ETFs can transfer securities in-kind to meet redemption needs.
- This type of payment, made in securities as opposed to cash, is referred to as an in-kind payment.
- Meanwhile in order to settle a redemption a mutual fund will sometimes need to sell holdings, potentially realizing capital gains that are passed back to shareholders.
- The ability to buy and sell an ETF in the secondary market, allows investors to meet on an exchange without always having to redeem at the fund level.

How does an ETF work?

Supply & demand

Step 1: When new ETF shares need to be created (demand outweighs supply), Market Makers go through an Authorized Participant (AP) to perform the transaction

Supply

Demand

Step 2: The AP will compile the necessary securities/cash for delivery to the ETF

Step 3: Upon receipt of the securities and cash, the ETF Issuer will issue new shares of the ETF to the AP

Step 4: The AP will pass the ETF shares to the Market Maker to replenish inventory

The process works in reverse for redemptions when supply exceeds demand

PRIMARY MARKET

Market where **ETF** shares are created and redeemed.

Securities

ETF issuer

ETF shares

CREATION

REDEMPTION

Authorized Participant

– They are a large broker/dealer that acts as a bridge between the exchange and the issuer.
– Shares are issued/redeemed to APs in large blocks, known as 'creation units'

– They help ETFs trade at prices close to the market value/NAV of their portfolio holdings

Premium

Discount

Premiums & discounts

Due to surges in either demand or supply – an ETF can sometimes trade at either discount or premium to the value of its underlying assets (net asset value – NAV).

ETFs generally trade close to their NAV due to the creation/redemption function.
When trading at a premium, APs will create more shares to add supply to the market and vice versa.

Buyers

STOCK EXCHANGE

Market Maker

A dealer that buys or sells at specified prices at all times; also known as liquidity providers.

Sellers

SECONDARY MARKET

An exchange where **ETFs** are traded (ie. New York Stock Exchange).

Liquidity

ETF liquidity = exchange volume + volume of underlying basket

1. Secondary market volume: The number of existing shares in the ETF available to be traded.

2. Primary market volume: The volume of the underlying basket of stocks in the ETF.

1 Surface liquidity

2 'Invisible' liquidity

Did you know?

ETFs make up 20-25% of total US stock market trading volume on average, but it can rise to as much as 40% in times of heightened market volatility[4]

ETFs

1. Source: Statista Global number of ETFs 18 February 2021
2. Source: ETFGI, as of March 31, 2021.
3. ETF tax efficiency can be derived from certain structural elements, including: turnover, which in passive strategies is typically lower than in active; in-kind redemptions, in which no capital gains are realized. This can allow investors more control over the timing of their tax liabilities based on when they generally sell their position. Please consult your own tax advisor or financial professional for more detailed information on tax issues as they relate to your specific situation.
4. Source: GS Global Investment Research, 2020.

ETFs trade like stocks, are subject to investment risk, including possible loss of principal. The risks of investing in the ETF typically reflect the risks associated with the types of instruments in which the ETF invests. Diversification cannot assure a profit or protect against loss. Past performance is no guarantee of future results. ETF shares are listed on an exchange, and shares are generally purchased and sold in the secondary market at market price. At times, the market price may be at a premium or discount to the ETF's per share NAV. In addition, ETFs are subject to the risk that an active trading market for an ETF's shares may not develop or be maintained. Buying or selling ETF shares on an exchange may require the payment of brokerage commissions. This material has been provided for informational purposes only and should not be construed as investment advice or a recommendation of any particular investment product, strategy, investment manager or account arrangement, and should not serve as a primary basis for investment decisions. Prospective investors should consult a legal, tax or financial professional in order to determine whether any investment product, strategy or service is appropriate for their particular circumstances. Views expressed are those of the author stated and do not reflect views of other managers or the firm overall. Views are current as of the date of this publication and subject to change. The information is based on current market conditions, which will fluctuate and may be superseded by subsequent market events or for other reasons. References to specific securities, asset classes and financial markets are for illustrative purposes only and are not intended to be and should not be interpreted as recommendations. Information contained herein has been obtained from sources believed to be reliable, but not guaranteed. No part of this material may be reproduced in any form, or referred to in any other publication, without express written permission. BNY Mellon Investment Management is one of the world's leading investment management organizations, encompassing BNY Mellon's affiliated investment management firms and global distribution companies. BNY Mellon is the corporate brand of The Bank of New York Mellon Corporation and may also be used as a generic term to reference the Corporation as a whole or its various subsidiaries generally. **Not FDIC-Insured | No Bank Guarantee | May Lose Value**
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