

## File Number S7-11-15: Request for Comment on Exchange-Traded Products

### Response Flow Traders Group

1. Arbitrage mechanisms are designed to keep intraday trading prices of ETP Securities equal (or nearly equal) to the contemporaneous value of the underlying portfolio or reference assets. Do these mechanisms work better for some types or categories of ETPs? To what extent do arbitrage mechanisms help ensure efficient market pricing for ETPs throughout periods of market volatility, including times of market stress?

*Arbitrage mechanisms work for all categories of ETPs. They work best when the underlying assets are traded during the same hours the ETP is trading and when the underlying assets are liquid. For efficient and transparent liquidity provision it is important that liquidity providers and all other market participants have full transparency in respect of the composition of the relevant ETPs in order to facilitate efficient hedging and liquidity.*

*If an underlying market is illiquid or closed (e.g. in foreign markets) pricing is somewhat more difficult, but also ETPs with foreign underlying assets are usually fairly priced relative to where the relevant foreign market is opening next day on the basis of other inputs. When underlying assets are less liquid it is harder for liquidity providers to hedge. They may have to resort to more liquid but less efficient alternatives. In order to include compensation for additional risk or less efficiency liquidity providers will typically widen their quotes.*

*Arbitrage mechanisms ensure efficient pricing to a large extent in periods of higher volatility or market stress. Although the traded price of ETPs might differ slightly more from the fair value than under normal conditions, they will still be trading close to the contemporaneous value of the underlying assets. The ETP market is very competitive and arbitrage mechanisms will ensure that ETPs trade close to fair value anyway. Generally, as long as the underlying assets are traded in an orderly manner, so will the ETP. In case of illiquidity in the underlying instruments we will still be trying to provide liquidity using other indicators for value for our quoting.*

2. Do commenters believe that there are other mechanisms besides arbitrage mechanisms that do, or could, help ensure efficient market pricing of ETPs? Do other factors play a role in efficient market pricing of ETPs? If so, what are these mechanisms or factors, and how effective are they? Are these mechanisms or factors more effective for certain types or categories of ETPs? To what extent are these mechanisms or factors effective during periods of market volatility?

*Transparency of the workings of the ETP (open availability of pricing methodology and composition) are key, as are availability of prices, volumes and other relevant data from ATSS and other trading venues. The more data is available and the least trading is restricted the better the price efficiency through liquidity provision will be. We believe that better access to all traded flow and data will lead to better execution for end-investors. We would strongly favor unrestricted access or trading possibilities through creation and redemption with issuers and access to ATSS - a significant volume of ETP trading occurs in dark pools that are not always equally accessible.*

*In addition, stock and ETP lending availability, availability of liquid hedges, ease of trading the underlying assets and efficient creation and redemption processes facilitate efficiency, particularly in volatile markets.*

*In contrast, the high level and complexity of capital requirements for liquidity providers are detrimental to pricing efficiency. We would welcome a better alignment of capital requirements with the business model of liquidity providers, as well as a consideration of how haircuts are calculated for net capital purposes as this can quickly become complex for liquidity providers given the number of transactions. In addition, the haircuts for liquidity providers can be disproportionately high relative to their trading activities, balance sheet use, risk profiles, positions and characteristics of assets and liabilities held for trading, causing liquidity providers to take little inventory on their books. Furthermore, creation and redemption costs, management fees and taxation also have a negative impact on pricing efficiency.*

3. What characteristics of an ETP facilitate or hinder the alignment of secondary market share prices with the value of the underlying portfolio or reference assets? What characteristics of an ETP's underlying or reference assets facilitate or hinder the alignment of secondary market share prices with the value of the underlying portfolio or reference assets? Does liquidity in the market for an ETP's underlying or reference assets affect arbitrage, and if so, how and to what extent? Does the availability of current and historical pricing information, as well as trading history, for the underlying or reference assets affect arbitrage, and if so, how and to what extent? To what extent does the availability of correlated hedges for the ETP's underlying or reference assets affect arbitrage and pricing efficiency? To what extent does an ETP's use of a sampling methodology (investing in a subset of the components of an index) to track an index affect arbitrage and pricing efficiency? Does the use of over-the-counter instruments by an ETP affect the opportunity for market makers or other participants to engage in arbitrage, and if so, how and to what extent? Do non-synchronous market hours between an ETP and its underlying assets (e.g., international equities) affect the pricing of an ETP and the opportunity for arbitrage, and if so, how? Does the

use of cash-only creation or redemption baskets and variable cash fees affect efficient market pricing, and if so, how?

*The liquidity of the stock borrow and lending markets for both ETPs as well as underlying assets are essential for trading ETPs efficiently. An additional factor is cross-margining by the OCC and the SEC for ETF positions - it is currently highly capital intensive to trade certain ETPs, which has a detrimental effect on the liquidity of such ETPs. Same goes for dividend or transaction taxes in some jurisdictions, although liquidity providers are exempt in some cases.*

*Other important factors include flexibility and costs of creations and redemptions with the issuer. The more flexible the issuer is, for instance accepting creations and redemptions at VWAP during the day, the fairer the price in the market will be. Any creation or redemption fee (also for cash-only creation or redemption) will increase pricing inefficiencies. Cash-only creation and redemption is often more expensive than trading the underlying assets.*

*Historical prices provide insight into the products traded and allow us to backtest calculations and models (e.g. by providing information on relative liquidity of the underlying assets).*

*In respect of hedging, generally speaking, better availability of, or access to, a hedge will be very beneficial to efficient pricing. The existence of correlated hedges is important in pricing - the more correlated hedges are available and accessible, the more efficiently a liquidity provider can serve the market. However, the correlation does not need to be perfect - also non-US instruments, futures, swaps, bonds and other assets may be used as potential hedges. It matters a lot how such instruments used for hedging are treated for capital requirements/haircuts and in that manner it impacts how much inventory a liquidity provider is willing to take on its books, affecting efficiency and pricing. Sampling reduces pricing efficiency to a small extent unless the sampling methodology is fully disclosed (and not changed without notice). Transparency will improve market efficiency.*

*In respect of OTC trading: for certain Exchange Traded Notes liquidity providers need to deliver a swap while the swap market is not always accessible for liquidity providers. It's all about availability, accessibility and liquidity of such OTC instruments and they are not transparent. OTC instruments are typically harder to trade because of a lack of an open market, barriers to entry (such as having access to OTC trading connections), opaque pricing (at the discretion of the counterparty) and lack of central clearing (leading to a counterparty risk). Any such circumstances make it more difficult to make a market, decreasing market and pricing efficiency.*

*Non-synchronous hours can decrease pricing efficiency although in general pricing remains quite efficient: investors can still have asset exposure even when international markets are closed. The price of an underlying asset can differ a lot but international ETPs are usually priced closely to where the underlying assets will open the next day on the basis of other available information. It is important to note that, pursuant to US GAAP and regulatory capital obligations, it is very inefficient to trade related assets with asynchronous trading hours (even between US cash markets and future markets: the future markets close 15 minutes later than the cash markets): these provisions do not permit liquidity providers to mark-to-market their assets and liabilities held for trading at the same time, so the asset values of two legs of the same hedged trade will often carry different book values and required capital. This means that some ETPs are partially impossible to hedge. Liquidity providers have to find a 'next best' proxy hedge and maintain a certain risk appetite. This negatively influences pricing efficiency.*

4. How closely do investors or other market participants expect the intraday trading price of ETP Securities to be aligned with the contemporaneous value of their underlying portfolio or reference assets? Do these expectations differ depending on the type of ETP, the nature of the underlying assets, or market conditions? What methods, if any, do investors use to determine whether the intraday trading price of ETP Securities closely tracks the value of their underlying portfolio or reference assets?

*Investors expect intraday ETP trading prices to be very close to their contemporaneous value, usually within the creation/redemption cost for the instrument. For international ETPs or if not all underlying assets (or hedges) are tradeable at the same time for other reasons this can be wider, as well as in volatile circumstances. Same applies for equity index futures.*

5. Do market participants conduct analyses of how well intraday prices of ETP Securities track the value of their underlying portfolio or reference assets? If so, how much weight do market participants place on such analyses?

*Liquidity providers do this all the time - we continuously calculate the fair value of ETPs in order to spot inefficiencies or trading opportunities. This is essential to our business model and central to prudent and profitable trading operations.*

6. Under what circumstances might the prices of ETP Securities not track (on an intraday, temporary end-of-day, or permanent basis) the value of their underlying portfolio or reference assets? Are there circumstances in which the price of an ETP's Securities, though different from its NAV, might be a more accurate measure of the value of the ETP's underlying assets? What are the implications for investors (both individual and institutional) and other market participants if

intraday prices for ETP Securities do not closely track the value of their underlying portfolio or reference assets, either on an intraday, temporary end-of-day or permanent basis?

*Prices might not track the value of the underlying portfolio when the underlying market is illiquid or closed, when the ETP fund is closed for creations or redemptions or when there's a sudden illiquidity in the ETP itself. When underlying markets are closed, the price of the ETP, even if different from NAV, is often a more accurate measure of value. This is also the case when the ETP is quoted more tightly than the underlying assets.*

*If intraday prices do not closely track the underlying value we would still expect the ETP to trade in line with NAV. As long as investors have information sources to determine NAV the risks are limited. Firm liquidity determines the fair value. If the ETP's liquidity is higher than liquidity of the underlying assets, the pricing of the underlying assets will typically follow the ETP's pricing. The more liquid the ETP, the tighter the bid/offer spread will be. In addition, the more Authorized Participants there are, the more opportunities to trade and provide liquidity.*

7. To what extent do arbitrage mechanisms affect trading in an ETP's underlying or reference assets? Does the answer vary depending on whether the underlying or reference assets are equities, fixed-income securities, commodities, derivatives, or another type of asset? If so, how?

*In general, arbitrage mechanisms increase liquidity in both the markets for the ETP as well as the markets for the underlying assets. It can also affect trading in the underlying assets due to creation and redemption or hedging activity. Arbitrage will generally cause efficient pricing.*

*All underlying assets have different trading characteristics and mechanisms will have to be able to cope with these differences. It depends on liquidity, creation and redemption costs and possibilities, and other factors. Equities, liquid futures and liquid FX are often easier to trade than other underlying assets including bonds.*

8. To what extent do ETNs offer opportunities for arbitrage? How do market participants engage in arbitrage for ETNs? How is arbitrage affected by ETN issuers' ability to suspend and restart issuances of notes at their discretion? How are arbitrage opportunities affected when an issuer suspends the issuance of its ETNs? Are certain ETNs easier or more difficult to arbitrage due to the nature of the ETN's reference asset or index, and, if so, which ones?

*In terms of trading, liquidity provision in ETNs is not that different from other ETP classes, as long as the ETN funds are open. From a credit perspective though, there is a big difference when markets get challenging. Depending on their structure, some ETNs will start trading in line with the credit risk of their issuer (often a bank).*

*ETNs may close for creation, in which case they can trade at a substantial premium. This reduces trading opportunities as it becomes highly difficult, also depending on stock borrow and lending markets. The only way to trade suspended ETNs is when you are holding a long position. When investors want to buy they are dependent upon the access to sellers (holding long positions) as market makers will not be able to sell, causing the premium to go up. When issuers can issue notes at their discretion, this also highly influences the price. In addition to limited creation/issuance, if ETNs cannot be redeemed they may start trading at discounts and do not entertain fair and transparent markets and access.*

9. As noted above, the IIV for an ETP is generally designed to provide investors information during the trading day on the value of the ETP's portfolio (or, in the case of an ETN, on the value of a reference asset or index). The IIV may be subject to various calculation methodologies. How does the calculation of IIV vary, if at all, among ETPs? Does the calculation methodology depend on the class or type of ETP, and if so, how? Does the calculation methodology depend on the nature of the underlying portfolio or reference assets, and if so, how? Are certain IIV calculation methodologies more or less useful for investors, market makers, or other market participants?

*Most sophisticated liquidity providers will calculate their own fair values instead of tracking IIV because they do not want to be dependent upon external parties. Our methodologies differ from one product to the next, depending on available data sources for each product.*

10. To what extent do market participants make use of the IIV for an ETP based on less-liquid securities? If underlying assets trade infrequently or are priced only at the end of the trading day for purposes of NAV calculation, does an IIV that is disseminated every 15 seconds (as is currently the case) contain useful pricing information? Would a different dissemination frequency be more appropriate, and if so, what would that be?

*We calculate our own fair value continuously on the basis of the underlying assets and other information. We need real time data. IIV provided every 15 seconds may not really provide useful pricing information to us unless the market for the relevant underlying asset is open and prints last prices regularly. If not, ETP pricing in trading is usually the better representation of fair value than IIV (given competitive markets). We have no opinion on appropriate dissemination frequencies.*

11. Do investors or other market participants use intraday or closing indicative values for ETNs? If so, for what purpose? How does the intraday or closing indicative value differ from the market value of an ETN or its redemption amount?

*Closing indicative values could be a possible approximation to investors in order to determine the value of their investments. The closing NAV does not incorporate the costs for redemption so the redemption price will typically be lower than NAV.*

12. How much disclosure about the contents of an ETP's underlying portfolio is necessary for arbitrage to function efficiently to keep the market price of an ETP aligned with the contemporaneous value of its underlying or reference portfolio? Please explain.

*The more the better: we need full disclosure of ETP composition in order to be able to price efficiently (or at all). A liquidity provider will be aiming for a profit, often only fractions of a cent. A trade can only be profitable if the fair value assessment of the ETP and the hedge are correct. Therefore the contents of an ETP must be exactly known. When composition or other characteristics are uncertain, either the spread will have to be wider to discount for risk, or we will not quote at all.*

13. In the absence of daily portfolio disclosure for an ETP, could other mechanisms enable market makers or other market participants to make efficient markets in that ETP? If so, what are those mechanisms and how would they function? What, if any, information disclosure, characteristics of the ETP, or other circumstances would be necessary for those mechanisms to function?

*We're skeptical - probably not, although data analysis may help in finding proxy hedges. ETPs with similar underlying assets or indices may be used as a proxy for NAV. If ETP composition is not exactly known we would welcome any information that could help us price such ETP by proxy.*

14. Under what circumstances would an ETP suspend creations? Under what circumstances could an ETP (other than a 1940-Act registered ETF) suspend redemptions? What effect does this or could this have on arbitrage mechanisms or the market value of these products? How might suspension of creations or redemptions affect the ETP's continued compliance with the conditions of its exemptive and no-action relief under the Exchange Act? How would an ETP issuer be likely to respond to the suspension of creation or redemption activity by one or more of its Authorized Participants?

*If underlying markets are closed or if an issuer runs into position limits (e.g. CTFC or RQFII position limits), creations could be suspended. For example, this may also occur when a fund gets too large to be managed (or if market supervisors won't allow it to grow further), when futures need to be rolled over, or if there is insufficient liquidity.*

*Redemptions could be suspended if the underlying markets are closed or if there is no liquidity in the underlying asset for other reasons, e.g. suspension of an underlying stock. Suspension of redemptions could also occur if the funds' size is too large to handle for the issuer or when there are more redemptions than the outstanding number of ETP units.*

*Any suspension will affect fair value assessment (becomes impossible), price formation, and the ETP will likely trade at a discount. Authorized Participants do not typically suspend creation or redemption (the issuer does) but when issuers are faced with significant Authorized Participants ceasing creating and redeeming they should find additional Authorized Participants for their product.*

- 15.** How do arbitrage mechanisms work in the case of ETPs with less-liquid underlying or reference assets? Are arbitrage mechanisms for ETPs with less-liquid underlying or reference assets effective and efficient in aligning share prices with the value of the underlying portfolio or reference assets?

*That strongly varies from product to product. Spreads typically become wider. Arbitrage mechanisms are usually effective and efficient, also in aligning share prices with less-liquid underlying assets or reference assets, but the products typically become more volatile when the underlying assets are more volatile. The liquidity provider will reflect the amount of risk (through illiquidity) in the spread of the ETP. Hence, the more illiquid the underlying asset, the wider the ETP spread.*

- 16.** To what extent do arbitrage mechanisms help ensure efficient market pricing throughout rising and falling markets, including times of market stress, for ETPs with underlying or reference assets that are less-liquid? Do periods of market stress affect arbitrage mechanisms for such ETPs, and if so, how? Could there be a point at which the amount of ETP Securities outstanding relative to the amount of underlying or reference assets outstanding results in an imbalance that inhibits the redemption process during periods of market stress?

*Arbitrage mechanisms (and proper and prudent liquidity provision) practically guarantee efficient pricing under falling markets and market stress: they enable risk transfer when it's most needed, under challenging circumstances. Liquidity providers need wider spreads in order to cover additional risk/volatility and price prudently and efficiently. They must be able to quickly adjust pricing to market circumstances (rapidly updating orders) in order to remain agile and in sync with the market, in order to preserve an orderly market despite the circumstances.*

*Arbitrage mechanisms facilitate efficient pricing but ETPs with less-liquid underlying assets trade less in line with their NAV than ETPs with more liquid underlying assets. Market stress or volatility makes it more difficult to hedge ETP trading. In general, volatility will cause wider spreads and less efficient pricing due to pricing in additional risk.*

*Theoretically there could be a point where the number of outstanding ETP units relative to outstanding underlying assets inhibits the redemption process during market stress, but this will mostly depend upon the issuer. Creation is possibly more difficult in such situations because there may be a shortage in underlying assets to buy or put into the basket.*

*At the moment of the ETP trade, the market impact is there. The creation or redemption afterwards is just a transfer to the issuer, typically with limited market impact.*

- 17.** To what extent, if any, does trading activity in ETP Securities affect price discovery, price correlation, liquidity, or volatility in the ETP's underlying or reference assets? What role, if any, do ETP Securities that are based on less-liquid underlying securities have in providing additional price discovery for the underlying securities?

*This is interdependent: the markets for the ETP and the underlying assets feed on each other for price discovery. Typically the most liquid market is leading. It also depends on the liquidity of the underlying versus the liquidity of the ETP: ETPs based on less-liquid underlying assets may provide price discovery for the underlying assets and often generate liquidity in the underlying assets.*

- 18.** Should the listing exchange for an ETP have an obligation to monitor the effectiveness of that ETP's arbitrage mechanism? If yes, what should be the nature of that obligation?

*We believe it is practically impossible for exchanges to track all different arbitrage mechanisms as there are countless varieties which are constantly changed or developed further. Furthermore, we do not really see a need for this (markets are very competitive for typical ETPs).*

[...]

- 32.** What, if any, is the appropriate role of an exchange that lists ETP Securities with respect to monitoring creation and redemption activity? For example, should the exchange be informed of an ETP's decision to suspend creations or redemptions during the trading day? If so, should the exchange be required to alert its members, investors, and other market participants?

*Creation and redemption may have an impact on price formation, hence monitoring by an exchange or other supervisor might be beneficial, especially as the inability to create or redeem (e.g. due to suspension) will affect pricing immediately. Exchanges should be aware of (or informed about) suspension of creations or redemptions and should be able to suspend ETP trading pending announcements. Exchanges should subsequently alert their members and other market participants.*

- 33.** What, if any, is the appropriate role of an exchange that lists ETP Securities with respect to monitoring or overseeing the calculation of IIV or NAV?

*Although it could increase transparency, we believe this is not a role for exchanges.*

- 34.** Do market participants believe that certain types of ETPs are more susceptible to manipulation than others? If so, please explain. To what extent, if at all, does the nature, characteristics, liquidity, or volatility of an ETP's underlying or reference assets affect the ETP's susceptibility to manipulation?

*ETPs with less-liquid underlying assets could theoretically be more susceptible to manipulation as price formation can be more easily influenced in less-liquid markets (for instance marking the close to influence the price of an ETP). We believe that more-liquid ETPs are not susceptible to market manipulation.*

[...]

- 50.** The Commission notes that, over the years, there have been ETPs that have closed after being listed and traded for some period of time. What are the consequences to investors of the closure and liquidation or termination of an ETP?

*Investors should receive NAV in cash and the closing costs of the fund should be charged to the manager and not the fund (i.e. the investors) as this seems unfair.*

- 51.** How are the types and complexity of the investment strategies and investment objectives of ETPs, and the nature of the market for ETPs, likely to develop in the future? How might these changes affect the listing and trading of ETP Securities? How might these changes affect any underlying securities held by an ETP—for example with respect to liquidity, volatility, and capital formation?

*We believe the ETP industry will continue to grow because it is way more transparent than the mutual fund industry. We think it may further diversify and try to mimic investor strategies in such a way that simple trading in ETPs will give investors the exposure they're looking for.*

*Future developments might include continuous innovation, meeting changing needs of investors: innovative products we currently wouldn't have thought of may come to the market and although many might fail, some will satisfy a need. We may see more actively-managed ETPs, more niches in terms of underlying assets or strategies, more currency-hedged ETPs and interest rate-hedged products. Overall we would expect to see more listings, higher volumes and overall more liquidity.*

- 52.** As noted above, the total market capitalization of ETPs has grown significantly, nearly doubling since the end of 2009. What do commenters believe are the main reasons for this growth? Do commenters expect significant growth in the number, variety, and market capitalization of ETPs to continue? If such growth continues, how might that affect the exchanges' listing and trading of ETP Securities? How might this growth affect investors, broker-dealers, or other market participants?

*We believe main reasons for growth include ETPs' low management fees, high transparency and ease of access and trading. ETPs can be continuously traded (as opposed to once a day). Furthermore, they enable new trading strategies, inexpensive exposure (including to emerging markets, high yield and other asset classes that were less accessible in the past) and quick changing of exposures if and when needed, for both institutional and retail investors.*

*We expect to see a significant increase in number, variety and market capitalization of ETPs. This will likely not affect exchanges or market participants like liquidity providers as such in a negative way: their systems, businesses and controls are typically very scalable regardless of higher volumes, more products and more participants. It will mean more choice for investors and easier access for all market participants.*

- 53.** The Commission provides market structure research, interactive data visualization tools, and advanced market metrics on its Market Structure Data and Analysis website, <http://www.sec.gov/marketstructure/index.html>. Users of the website and its data can, among other things, compare quoting and trading characteristics of ETPs to those of other equity securities. Have commenters drawn any observations or conclusions from this data about the listing and trading of ETPs? What effects, if any, does market structure have on the quoting and trading of ETPs? What effects, if any, does the quoting and trading of ETPs have on the general characteristics of current equity market structure? Do any specific aspects of current equity

market structure facilitate or hinder the fair and efficient quoting and trading of ETPs? What types of additional information or data would commenters like to see regarding the quoting and trading characteristics of ETPs?

*In our view, the current fragmented market structure does not necessarily result in best execution for the investor. Before an order reaches the most liquid ETP exchanges (e.g. ARCA, BATS/EDGX, NASDAQ), it may go through a loop of venues with less liquidity (e.g. payment for order flow, dark pools, inverted exchanges) where certain market participants may have a first look at the order, sometimes in exchange for a fee. The question is if those executions are optimal for investors. There may be no or limited liquidity on those less liquid venues and before the order reaches the more liquid ETP exchanges, the price may have moved already.*

*We are a strong proponent of fair, orderly and transparent markets. A shift to lit markets or provision of market data that is as complete as possible will benefit the markets and their participants as a whole.*

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*Flow Traders Group is a leading, technology-enabled liquidity provider operating on a global scale that specializes in ETPs. While we do not have any clients or distribute ETPs to end-customers, we enable investors to buy and sell ETPs efficiently by quoting bid and ask prices. We provide liquidity in over 4,000 ETP listings across the globe, tracking all underlying asset classes including equities, fixed income, commodities and currencies with access to 94 trading venues (exchanges, ECNs and other platforms) in 32 countries. Flow Traders Group is headquartered in Amsterdam, the Netherlands, with additional trading offices in Asia and the US, covering all time zones. The shares of the group's holding company, Flow Traders N.V., are listed on Euronext Amsterdam (symbol: FLOW). For more information please visit [www.flowtraders.com](http://www.flowtraders.com).*