

**A response to the Commission's call for commentary regarding File No. SR-NASDAQ-2014-065, which addresses a proposed rule change to adopt new rule 5713 and list Paired Class Shares issued by Accushares Commodity Trust.**

There is strong cause for concern related to the issuance of these products in that it is not economically possible to construct a two sided market for spot exposure that does not trade in line with VIX futures prices. The Commission, in its call for commentary has asked each commenter to consider a number of points, broadly covering the possibility of persistent premiums and discounts, suitability for retail investors and leverage drift. These comments focus on the first question, because inherent in the structure of the product will be persistent premiums and discounts which fundamentally invalidate the premise of the products in the market, making them misleading to investors.

The "arbitrage mechanism" described in the prospectus will not work to keep each of the products trading closely to its intrinsic value; rather it will in theory keep the sum of the discount on one and the premium on the other at zero. It is not economically possible to maintain intrinsic value in the secondary market; any attempt to do so will lead to massive speculation in the products until they are pushed to a breaking point, undoubtedly causing significant losses for less sophisticated investors.

A simple example should illustrate the point. This Response will focus on the proposed VIX shares, as the issue is most pronounced in this case, but the same economic principles apply to any futures.

Assume that on the 15th of the month ( a Distribution date):

1. The VIX Spot on the first day following the prior Distribution Date is 30;
2. The front month VIX future is trading at a 10% discount at 27;
3. There are 30 calendar days in the month.
4. The Share Index Factor is 1 (VXUP Price is 30);

An investor who wishes to have positive exposure to the VIX will need to evaluate whether to use VXUP or a VIX futures based product. VXUP will be charged 4.5% in Daily Amount Charges for holding the long position (this response will come back to the Daily Amount charge, and why it is a clear sign that the sponsors of these product also understand that they cannot offer spot VIX returns) . The investor can't buy the VIX Spot Index, so the investor's choices are (a) buy the front-month future at 27, or (b) buy the UP Shares at 30. Which should the investor choose? If the VIX happens to close the period at 27, then the Futures investor has zero P&L. The VXUP investor will have lost a considerable 14.5% (ignoring fees other than the Daily Amount); 10% from the price decline in Spot and 4.5% from the Daily Amount charges. In fact, there is no single outcome of the Spot VIX at the next Distribution Date where an investor would be better off buying VXUP, and in every case the investor would be worse off. This is an arbitrage opportunity. VXUP would have to trade at a discount. What would/should the price be? It would be 14.5% lower than the Spot VIX: 25.65. If Spot VIX closes at 27, then there would be a 3 point loss in addition to a 1.35 point loss due to the Daily Amount, so the value would be 25.65 for zero P&L. And since there is a discount in the Up Shares, there would have to be the offsetting premium in the Down Shares. Implicitly the sponsors have tried to build in a negative roll yield of 4.5% per month into their "spot" product, despite claims to the contrary. Form the prospectus:

"The majority of exchange traded products which are based on VIX related indices either hold futures contracts or reference a variation of a VIX related index which incorporates the effects of holding, trading and rolling futures contracts based on their relative expirations. Because futures contracts have scheduled expirations, persons wishing to maintain an exposure to a volatility measure must close out the position prior to the futures contract expiration and establish a position in the next available contract. This process is referred to as "rolling" the position forward. Rolling futures positions forward can cause a portfolio or index that continuously holds futures contracts on a volatility measure to experience a "roll yield" due to the replacement contract's price being higher or lower than the expiring contract's price.

In contrast, the VIX is based on the spot variation of the index and as such does not incorporate the effects of closing out an expiring contract position and establishing a position in the next available contract. As such, the Fund is expected to more closely track changes in the expected volatility measures which make up its index rather than track the performance of "rolling forward" expiring future positions.

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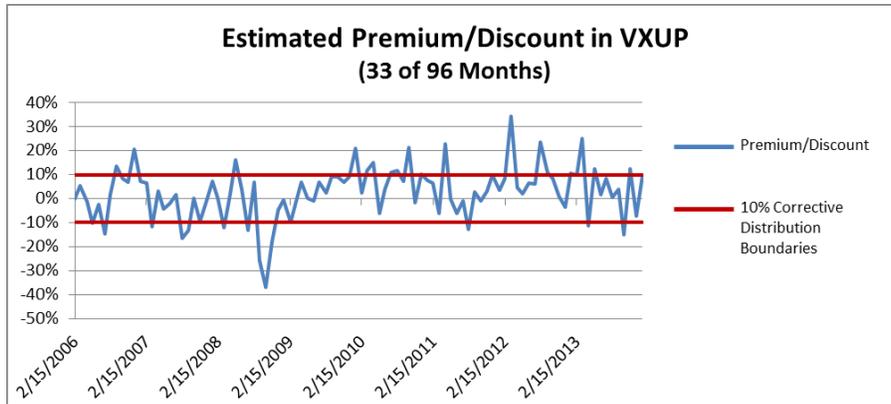
“As a result of the Index Provider’s methodology, the Underlying Index will reflect a numerical value which does not incorporate or account for any increase or decrease relating to roll yield or to the trading of expiring contracts into a next current contract.”

This is obviously highly misleading. It highlights however that basically anytime the actual VIX futures curve has some other roll yield, it necessitates the products to trade at premiums or discounts such that they reflect a VIX future. The dislocation will be most pronounced when the VIX futures are downward sloping and the VIX is under 30 (the condition for imposing the Daily Amount). The only way this product works is if the Daily Amount is equal to the actual futures roll yield each day, which of course would then be nothing more than a highly complex product which would simply mimic VIX futures. The Sponsor of the product recognizes this fact, which is why the Daily Amount exists, but, falsely advertises the product as being “Spot.”

The core of the issue here is that the products are simply not hedgeable. While a market maker may be willing to put up bids and offers, that says nothing at all about whether there would be a two sided market of actual investors, or where the mid would be. A future represents the markets assessment of fair value to buy or sell the underlying for delivery on a future date. If the market was willing to offer spot VIX returns at no cost (i.e., a flat futures curve) then the futures curve would be flat, which it quite obviously isn’t. If instead one assumes that (as is usually the case) the futures curve is steeply upward sloping (assume a number significantly above 4.5%, the “slope” imposed on VXUP) then every long VIX investor would prefer VXUP and no short investor would ever purchase VXDN. This can only be solved in a free market if VXUP trades at a significant premium and VXDN trades a significant discount. There will be very significant arbitrage pressures attempting to exploit the economic perversity of the products and significant activity around prices that reflect a Corrective Distribution.

The Corrective Distribution is meant to bring the secondary market prices in line so that the value received by the investors at the Distribution Date will be the CV (in neutral shares). In theory, this is supposed to result in no premium/discount at the last instant of trading. The thinking was probably that there could be no premium/discount on the two products at expiry, and therefore the products would trade to the intrinsic value over the course of each month. This is definitively not the case. First of all, this response already demonstrated why even if there were no premium or discount at the Distribution Date close, there would be prior to that and such premium or discount would systematically erode over the course of each month. Were this to be the case though, a premium/discount would immediately occur upon the following open, for the same reason the first one occurred, and that would imply that there would be a jump (positive for one product, negative for the other) in the secondary market from the close to the following open. This can't happen either, otherwise there would be an arbitrage to jumping on the product that would be expected to have the premium after the close; therefore the "arbitrage mechanism" would fail to work. The products would continually trade at premium/discount to intrinsic value, and there are likely to be many unforeseeable events related to arbitrageurs attempting to profit from the products uneconomic design flaws.

To try and quantify this more specifically, constructed below is a simplified data set. On the 15th (or next business day) of each month, compute the expected roll yield in the VIX Futures curve using cubic spline interpolation. Compare that to the 4.5% expected Daily Amount charges if the Spot VIX is less than or equal to 30. The difference must be the Premium or Discount in VXUP. Below is the graph of the Premium/Discount for 96 months’ worth of monthly data. The red lines represent the 10% boundaries associated with the Corrective Distribution. In 33 of the 96 months, the Premium/Discount is expected to cross the Corrective Distribution threshold. There could be (and would have been in this backtest) multiple Corrective Distributions in a year. The 33 months of Corrective Distributions result in reinvestment fees of, on average, 500 basis points per year (using the Prospectus’ own estimate of fees at 125 basis points per instance). In theory, one could be subject to 12 Corrective Distributions in a year (there were seven in this analysis in 2010), resulting in a 1500bp implicit fee for both Up and Down shareholders in addition to a whopping 54.75% Daily Amount charges (15bps x 365 days) which are permanently built into the VXUP.



The other point which is quite apparent from this data, is that even in the 2/3 of months where there is not an expected Corrective Distribution, the products are not expected to trade anywhere near spot as advertised, since it is not economically possible and is the reason the futures markets trade in contango or backwardation. There are not generally investors willing to sell spot VIX returns to long investors for free (or even for a fixed average 4.5% per month) and, frankly, no other analysis is needed to know the product therefore cannot function as advertised.

These products are not suitable for any investor, they will not (and cannot) behave as advertised and the only possible result of issuing them will be highly sophisticated arbitrageurs actively trading the products to a breaking point at the expense of less sophisticated users.

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Because the Commission asked commenters about other areas, below are some of the implications of the persistence of the premium/discount:

1. The investor would have to be extremely diligent in tracking the position, since the Up Shares could so frequently turn into both Up and Down Shares. This means that the investor would be paying fees to the Issuer but not receiving any notional exposure whatsoever.
2. Any investor would require extensive knowledge of the financial markets to understand why, when being required to re-enter the market after a distribution to reestablish a position, the product could be trading already at a significant premium or discount. Further, the investor would have to have intimate knowledge of the VIX futures market to understand from where the premium or discount was actually derived.
3. Investors would likely receive shares with the opposite economics for some distributions, causing confusion. Any investor would likely be confused if they were to check in on their portfolio to discover shares of a product that were not purchased. Most investors are comfortable with distributions in the form of shares, but shares that don't carry the same economics and have different tickers would undoubtedly raise questions.
4. The leverage drift becomes less relevant since the product mostly prices off of the VIX futures curve. Monthly resetting products (or more frequently resetting products if and when additional Distributions are reached) don't have consistent daily deltas, so if the Spot VIX goes from 10 to 11 on the first day of a period where the VIX started at 10 there would be a delta-one exposure to that move, but if the VIX started at 20 that period, there would only be a 50-delta to that move. Similarly, if the Spot VIX started at 10 for the period there would be a delta-one exposure to the first day's move, but in a subsequent day if the Spot VIX moved from 20 to 21, instead of a five percent return there would be a 10% return. In other words, there are times when there is leverage to the Spot VIX but the delta changes day-to-day. In addition, the 90% threshold means that there will not be a non-linear delta to the Spot VIX, since large moves will be truncated. Consider a period where the Spot VIX starts at 20. It then rises to 34.99. The 75% threshold has not been reached. The next day, the index moves to 50. At this point, the UP investor would get a Distribution (absent UPNIA and DA) that would only account for the first 18 points of the VIX rise. Then next 12 points would not be accounted for. Someone believing they could get UP

exposure to the Spot VIX at 34.99 would only have the first 3.1 points of exposure. All that is premised on the products trading at their CV. It's exponentially more complex when the premium/discount is determined by the Daily Amount and the VIX futures curve.

5. Unlike products that trade at or close to their intrinsic value, the investor needs to know a considerable amount of information at every point in time when investing in the product:
  - a. The investor must know the CV at all times;
  - b. The investor must know the SIF at all times, since that is the insight into the delta of the product;
  - c. The investor must also know how many days there's been a premium or discount, since if there are more than three days of 10% excess, then the Corrective Distribution kicks in.
  - d. The investor must also know where the Spot VIX was at the beginning of the period to account for whether or not there will be a Daily Amount for each day in the month.
  - e. The investor must also pay close attention to the VIX futures curve and try to understand how it relates to the secondary market pricing, since if there are arbitrage opportunities quant shops will be keenly attuned to them.
  - f. The investor must also check their accounts every day to see if there's been a Special Distribution and on every Distribution Date to see what is in his or her account. Is it cash? Is it a neutral basket? Is the investor paying fees on this basket?