



T.RowePrice

Why ETF liquidity matters for every investor

From the Field
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Key Insights

- The ETF industry is growing at a rapid pace, and many investors are drawn to the vehicle's ease of trading and liquidity.
- Investors can access two layers of liquidity, and understanding these layers should be a key consideration prior to trading.
- For larger ETF orders, investors can access several execution strategies, including leveraging an ETF block desk for greater efficiency.

Exchange-traded funds, or ETFs, continue to grow in terms of both their number and the total assets under management. Two hundred new ETFs launched in the U.S. between January 1, 2023, and June 30, 2023¹, and the industry's combined assets under management (AUM) are over USD 7 trillion as of August 2023.² Though their AUM is just under 25% of that of U.S. equity mutual funds,³ ETFs have grown at a much faster pace than mutual funds.⁴

The advantages of ETFs, including the ease of trading, have helped fuel their parabolic rise in popularity. For any

investor, it's important to understand the unique features of ETFs and how to efficiently source liquidity for ETFs. This guide will help explain what drives ETF liquidity, provide trading best practice considerations, outline potential strategies for placing large orders, and share a case study showcasing ETF liquidity in action.

How to assess ETF liquidity

ETFs have two layers of liquidity that investors can access. The first is "on-screen" liquidity, which investors and market participants can see and



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¹ <https://www.etf.com/etf-launches>

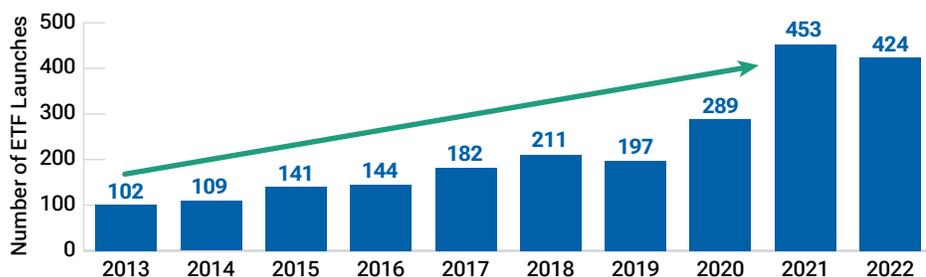
² FactSet.

³ <https://www.statista.com/statistics/295632/etf-us-net-assets/>

⁴ <https://www.statista.com/statistics/255518/mutual-fund-assets-held-by-investment-companies-in-the-united-states/>

Annual number of ETF launches continues to increase

(Fig. 1) Growth in the industry since 2013



As of December 31, 2022.
Source: FactSet.

source (also known as the ETF secondary market). The second is the liquidity of an ETF's underlying constituents, which can be accessed through the ETF creation/redemption process (also known as the ETF primary market).

Although some ETFs are known for being highly liquid, there has been a tremendous amount of new ETF launches over the past several years. In fact, since 2013, 52% of all ETF launches have come to market in the past three years.⁵ Most of these newer ETFs tend to have lower assets under management and a lower average daily volume. However, the size and average daily volume of an ETF should not be viewed as a barrier to using a particular ETF but rather serve as a road map as how to best introduce an ETF order to the marketplace. When trading any ETF, it is important for

investors to understand the mechanics of the ETF product structure, the available execution strategies, and ETF nuances that may impact execution quality.

ETF underlying liquidity

ETF liquidity is mainly driven by the liquidity of the underlying constituents held by the ETF. Before trading any ETF, investors should understand the liquidity of the ETF's underlying constituents, which will impact an investor's execution costs and overall experience buying and selling an ETF. The ability to efficiently trade any ETF should not be determined by the ETF's average daily volume (secondary market), but by the overall liquidity pool available to an investor, which includes the liquidity of the underlying constituents (primary market).

⁵ FactSet.

Incorporating ETF trading best practice considerations can help investors efficiently execute any ETF order



T. Rowe Price Capital Appreciation Equity ETF (TCAF)

(Fig. 2) Secondary vs. primary market liquidity



TCAF: secondary market

USD 5 million average daily volume



TCAF: primary market

USD 92 billion average daily volume

As of September 30, 2023.

Source: FactSet.

In Figure 2, a USD 10 million trade would represent 200% of the ETF's average daily volume, but less than 1% of the average daily volume of the underlying constituents. The ability for an investor to source additional liquidity (beyond what is shown on screen) should be a key consideration prior to trading an ETF.

An ETF execution strategy is key when executing larger ETF orders

There are several ways an investor can source liquidity for larger ETF orders. It is important for investors to consider consulting with the ETF issuer and respective trading partners to better understand ETF execution strategies and how to best implement a trade for each scenario. Below are a few examples of commonly used ETF execution strategies:

- **Risk Market.** An investor works with their trading desk to execute the entire order immediately. The market maker can leverage the create/redeem mechanism to source additional liquidity not shown on screen to fulfill the order.
- **Worked Order.** An investor works with their trading desk to execute the order over a predetermined period of time. The market maker can leverage the ETF's on-screen liquidity, the liquidity of the underlying basket, or a combination of the two to fulfill the order.
- **Create/Redeem ETF Shares.** An investor works with their trading desk to execute the order by creating (or redeeming) ETF shares. The authorized participant can create/redeem ETF

ETF block desks can help facilitate larger orders on behalf of investors

For larger ETF orders, leveraging the expertise and resources of an ETF block desk typically results in a more efficient trading experience. Block desks can source liquidity from market makers to execute large orders that may be a significant percentage—or even a multiple—of an ETF's average daily volume. Generally speaking, the trade can be executed with minimal market impact depending on the size of the trade, market conditions, and liquidity of the underlying constituents.

Investor	ETF Selection	ETF Issuer	Best Practices	Block Desk	Source Liquidity	Market Makers	Provide Liquidity
Investor selects the ETF that meets their investment criteria and needs.		ETF issuers have dedicated specialists to help educate investors on different ETF trading strategies.		Block desks can source liquidity from market makers to execute larger orders that may outsize what appears on screen.		Market makers provide liquidity and facilitate larger ETF orders on behalf of block desks and other institutions.	

ETF liquidity in action: T. Rowe Price Capital Appreciation Equity ETF

(Fig. 3) On July 14, 2023, an investor successfully purchased 491,770 shares of TCAF

TCAF Quote Recap		
Time	Bid/Trade/Ask	Size (x100)
10:10:17	25.87 / 25.89	40x11
10:10:15	25.87 / 25.89	40x14
10:09:50	25.87	4917.70
10:09:45	25.86 / 25.89	41x14
10:09:45	25.86 / 25.89	40x14

- The trade accounted for 88% of TCAF's volume on the day
- The trade was ~3x TCAF's average daily volume
- The trade executed inside the quoted bid/ask spread (*shaded row*)

For illustrative purposes only and not intended to be a recommendation to take any particular investment action.

shares directly with the ETF issuer to fulfill the order.

- **Switch Trade.** An investor works with their trading desk to trade two ETFs with similar exposures simultaneously. The market maker can leverage the overlap in exposures to reduce the overall trading costs.

Figure 3 illustrates the benefits of the ETF structure, which allows for investors to access additional liquidity beyond what is shown on screen, by leveraging an ETF block desk and utilizing the appropriate ETF execution strategy.

Key takeaways

ETFs can offer an efficient way for investors to move large amounts of shares; however, it's crucial that investors factor in several variables—from trading hours of the

underlying securities to the percentages of daily trading volumes. For investors looking to take full advantage of ETFs, remember to:

- Incorporate ETF trading best practices when executing any ETF order.
- Conduct appropriate due diligence when making a large ETF trade or when a trade will represent a significant percentage of the ETF's average daily volume.
- Understand the different ETF execution strategies available and how to best leverage them for any scenario.
- Review the capabilities of the trading desks. ETF block desks play a crucial role in sourcing ETF liquidity for investors.
- Consult the ETF issuer prior to placing a trade with any questions or concerns regarding a particular ETF.

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ETFs are bought and sold at market prices, not net asset value (NAV). Investors generally incur the cost of the spread between the prices at which shares are bought and sold. Buying and selling shares may result in brokerage commissions, which will reduce returns.

Important Information

Call 1-800-225-5132 to request a prospectus or summary prospectus; each includes investment objectives, risks, fees, expenses, and other information you should read and consider carefully before investing.

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