KraneShares

ETF trading fallacies and best practices.

A practical look at Do's & Don'ts in ETF trading while highlighting the need for ETF due diligence.

Prior to the rapid rise of Exchange Traded Funds (ETFs) over the last decade, investors gained trading experience with stocks and closed end funds (CEFs). Stocks and CEFs for many decades had a single dedicated specialist who facilitated the pairing of buyers and sellers. Volume was very important in stocks and CEFs because they have a fixed number shares. High volume stocks traded at tighter spreads than low volume stocks due to the competition amongst multiple buyers and sellers. The number of shares one could trade was proportional to the number of people willing to take the other side of that trade. In stocks and CEFs, volume is a measure of popularity. Not wanting to have their order move a stock, investors would divide a stock's average daily volume (ADV) by the number of shares in their order. An order with a high percentage of ADV would be "broken" up into smaller trades over several days to limit moving a stock.

Unfortunately many investors apply these same rules to ETFs. Investors are often concerned about being able to buy an ETF but not being able to sell it. The roach motel theory assumes market makers are biased to facilitating buy orders. Market makers are agnostic on buys and sells as they are compensated on activity. Unlike the single specialist system, there are dozens of market makers competing for ETF order flow. Market makers' computers analyze orders in the market and compute in nano-seconds to accept or reject an order.

About KraneShares:

KraneShares is a product of Krane Fund Advisors, an asset management firm delivering China-focused exchange traded funds to global investors.

Our local presence and Chinese partners position us to provide ETF strategies from a Chinese perspective.

KraneShares is China focused and partnered with local Chinese professionals.

What sets KraneShares apart:

Creating new paradigms in China–focused investment products:

KraneShares ETFs offer global investors innovative access and ways to invest in China, allowing them to capture the drivers of China's long-term economic plan. Our products are developed through relationships with our trusted Chinese partners, and provide differentiated vehicles to invest into the second largest economy in the world.

Helping global investors understand the China opportunity

China has 2000 years of history, 1.3 billion people and is experiencing exponential growth. KraneShares provides transparency into China's capital markets, people, society and culture to help global investors strategically access the China investment opportunity.

Focused on China and partnered with local Chinese professional expertise

KraneShares has a local presence in China. Our team and partnership network includes Chinese nationals and seasoned US investment professionals. We provide the local Chinese perspective to global investors.

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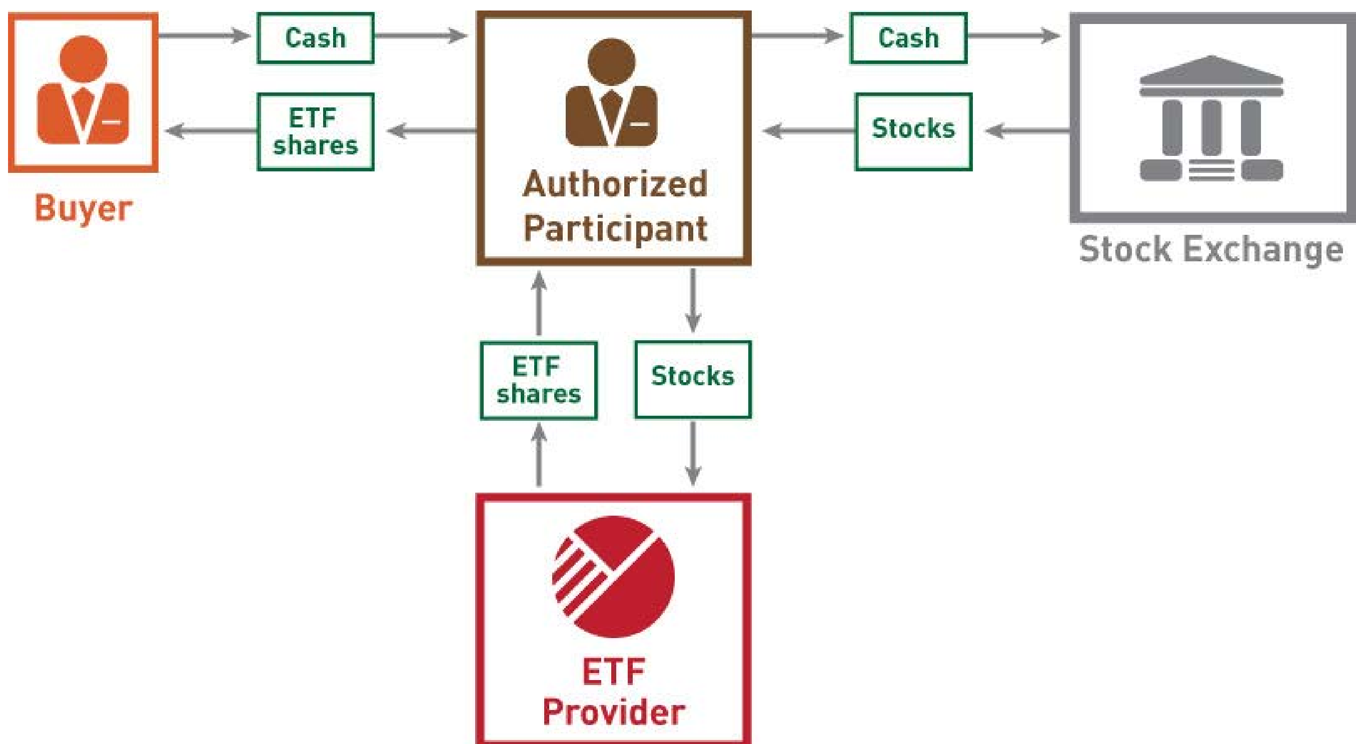
ETFs, like traditional mutual funds, can create or redeem shares on a daily basis. In traditional mutual funds, the mutual fund company facilitates the creation and redemption of shares. In an ETF, Authorized Participants are brokerage firms that create and redeem ETF shares by delivering or receiving the ETF's underlying basket of securities. Every night ETF providers send out a portfolio composition file that is akin to a recipe of how to build or dismantle an ETF. In the case of a purchase, when a buyer's share amount exceeds the shares available in the market, Authorized Participants will buy the underlying securities that comprise the ETF and deliver those shares to the ETF provider. In return the AP receives ETF shares that are passed along to the buyer. The graph below shows how the process works.



International ETFs differ in that the underlying securities' markets tend to be closed during US trading hours. In order to facilitate buying and selling in international ETFs, APs often hold an inventory of ETF shares. By owning shares of the ETF, the AP will hedge the exposure through a variety instruments such as futures, shorting the underlying basket of stocks or other similar ETFs.

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In circumstances when the AP lacks ETF shares in inventory, the price buyers are quoted from an AP is based on where they believe the securities can be purchased the next day the markets are open. The price quoted is based on a number of reference points and factors such as:

- The underlying securities' currency movement versus the US dollar during US trading hours.
- Market news that may affect the underlying stocks' market.
- US stock or sector movement that may affect the ETF's underlying securities.
- ADRs are certificates issued by US banks used to facilitate trading of foreign securities on US exchanges. The movement of ADRs can provide a potential indicator where the underlying securities and market will open the next day.
- Stamp taxes and exchange fees are also incorporated into the bid-ask spread. For instance the Hong Kong has a stamp tax of 0.2% per security transaction. APs are responsible for paying the stamp tax which they will include in the price quoted.

While the operations of US-listed international ETFs are similar to domestic ETFs, there are unique elements to the creation/redemption process. The role of an AP involves both art and science in the creation and redemption process of international ETFs.

Having established how ETFs are like traditional mutual funds and dissimilar to stocks and CEFs, there are practical guidelines to trading ETFs.

ETF Trading Rules: Things Not To Do (Unless You Really Really Have To:)

Trade within first half hour of trading:

Market makers need to know where an ETF's underlying the stocks are trading to intelligently quote a bid ask spread. However many stocks do not open at the market's open. Additionally market makers may want to understand the market's tenor prior to quoting prices. While many market makers are unwilling to make a market at 9:30, there are market makers who will. Often times these prices are at very wide spreads (ie higher cost to trade). If there is one rule to be followed in my experience it would be this one.

Market On Close & Market On Open order types:

A specialist would "set" the closing price for stocks and closed end funds at the exchange. These order types allowed a specialist to balance their books by pairing off buyer and sellers. In ETFs the last trade is the closing price. ETF MOC orders can create an imbalance if there are more buys or sells which could cause an ETF to trade higher or lower

Market Orders on Lower Volume ETFs

Market makers' bid ask spread contains how many shares they are willing to buy or sell. If a market maker is offering 1,000 shares on the offer, an investor looking to buy 100 shares could use a limit order to potentially get a better price. A market order might not benefit from the potential price improvement of using a limit order to "haggle" for a better price.

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The Role of Volume & Expense Ratios in ETF Due Diligence

Bid ask spreads are a cost to investors. If one had to choose between two ETFs identical in every way, one would logically choose the higher volume and tighter bid-ask spread ETF. However ETF providers choose different indices in order to differentiate or improve upon existing ETFs. Do investors reward innovation or does their focus on expense ratios and volumes lead them to sub-optimal investments? Can one prove if investors are doing due diligence on ETFs?

The US large cap ETF category should show the smallest dispersion amongst all ETFs due to the efficiency of the underlying stocks. Looking at traditional market cap weighted indices in the category, neither the funds with the lowest expense ratios nor the highest volume ETFs are necessarily the best performing ETFs. The market cap and sector exposures create a disparity greater than the effect of expense ratios. While this analysis is done in hindsight it does beg the question to the extent investors are engaging in ETF due diligence. Investors appear to be sacrificing potential reward in exchange to own the "cheapest" ETF. Investors' desire to be thrifty over doing their homework appears to be a counter-productive endeavor.

Calculating Trading Costs

The aggregate costs for buying an ETF are expense ratio, bid ask spread, tracking error (how well did the ETF provider track their underlying index) and taxes generated by capital gains. While not forward looking, historic metrics can act as a guide for what might occur in the future. Utilizing the US large cap example, the best performing ETF in the category for the last five years had an expense ratio of 0.49%, average spread of 4.7 cents, tracking error of 0.66%, and generated no capital gains (Source: Bloomberg May 2014). With a share price of $37.02, 0.047/37.02 equals 0.12% incurred by buying the ETF on the offer. Conversely the largest ETF and least expensive ETFs had expense ratios of 0.09% and 0.04% with average spreads of 4.8 cents and 0.02 cents. While the highest volume ETF and least expensive ETF had lower costs, ultimately these costs were negated by the performance of the fund's holdings.

A major development over the last several years has been ETF providers' ability to calculate potential trading costs for investors. This information can provide an investor with knowledge of potential trading costs. Thus an investor can quantify the total cost of purchase by aggregating potential trading costs in addition to historic tracking error and expense ratio.

On a daily basis newspapers and financial websites publish securities that experienced large increases in volume from their historic average. ETFs tend to dominate the volume movers table. This proves the effectiveness of the creation/redemption process. It also proves there are investors engaging in ETF due diligence. Armed with the proper information, the informed ETF investor can make judicious investment decisions.

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Carefully consider the Funds' investment objectives, risk factors, charges and expenses before investing. This and additional information can be found in the Funds' prospectus, which may be obtained by clicking here. Read the prospectus carefully before investing.

Investing involves risk, including possible loss of principal. There can be no assurance that the Funds will achieve its stated objectives. The Funds focus their investments primarily with Chinese issuers and issuers with economic ties to China. The Funds are subject to political, social or economic instability within China which may cause decline in value. Fluctuations in currency of foreign countries may have an adverse affect to domestic currency values. Emerging markets involve heightened risk related to the same factors as well as increase volatility and lower trading volume. Current and future holdings are subject to risk.

Narrowly focused investments and investments in smaller companies typically exhibit higher volatility. Internet companies are subject to rapid changes in technology, worldwide competition, rapid obsolescence of products and services, loss of patent protections, evolving industry standards and frequent new product productions. Such changes may have an adverse impact on performance.

The ability of the KraneShares Bosera MSCI China A ETF to achieve its investment objective is dependent on the continuous availability of A Shares and the ability to obtain, if necessary, additional A Shares quota. If the Fund is unable to obtain sufficient exposure due to the limited availability of A Share quota, the Fund could seek exposure to the component securities of the Underlying Index by investing in depositary receipts. The Fund may, in some cases, also invest in Hong Kong listed versions of the component securities and B Shares issued by the same companies that issue A Shares in the Underlying Index. The Fund may also use derivatives or invest in ETFs that provide comparable exposures. Investments in derivatives, including swap contracts and index futures in particular, may pose risks in addition to those associated with investing directly in securities or other investments, including illiquidity of the derivatives, imperfect correlations with underlying investments, lack of availability and counterparty risk. The use of swap agreements entails certain risks, which may be different from, and possibly greater than, the risks associated with investing directly in the underlying asset. The Fund, may be concentrated in the financial services sector. Those companies may be adversely impacted by many factors, including, government regulations, economic conditions, credit rating downgrades, changes in interest rates, and decreased liquidity in credit markets. This sector has experienced significant losses in the recent past, and the impact of more stringent capital requirements and of recent or future regulation on any individual financial company or on the sector as a whole cannot be predicted.

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