



# Creation and Redemption

**W**hat happens when an investor buys or sells shares of an exchange-traded fund (ETF)? From their perspective, nothing special; the trade is filled at the market price and either shares or dollars are deposited into their account.



## Done right...this “creation/redemption” process is the reason ETFs are called a “better mousetrap” by many experts.

But what happens behind the scenes *is* unique; in fact, it holds the key to why ETFs have advantages over both traditional mutual funds and closed-end funds (ETFs). Done right—and that caveat is important—this “creation/redemption” process is the reason ETFs are called a “better mousetrap” by many experts.

The best way to understand the importance of the creation/redemption process is to compare the way new ETF and mutual fund shares are created.

When an investor buys shares in a traditional mutual fund, the fund company gets the investor’s money and puts it to work on the open market buying stocks, bonds or other assets. When the investor sells, the process is reversed, with the fund company selling assets and delivering cash to shareholders.

With ETFs, the process works differently. Retail investors who buy or sell shares have no contact with the ETF provider. Instead, ETF shares bought or sold by retail investors are first created or redeemed only by authorized participants (APs)—large institutional investors or market makers who contract with the ETF sponsor to serve that role. These APs create ETF shares in large blocks called “creation units”, typically 50,000 shares, which they then sell to retail investors in smaller share lots.

The important thing about institutionalizing the creation/redemption process is that it allows the process to work on an in-kind basis. To create shares of an S&P 500 ETF, for instance, an AP will

buy all the companies in the S&P 500 in the exact right proportions and deliver those to the ETF issuer. When the AP redeems shares, the process is reversed.

This in-kind redemption is the reason ETFs tend

to be more tax-efficient than mutual funds. Provided the back-office servicing is done correctly—the right tax lots are distributed, settled and recorded—the ETF issuer can largely avoid creating capital gains. After all, it doesn’t have to sell the underlying stocks. The issuer can also distribute the lowest-cost tax lots during redemptions, further limiting capital gains exposure.

Of course, the system isn’t perfect. Some ETFs pay capital gains distributions each year, whether due to index changes (which require selling in the portfolio) or other factors (e.g., certain countries like Brazil and Malaysia do not allow in-kind redemptions). But overall, the industry operates with impressive tax efficiency. In 2007, only 83 of more than 600 U.S.-listed ETFs paid capital gains distributions, and most payouts were small.

The creation/redemption process has another important benefit: It helps keep ETF share prices in line with net asset values (NAVs). When underlying securities are priced lower than NAV, APs will buy the underlying and create shares of the more valuable ETF, and vice versa.

The new wave of quantitative, leveraged and actively managed ETFs present additional challenges, with less transparency, more turnover and more persistent rebalancing. It remains to be seen how these new funds will handle arbitrage spreads, capital gains and other issues. But with strong service standards, even these should operate smoothly. ○