

exchange traded funds trading overview



benefits of working with Ascensus

- *Ascensus trading system*—provides trade aggregation, minimizing trading costs and allowing for T+1 settlement
- *Directly held (non-unitized) ETFs*—enables participants to own actual ETF shares (including fractional shares)
- *Investment neutrality*—enables Ascensus to offer ETFs and mutual funds within a plan

Exchange traded funds or ETFs are becoming an increasingly popular option in retirement plans. While structured like a mutual fund, ETFs trade more like a stock, where shares are bought and sold on an exchange throughout the day.

Unlike other defined contribution programs that offer ETFs, the Ascensus offering has several key distinctions. ETFs are available to plans of all sizes and can be offered in conjunction with a broad selection of mutual funds. In addition, ETFs are directly traded, allowing participants to own actual shares of the ETFs. Ascensus' trade platform also aggregates and nets trades before going to market, providing an innovative and cost-effective solution.

ETF comparison

ETFs in a retirement plan typically operate differently than they do within a retail brokerage account or other non-retirement-plan accounts. The following chart looks at the Ascensus ETF solution to illustrate some of the key differences.

| | <i>ETFs in a Retail Brokerage Account</i> | <i>ETFs in Retirement Plan on Ascensus Platform</i> |
|------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Trade cut-off deadline</i> | 4:00 p.m. ET (or the applicable market close time) | 3:00 p.m. ET (or 1 hour before market close time for an early market close) for all investments (including mutual funds) – allows for trade aggregation to minimize trading costs.* |
| <i>Trade processing</i> | Shares of ETFs can be bought and sold throughout the trading day | Each participant can submit one trade per ETF per day. Trades can be submitted intraday but will be processed using an average share price* calculated for each ETF. |
| <i>Share price used for transactions</i> | Based upon market price at the time of the transaction | All trades submitted before the trade cut-off deadline on a trading day will receive the same average share price* regardless of the time the transaction was submitted. |
| <i>Transaction costs</i> | Brokerage commissions vary depending upon the total account value and size of trade, but typically cost between \$10 and \$20 per trade. A similar fee structure in a retirement plan could make dollar cost averaging expensive for participants. | Ascensus' trading platform allows for buys and sells within an ETF to be netted at a "super omnibus level" without incurring any transaction fees or commissions. After trade netting occurs, transaction fees will be imposed for any trades executed. These transaction costs are included in the average share price* calculation and not charged separately to participants. |

*See "Average Share Price" on back for details on how the Ascensus method of aggregating trades can minimize trading costs.

average share price

All trades submitted for the day for each ETF on the Ascensus platform will receive the same average share price. The average share price is calculated based upon the market price received for actual shares traded plus the fees noted below. This method allows for automation of trades, which minimizes trading costs, and enables participants to own whole and fractional shares of ETFs.

fees

- Brokerage commissions, which are estimated to be \$.02 per ETF share traded for trades executed while the market is open and \$.07 per ETF share traded for trades executed after market close.
- SEC fees (applied to the sale of ETF shares only), which are estimated to be approximately \$25.70 per \$1,000,000 of sale proceeds.

illustration

| Trade requests are submitted | Trade buy/sell orders are aggregated | Average share price is calculated for each ETF |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> ■ Participant "A" buys 10 shares of "ETF 123" ■ Participant "B" buys 15 shares of "ETF 123" ■ Participant "C" sells 20 shares of "ETF 123" | <p>10 buys + 15 buys ----- 25 buys</p> <p>25 buys → 25 buys</p> <p>25 buys → - 20 sells ----- 5 buys</p> <p>5 shares must go out to market to be purchased</p> | <p>For the 45 total buys and sells processed for participants A, B, and C, the participants' accounts are updated, using an average share price for each ETF 123 trade.¹</p> |
| Up to 3:00 p.m. ET | 3:00 p.m. to 4:00 p.m. ET | Overnight |

¹ While the average ETF price is used for transactions, accounts will reflect close of business price for the ETF in the participants' accounts.

The commissions and fees listed above are estimates only and are provided as of the date of this disclosure. The commissions and fees are subject to change without notice. Other fees and commissions may apply from time to time.