



Things to know about ETFs

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Exchange traded funds (ETFs) - a collection of securities packaged within a fund structure, against which fractional ownership is provided in the form of units which are listed and traded upon an exchange.

Almost all ETFs passively track a benchmark index. The index may consist of stocks, bonds or a commodities. The first ETFs in Qatar will track well known equity indices calculated by QSE. Typically stocks in an equity index are weighted by market capitalization although different schemes are now became prevalent, for example you might see a stock weighted by its PE ratio. Whatever the methodology, the more heavily weighted a stock the greater the effect a one riyal movement in its price will have upon the index return (when compared to smaller weighted stocks). More information on QSE's index rulebooks and methodologies can be found at www.qe.com.qa

The advantages of ETFs is that they can be bought and sold intraday, they're cheaper than other actively managed funds and they can provide exposure to securities that might otherwise have been difficult to invest in. A time may come where QSE lists ETFs based on securities whose primary listing is overseas. ETFs bring convenience to the investor, he may use existing local architecture (accounts, brokers, order types) to quickly invest in a new and diversified holdings set.

Some Key Terms related to ETF's:

Fund Manager: The firm licensed by the relevant regulator to manage the Exchange Traded Fund

Custodian & Administrator: The bank/institution responsible for holding the assets of the ETF, calculating the Net Asset Value and properly accounting for the creation/redemption of units

Liquidity Provider or Market Maker: The firm licensed by the relevant regulator to provide liquidity (bids and offers) on the exchange for shares in the ETF

Authorized Participant: A firm which is authorized by the ETF Fund Manager to submit requests for large blocks of shares in the ETF to be created or redeemed (these blocks are called Creation Units)

ETF Basket or Portfolio Composition File: Is the group of securities and amount of cash the Authorized Participant is required to deliver to the ETF

NAV: Net Asset Value of the ETF is usually published after market close and may vary from the last trade price on the exchange

iNAV: the price of the shares noted in the ETF Basket or Portfolio Creation File multiplied by the current market price. This iNAV or indicative-NAV is usually published as part of the exchange market data feed or through Bloomberg, Reuters and other financial data portals.

ETF units have an official end of day valuation called the Net Asset Value (NAV). The NAV is the sum of all the fund's assets (the value of its holdings in e.g. cash, shares, bonds, and other securities) less any liabilities, all divided by the number of units outstanding. The NAV for ETFs listed at QSE will be published by 6PM and is available on its website and via data vendor screens such as Bloomberg and Thomson Reuters.

One of the liabilities upon the fund is its total expense ratio (TER). This is the measure of the total costs associated with managing and operating an ETF and is expressed as an annual % (e.g. 0.5%). The TER is accrued daily and is reflected in the NAV of the ETF. Full audited annual and semi annual financials will be published by the fund's website together with quarterly performance reports.

The job of the fund manager is to ensure the ETF replicates the performance of the index. While variations tend to be small, the difference between a fund's return and the index's return, often called tracking error, can sometimes be significant. The total expense ratio is a fee not applied at the index level so this is often cited as a primary cause of tracking error. Other reasons include illiquidity and transaction costs. The fund manager need execute rebalance trades as close to the closing price of the security as possible in order to be in line with the index value. The index does not assume brokerage or exchange fees when it rebalances its components twice a year also. Another cause could be something called 'cash drag' – as an example some ETFs may hold dividends as cash and then make a distribution periodically. This increased cash position relative to the index could create periods of over/under performance.

In addition to rebalancing the ETF in line with any index changes, the fund manager should replicate the corporate action treatment of the index – paying particular attention to price adjustments and inclusions of new shares. From a trading perspective the fund manager should try to shadow the methodology of the index at all times. If the index is a total return index i.e. it assumes the dividends distributed by components are reinvested, then the fund manager must quickly reinvest an underlying dividend

across the basket at the same point that the index adjustment is made. Dividend reinvestment for the fund manager involves executing buy orders in each of the index components. Dividend reinvestment can boost the total return of an investment portfolio through the effect of compounding the accumulated income over time (often called the 'snowball effect'). By reinvesting the dividend payments into additional shares the fund should benefit the next year by also earning dividends on these reinvested shares

The alternative is to make dividend distributions. If an ETF is benchmarked to the price return index it will usually distribute a dividend to the ETF unit holders. The frequency with which an ETF will make the dividend distribution depends on the underlying dividend schedule of its components, the cost of making dividend payments and the ability of the fund manager to manage any 'cash drag'. A price return index purely reflects the market price of stocks without accounting for dividends paid by those shares in the index. For example an ETF using a QE price return index the dividend distribution of their components could occur up to 20 times. However at the ETF level it may not be practical or economical to make 20 payments to unit holders and instead the fund manager will hold the dividends in the ETF, they will be included in the ETF NAV, and then may declare one dividend distribution date for the ETF at the end of the dividend season for the underlying components. Operationally this is repeated throughout the dividend season and some tracking error would be observed until the dividend distribution is made and the ETF NAV falls back in line with the index.

To qualify for the distribution in the scenario described above the unit holder should have purchased their position in the ETF on or before the record date. The following trading day the ETF will trade without entitlement to its dividend and the NAV should drop by that dividend amount, as anyone that buys the ETF on that date will not be entitled to the dividend. While it might seem like a good idea to buy the ETF immediately prior to the distribution, this is actually not true, as we've seen that the NAV adjusts downward after the record date and any gain would be offset. If the ETF does see significant inflows (requests for new units to be created by the Liquidity Provider or Authorized Participant) prior to the dividend does it mean that investors that bought the ETF months earlier would receive a smaller dividend than before? Usually ETF's implement various measures to protect the entitlements of shareholders in terms of dividends and corporate actions, some ETF's with a high dividend yield may distribute dividends more frequently, others may restrict the amount of creation/redemption around their anticipated dividend date. Another way ETF's may protect their investors dividends is by implementing a 'Dividend Equivalent Payment' as part of the daily ETF Basket or Portfolio Composition File. This payment would need to be made by any investor subscribing during certain periods when shares held by the ETF have traded past their record date but the ETF has not yet distributed its dividend. In fact this method is the standard used by some of the largest ETF's in the world.

Until now we've said very little about the Liquidity Provider (LP) and pricing and trading of ETF units on the exchange. The role of the LP is to facilitate the ETF buy and sell demand that comes through the exchange. The LP will place bid and ask orders for the ETF units throughout the trading session usually aiming to minimize the spread between bid and offer as much as possible. The price at which the LP offers to buy and sell units is built around the Indicative Net Asset Value (iNAV). iNAV is an intraday indicative value of an ETF based on the real-time market prices of its underlying constituents. At QSE you would see this value on the Marketwatch and/or orderbook section of its website, as well as via data vendor screens. iNAV allows the investor to view the 'fair value' of the ETF unit. In terms of execution the investor may use market or limit orders. If the price offered is in line with the iNAV and you enter a market order you'll receive ETF units as per offers posted by the LP. However if you want to wait, enter a limit order and see if the inherent value of the ETF reduces to the point at which you're willing to execute you may do that. Dividend treatment and other corporate action handling is all built into the iNAV and the LP will continue to quote a bid/ask spread around the ETFs true tick-by-tick value.

The Liquidity Provider is also an Authorized Participant able to create and redeem ETF units directly with the fund based on the end of day NAV in large blocks called Creation Units. In order to satisfy demand for ETF units the AP will purchase and compile the underlying shares according to specified weights, which are posted by the Fund Manager on a daily basis, and deliver these to the fund in exchange for ETF units. Similarly, the AP may redeem ETF units once a certain size is met (a 'Creation Unit') and the fund will deliver the underlying shares in return, again in-line with the daily Portfolio Composition File or ETF Basket posted by the Fund Manager. This unique process helps keep the ETF price on the exchange aligned with the intrinsic value of the ETF unit. It's also an extraordinarily efficient way for the ETF to gain new assets - whilst the ETF incurs trading fees to rebalance in line with the index twice a year, it is the LP and AP who incur the cost of assembling the basket in line with the index weights and delivering to the fund as demand for an ETF grows

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