



## ETF Basics: The Creation and Redemption Process and Why It Matters

By Mara Shreck and Shelly Antoniewicz

JANUARY 19, 2012

One benefit of exchange-traded funds (ETFs) is that they give investors access to a range of strategies and indexes, with the flexibility of transacting throughout the trading day at prices that typically approximate the value of the fund's underlying portfolio. To see how ETFs accomplish this, one must understand how ETF shares are created and redeemed.

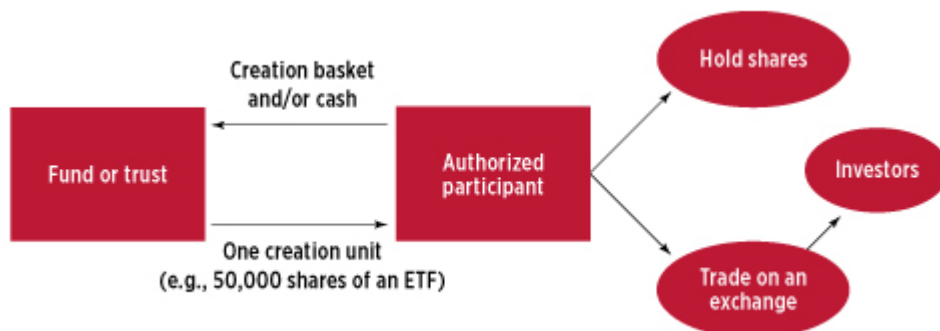
### Creation

ETF shares are created when an “authorized participant” deposits a daily “creation basket” (or cash) with the ETF. So let's get the definitions straight.

- **What is an authorized participant?** An authorized participant is typically a large institutional investor, such as a broker-dealer, that enters into a contract with an ETF to allow it to create or redeem shares directly with the fund. The authorized participant does not receive compensation from the ETF or the ETF sponsor for creating or redeeming ETF shares.
- **What is a creation basket?** A creation basket is a specific list of names and quantities of securities or other assets that may be exchanged for shares of the ETF. The creation basket typically either mirrors the ETF's portfolio or contains a representative sample of the ETF's portfolio. The contents of the creation basket are made publicly available on a daily basis.

In return for the creation basket or cash (or both), the ETF issues to the authorized participant a “creation unit,” a large block of ETF shares (generally 25,000 to 200,000 shares). The authorized participant can either keep these ETF shares or sell some or all of them on a stock exchange. ETF shares are listed on a number of stock exchanges, where investors can purchase them as they would shares of a publicly traded company.

### Creation of an Exchange-Traded Fund



### Redemption

ETF shares may be redeemed through the reverse of the creation process. That is, an authorized participant presents the specified number of ETF shares to the ETF in exchange for a “redemption basket” of securities, cash, or both, which typically mirrors the creation basket.

### How Creation and Redemption Helps Keep an ETF’s Market Price Close to Its Underlying Value

The market price of an ETF share on a stock exchange is influenced by the forces of supply and demand. Deviations between an ETF’s market price and its underlying value create opportunities for arbitrage for authorized participants. The ability of authorized participants to create and redeem ETF shares helps the ETF to trade at a price that approximates its underlying value. For example:

- **When an ETF is trading at a premium to its underlying value, authorized participants may sell short the ETF during the day while simultaneously buying the underlying securities.** At the end of the day, the authorized participant will deliver the creation basket of securities to the ETF in exchange for ETF shares that they use to cover their short sales. The authorized participant will receive a profit from having paid less for the underlying securities than it received for the ETF shares. The additional supply of ETF shares also should help bring the ETF share price back in line with its underlying value.
- **When an ETF is trading at a discount, authorized participants may buy the ETF shares and sell short the underlying securities.** At the end of the day, the authorized participant will return ETF shares to the fund in exchange for the ETF’s redemption basket of securities, which they will use to cover their short positions. The authorized participant will receive a profit from having paid less for the ETF shares than it received for the underlying security. The lower supply of ETF shares available also should help bring the ETF share price back in line with its underlying value.

In short, the creation and redemption process allows authorized participants to engage in an arbitrage strategy that adjusts the supply of ETF shares on the market, and thus helps ETFs trade at market prices approximating their underlying value.

### How Portfolio Transparency Helps Keep an ETF’s Market Price Close to Its Underlying Value

The transparency of an ETF’s holdings also allows investors in the secondary markets to help keep the ETF’s market price in line with its underlying value.

- **If the ETF is trading at a premium to its underlying value, investors may choose to sell the ETF or buy the underlying securities.** These actions should bring the price of the ETF and the market value of its underlying securities closer together.
- **If the ETF is trading at a discount to its underlying value, investors may buy ETF shares or sell the underlying securities.** The increased demand for the ETF should raise its share price, while sales of the underlying securities should lower their share prices, narrowing the gap between the ETF and its underlying value.

### Additional Information

[This seven-minute animated video from iShares](#) uses a simple metaphor to explain ETF creation and redemption. You can find more on ETFs at [ICI’s ETF resource center](#).

---

*Mara Shreck is an Associate Counsel at ICI. Shelly Antoniewicz is a Senior Economist at ICI.*

© 2019 Investment Company Institute. All rights reserved. Information may be abridged and therefore incomplete. Communications from the Institute do not constitute, and should not be considered a substitute for, legal advice.