ETF Trading: Understanding ETF Liquidity
November 17, 2015
by Sponsored Content from FlexShares ETFs

Edward A. Rosenberg
Director
Capital Markets and Analytics
FlexShares ETFs

As you determine which ETFs best meet your clients’ needs and objectives, bear in mind ETF liquidity and trading. This will help you better maximize opportunities and optimize trades at the best possible price in order to gain potentially higher total returns.

A common misconception holds that to get “best execution,” an ETF must possess significant average daily trading volume. ETFs actually have three levels of liquidity:

- Secondary market
- Market depth
- Primary market

Examining the level of liquidity of a specific ETF will help determine its appropriate trading strategy.

We often hear this question from our investors: Can I trade an ETF with low average daily volume (ADV) or less-liquid underlying holdings without moving the price? The answer requires an advisor to have an understanding of how ETF trading works, including the various levels of ETF liquidity and techniques to help achieve best execution when trading ETFs.

ETF VOLUME ALONE DOES NOT EQUAL LIQUIDITY

First, it is critical to understand that ETFs trade quite differently than stocks and other investments. The reason: The intrinsic value of an ETF reflects the value of its underlying securities. A common misconception holds that to get best execution, an ETF must possess significant average daily trading volume.

But onscreen volume isn’t a proxy for ETF liquidity. That’s because executed share volume pertains only to the secondary market exchanges on which the ETFs trade.[*] ETFs actually have three levels of liquidity across the primary and secondary markets. Consequently, average daily trading volume delivers an incomplete measure of actual liquidity.

As Exhibit 1 illustrates, roughly 7% of all listed ETFs comprise about 87% of ETF volume. Generally, these ETFs are based on standard benchmarks, or they are leveraged or inverse ETFs. A leveraged ETF aims to deliver two or three times the return on its stated index, while an inverse ETF tries to deliver returns that are the opposite of the index’s returns.
More than 64% of all ETFs trade less than 50,000 shares per day. Most often, these encompass specialized or alpha-generating strategies. Alpha-generating securities, when added to an existing portfolio, attempt to create excess returns above a preselected benchmark index. As a result of the various liquidity sources across the markets, these ETFs can be traded as effectively as those with greater daily exchange volume.

MULTIPLE SOURCES OF LIQUIDITY

To effect optimal trades, it is valuable to know and understand the various sources of ETF liquidity (see Exhibit 2).

EXHIBIT 2: THE THREE LEVELS OF ETF MARKETING LIQUIDITY

Level One

You may be familiar with the National Best Bid Offer, the publicly available view of the secondary market used to pull up quotes. It also is known as the “inside” market. It displays the best bid (the price at which a security may be sold) and the best ask (the price at which a security may be bought) available. The difference is known as the bid/ask spread, which is determined by market makers who post quotes through an exchange (see Exhibit 3).

Because an ETF generally is a single security that represents a portfolio of securities, the pricing of its underlying securities substantiates its value. In effect, an ETF’s price only moves as much as the price of its underlying basket of securities, as published each day by the ETF sponsor.

ETFs trade on exchanges continuously throughout the day, much like single stocks. Unlike stocks, however, the number of ETF shares outstanding may rise or decline because of a unique creation and redemption process. It allows an ETF to trade significantly more shares than the exchange ADV statistics reveal. (The creation and redemption process is discussed further in the section entitled Level Three.)

Level Two

National Best Bid Offer quotations are constructed from the best bid and ask with the largest size, available from market makers who post quotes through an exchange. However, the depth of the ETF marketplace isn’t reflected in the National Best Bid Offer.
ETF quotes from market makers often have higher ask and lower bid prices with larger size than those shown on National Best Bid Offer. You can access these quotes through relationships with market makers (also known as liquidity providers), through subscription access via a quote system, or through a custodian trade desk.

Trading firms may choose to assume positional or proprietary trading risk for ETFs and other securities. A lead market maker for specific securities must post all day long a two-sided quote, which is a firm bid price and a firm ask price that it’s willing to honor. Other market makers have the option of showing two-sided or one-sided quotes as needed, or showing nothing at all.

For a large order, contact a block desk. Block desks are staffed with trained professionals who will help determine how best to execute a large trade (see section entitled Execution Matters).

EXHIBIT 3: NATIONAL BEST BID OFFER FOR TDTT, A FLEXSHARES ETF
The National Best Bid Offer price quotations reflect the bid/ask spread as determined by market makers, who post prices through an exchange. Any quote not highlighted in yellow represents additional quotes behind the National Best Bid Offer. This example shows the market depth for FlexShares iBoxx 3-Year Target Duration TIPS Index Fund (TDTT).

BID side is on the left; ask side is on the right. Size is shown in ‘00s. The chart above is for illustrative purposes only and may be subject to change. Source: Bloomberg as of 3/14/2015

Level Three
The primary market for ETFs emerges through the creation and redemption process, referenced earlier, which makes ETFs open-ended. In a creation transaction, an authorized participant, or AP – a market maker or a large trading firm that handles all aspects of client activity itself – assembles a portfolio or basket of securities that comprises the ETF unit. Typically, the portfolio involves 50,000 or 100,000 shares as determined by the ETF sponsor. The AP then turns the basket over to an ETF distributor and a custodian. In exchange for the basket of securities, the ETF custodian provides shares of the ETF to the AP at the net asset value. In a redemption transaction, the process works in reverse.

EXHIBIT 4: ETF CREATION AND REDEMPTION PROCESS

Because of the creation and redemption process (Exhibit 4), an ETF’s market price doesn’t shift far from the value of the underlying securities, also known as the “intrinsic value.” Arbitrage opportunity provides an incentive to trading firms to exploit pricing differentials. Since these firms can create ETF shares, the ETF’s price aligns with its intrinsic value. Essentially, the creation and redemption process facilitates a pricing discipline for any ETF, based on its underlying holdings.
ETF TRADING IMPLICATIONS

Spread – again, the difference between the bid and ask price of a security or asset – is an important consideration when choosing between and trading ETFs. It can meaningfully impact the cost of investment and, consequently, an investor’s potential total return.

Cost of Investment
Closely examine the cents-per-share spread when evaluating the overall cost of purchasing an ETF. It may appear wise, for example, to buy an ETF with a one-cent spread rather than another with a five-cent spread. However, a one-cent spread on a $10 ETF equals 10 basis points, while a five-cent spread on a $75 ETF equals 6.7 basis points. From this perspective, the $75 ETF might be a better buy.

Potential Total Return
The spread affects the long-term performance of an ETF. Suppose you are examining ETFs with similar share prices of about $36. At a one-cent spread, the ETF could be quoted at 36.42-36.43 (bid-ask).

- If you hold the ETF for one year and its price increases 10%, the bid-ask will be 40.06-40.07.
- Because you must buy at the ask price and sell at the bid price, the pretax total return after one year would be 9.97%.

Now assume an order was entered that caused a 10-cent spread (36.38-36.48 bid-ask):

- If you owned this ETF for one year and its price rose 10% (40.02-40.12 bid-ask), the pretax total return would be 9.70%.
- The difference between the two examples is 0.27%, demonstrating how the spread impacts your pretax total return.

Time horizon and the investment strategy also can affect the spread:

- The shorter the investment’s time horizon, the more impact the spread will have on total return; the longer the time horizon, the less impact it will have.
- Different investment strategies offer different expected rates of return, trading characteristics and liquidity profiles.
- If the ETF is concentrated in less-liquid securities such as corporate bonds, the market depth may be less, possibly causing wider spreads.

When buying or selling larger numbers of ETF shares, the ask tends to move up and the bid tends to move down. The price will move closer to the value of the underlying securities as the number of shares approaches the creation unit size.

EXECUTION MATTERS
Now let’s examine how to determine the appropriate trading strategy for a specific ETF, given market conditions. For example, assume that, based on a client’s investment objectives, you purchase 30,000 shares of FlexShares Quality Dividend Index Fund (QDF).

Employing the First Level of Liquidity (Secondary Market)
First, you must ask: Are there enough shares of QDF available for purchase or sale at the bid or ask price for this trade?

- If the answer is yes, you may enter a limit order to obtain a specific price or a market order to simply acquire the security.
- If the number of available shares on the inside market quote is close to, but less than 30,000, you could break the trade into two orders or enter a limit order for the entire amount.
- If too few shares of QDF exist in the secondary market (which the National Best Bid Offer will indicate) the most effective approach is to call the block desk to help execute the order by accessing the enhanced liquidity that market makers can provide.

Employing the Second Level of Liquidity (Market Depth)
A block desk or liquidity provider becomes a key resource in executing large trades because of the ability to access the market depth of each security. The block desk will ask whether you want prompt execution (held order), or the best possible price (not held order). Furthermore, you will need to determine whether to give the broker or floor trader the discretion to determine the time and price.

The block desk or liquidity provider offers advice or instructions on how to best execute the trade. For instance, consider the decision whether to enter an order in one block or break it into parts. If you favor breaking up the trade, one option is to use a volume-weighted average price. That price is calculated by adding the dollars traded for every transaction (price multiplied by number of shares traded), then dividing by the total shares traded for the day.

Employing the Third Level of Liquidity (Primary Market)
If you cannot break up the order, other choices are available, including:

- **A risk trade**, a set price that you agree upon with the trading desk. If it costs more to trade QDF than the agreed-upon price, the trading firm takes the loss. If it costs less, the trading firm takes the extra money.
- **A block trade**, which generally pushes the bid price slightly lower and the ask price slightly higher than a risk trade does.
- **A Net Asset Value (NAV) trade**, which will occur at the end of the day at QDF’s NAV plus a commission, probably one cent to two cents per share.

Potentially, execution of a block trade offers investors access to the creation and redemption process. The block desk or liquidity provider will determine the best way to execute the trade, which, depending on the firm’s size and inventory, may cause a creation and redemption. Note that not all large trades trigger a creation or redemption, but this process helps ensure that investors pay a fair price without moving the market.

**TIMING IS ALSO IMPORTANT**

U.S.-based ETFs trade well during U.S. market hours, while European-based ETFs trade better when European markets are open (before noon Eastern Time). Pacific-based ETFs trade well in the afternoon as their market open draws near.

You should avoid trading for the first 15 minutes of the market open, which is when all of the underlying securities have opened and prices have been established. The last five minutes before the market close also should be avoided because it becomes more expensive for liquidity providers to hedge securities late in the day, giving them less incentive to execute large trades.

**HOW ETFS CAN HELP**

ETFs are powerful tools that can be used to address a number of financial and investment challenges, including:

- Adjusting risk exposure, managing tax liabilities and harvesting losses
- Providing market exposure for short-term cash holdings while minimizing opportunity costs
- Adding or overweighting specific markets, sectors or asset classes in a core portfolio

As you determine which ETFs best meet your clients’ needs and objectives, bear in mind ETF liquidity and trading. This will help you better maximize opportunities and optimize trades at the best possible price in order to gain potentially higher total returns.

**HOW FLEXSHARES CAN HELP**

Our Capital Markets team offers expertise to help you trade in a cost-efficient manner. We can provide you with insights, answer questions and recommend trading strategies.

We strive to keep spreads down by:

- Monitoring market movements diligently
- Ensuring that lead market makers post three levels of quotes
- Working with market makers to review illiquid securities within the basket

We can also assist with trades by:

- Getting indications of interest from authorized participants
- Working with market makers to increase size or tighten spread
- Coordinating with trade desks to source shares

**FOR MORE INFORMATION**

To learn more, or for help with a trade, contact your FlexShares Business Consultant or call 1-855-FlexETF (1-855-353-9383), or visit flexshares.com.

**IMPORTANT INFORMATION**

Before investing carefully consider the FlexShares investment objectives, risks, charges and expenses. This and other information is in the prospectus, a copy of which may be obtained by visiting www.flexshares.com. Read the prospectus carefully before you invest. Foreside Fund Services, LLC, distributor.

An investment in FlexShares iBoxx 3-Year Target Duration TIPS Index Fund (TDTT) is subject to investment risk, including possible loss of principal amount invested. Fund’s returns may not match those of its index. The Fund may be subject to the following risks: asset class; derivatives; fluctuation of yield; income; inflation protected security; interest rate/maturity; management; market; non-diversification; passive investment; and tracking. For a
complete description of risks associated with the Fund please refer to the prospectus.

In addition, TDTT may invest in derivative instruments. Changes in the value of the derivative may not correlate with the underlying asset, rate or index and the Fund could lose more than the principal amount invested. The Fund is non-diversified meaning performance may depend on the performance of a small number of issuers because the Fund may invest a large percentage of assets in securities issued by or representing a small number of issuers.

Investment in FlexShares Quality Dividend Index Fund (QDF) is subject to numerous risks, including possible loss of principal. Fund’s returns may not match the returns of its index. Fund is subject to the following principal risks: counterparty; derivatives; dividend; equity securities; industry concentration; issuer; management; market; market trading; new fund; passive investment; tracking error; and volatility. A full description of risks is in the prospectus.

QDF is passively managed and uses a representative sampling strategy to track the Underlying Index. Use of a representative sampling strategy creates tracking risk where a Fund’s performance could vary substantially from the performance of its Underlying Index. Additionally, Fund is at increased dividend risk, as the issuers of the underlying stock might not declare a dividend, or the dividend rate may not remain at current levels. Fund is also at increased risk of industry concentration, where it may be more than 25% invested in the assets of a single industry. Finally, Fund may also be subject to increased volatility risk, where volatility may not equal the target of the Underlying Index.

* ETF exchanges include BATS, Direct Edge, NYSE Arca and NASDAQ.