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5 Reasons ETFs impact stocks less than you think

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Huge trades do impact underlyings

Crib Sheet:

ETFs trade almost \$80bn each day, making up around 29% of all stock trading by value. Because of this, ETFs get blamed for contributing to volatility and correlation (among other things).

We highlight five reasons these fears are overblown:

- 1. The VIX is near all-time lows, and correlations have broken down since the election, despite a surge in ETF trading.
- **2. Futures trade more than \$250bn/day** concentrated in two beta exposures and have a far greater effect than ETF trading.
- **3. Creations and redemptions** are much smaller than ETF volumes, **averaging just \$8.9bn/day**, or 11% of all ETF value traded.
- **4.** Less than 10% of ETFs trigger stock arbitrage during the day.
- **5. ETF baskets are liquid**. Even a \$1bn trade in small or mid-cap ETF represents less than 10% of ADV in the underlyings.

Exhibit 1: ETF Creations are a fraction of futures and ETF trading





ETFs impact stocks less than you think

ETFs trade almost \$80bn each day, making up around 29% of all stock trading by value. Because of this, ETFs get blamed for contributing to <u>volatility</u> and correlation, as well as making it harder to trade underlying stocks.

We highlight five reasons these fears are overblown.

1. Futures are way bigger and more correlated.

US Equity Futures trade over \$250bn/day, more than 3x the value of ETFs and much more than underlying stocks. Futures liquidity is also concentrated in just two vanilla portfolios: S&P500 and Russell 2000. Intuitively, futures trading should contribute far more to volatility, especially correlation.

In contrast, the \$79bn/day of ETF trading is spread across sectors, countries, and asset classes (Exhibit 2). In fact, we would argue that as ETFs offer more granular portfolios, they are net contributing to stock selection at a sector and style level.

2. VIX is low and correlations have broken down.

Since the election, we have seen a surge in ETF trading as hedge funds and other investors rushed to reposition portfolios.

Despite this, the VIX has been near all-time lows (around 11 as we write), and correlations have broken down significantly since the election.

3. Creations and redemptions average just \$8.9bn.

Although ETFs trade around \$79bn/day, creations and redemptions average just \$8.9bn/day. That's just 11% of all ETF value traded, and we think a better measure of how much ETFs really impact stocks.

4. Stock-arb happens less than 10% of the time.

Most liquid ETFs have spreads that are tighter than their underlying basket. Moreover, <u>we've shown</u> that most ETFs trade inside the underlying spreads, making stock arbitrage uneconomical.

In fact, we estimate that less than 10% of all ETF trades would trigger stock arbitrage (Exhibit 3), roughly the same proportion as the observed creation ratio (above).

5. Baskets are much more liquid than ETFs.

That still leaves around 10% of ETF trades that *are* big enough to cause underlying trading. What about them?

Exhibit 2: Growth in ETF trading by underlying exposure.

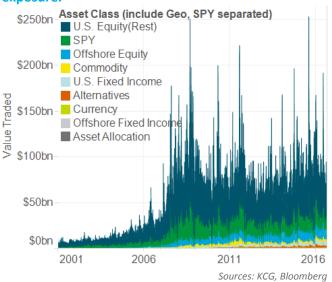
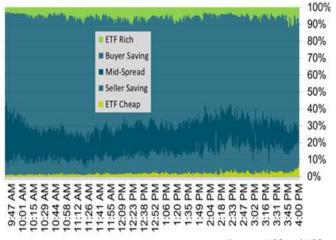


Exhibit 3: Most ETFs trade cheaper than stockarbitrage triggers almost all the time.



Sources: KCG and KCG



The first thing we'd highlight is that underlying stocks are almost always <u>much more liquid</u>. For example, a \$1bn trade in relatively illiquid markets is usually still digestible:

- Just 10% of ADV in underlying small or mid-cap US stocks
- 5% of the underlying in corporate bonds
- Around 10% of daily value traded in emerging markets

Huge trades do impact underlyings.

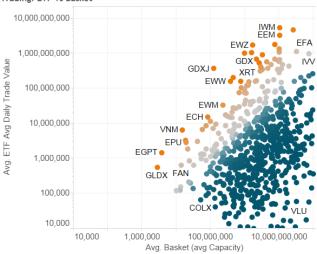
Of course, *some* trades *do* affect stocks, sometimes very <u>publicly</u>.

Mostly these are very large trades, where some market impact is *unavoidable* whether the portfolio rebalancing is done with ETFs or "old-fashioned" stock trades.

What's important with large trades is to execute them carefully. Trading too aggressively or signaling to the market adds *unnecessary* costs. That's one reason we recommend clients talk to our ETF desk before trading an illiquid ETF or a very large notional.

Exhibit 4: Underlying baskets are typically very liquid, with almost all baskets trading over \$100m/day and many trading over \$10bn/day.

Trading: ETF vs Basket



Sources: KCG, Bloomberg

Case Study: An exceptional trade

Many people worry about bond market liquidity, and still more worry that ETFs might trigger a crash in the bond market because of the lack of underlying liquidity.

Back in April 2016, we saw HYG redemptions totaling almost \$3bn. Here is what happened:

- Remember that the underlying liquidity in all corporates is just \$20bn.
- So, a \$3bn trade is large in proportion to the underlying high yield liquidity.
- Sensibly, the trade was spread over three days, which helps minimize market impact.
- The morning of April 29 there was spike in trading volume (green bars, lower chart) that caused the ETF to sell off to as much as a 72bps discount to NAV (blue vs green line).
- Slowing down in the afternoon helped HYG's price recover
- Because bonds are illiquid and not exchange traded, their NAVs slow to mark-to-market.
 Overnight, the NAV for HYG closed at 83.16, a discount to the intraday NAV and even the HYG close.

Exhibit C1: Trading in HYG vs NAV on days of large redemptions



Sources: KCG, Bloomberg





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