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September 8, 2021

Ms. Vanessa Countryman Secretary U.S. Securities and Exchange Commission 100 F Street, N.E. Washington, DC 20549-0609

Re: File No. SR-NYSEArca-2021-29

Dear Ms. Countryman:

On behalf of this firm's client, ConvexityShares, LLC (the "Sponsor"), we appreciate the opportunity to respond to the Securities and Exchange Commission's (the "Commission") request for comments pursuant to Release No. 34-92650 (the "Order") regarding the proposed rule change by NYSE Arca, Inc. (the "Exchange" or "Arca") that would permit the listing and trading of shares of the ConvexityShares 1x SPIKES Futures ETF ("Fund"), a series of ConvexityShares Trust ("Trust"), under NYSE Arca Rule 8.200-E, Commentary .02.

The Sponsor welcomes the opportunity to provide the Commission with information to support approval of the proposed rule change. Section 6(b)(5) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), requires, among other things, that the rules of a national securities exchange be designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to remove impediments to and perfect the mechanism of a free and open market and, in general, to protect investors and the public interest. The Sponsor believes that, based on the information presented in the Trust's Registration Statement for the Fund, this submission and the various other submissions made part of the record in connection with the proposed rule change, it is clear that approving the proposed rule change would be consistent with the Section 6(b)(5) standards.

In particular, the Sponsor would like to distinguish the Fund from recent proposed rule changes that have been blocked by the Commission.¹ In the Stay Orders, the Commission stayed Orders approving the proposed rule changes by Cboe BZX Exchange, Inc., to list and trade shares of each of the -1x Short VIX Futures ETF (the "Inverse VIX Fund") and 2x Long VIX Futures ETF (the "2x VIX Fund" and, together with the Inverse VIX Fund, the "VIX Funds"). The Sponsor is writing to note fundamental differences between the design of the Fund and the VIX Funds that should alleviate any Commission concern with the proposed rule change relating to the Fund.²

¹ See Letters from Assistant Secretary J. Matthew DeLesDernier to Kyle Murray, Assistant General Counsel, Cboe Global Markets, dated March 5, 2021 (the "Stay Orders").

² The Sponsor notes that the Exchange also proposed a rule change with respect to another fund managed by the Sponsor, the ConvexityShares Daily 1.5x SPIKES Futures ETF (the "1.5x SPIKES ETF"). The Sponsor is not writing with respect to the 1.5x SPIKES ETF at this time.

The Fund

As is described in the text of the proposed rule change, the Fund will seek investment results, before fees and expenses, that correspond to the performance of its benchmark index, the T3 SPIKE Front 2 Futures Index ("Index"), an investable index of futures contracts on the SPIKES Volatility Index ("SPIKES Index"). The Index employs rules for selecting the SPIKES futures contracts comprising the Index and a formula to calculate a level for the Index from the prices of these SPIKES futures contracts. Currently, the SPIKES futures contracts comprising the Index represent the prices of two near-term SPIKES futures contracts, replicating a position that rolls the nearest month SPIKES futures contracts to the next month SPIKES futures contracts at or close to the daily settlement price via a Trade-At-Settlement program towards the end of each business day in equal fractional amounts. This results in a constant weighted average maturity of one month.

The SPIKES Index is a non-investable index that measures the implied, or expected, volatility of the SPDR S&P 500 ETF Trust ("SPY") over 30 days in the future. SPY is a unit investment trust that holds a portfolio of common stocks that closely tracks the price performance and dividend yield of the S&P 500 Composite Price Index ("S&P 500 Index"). The SPIKES Index does not represent the actual or the realized volatility of SPY. The SPIKES Index is calculated based on the prices of a constantly changing portfolio of SPY put and call options. The SPIKES Index is reflective of the premium paid by investors for certain options linked to the level of the S&P 500 Index.

Why Any Commission Concerns Regarding the VIX Funds Should Not Apply to the Fund

The Fund employs no leverage and only seeks to track the performance of the Index. The Fund will not buy or sell futures contracts to rebalance the portfolio in response to movements in implied volatility.³ The returns of the VIX Funds are benchmarked to indexes constituting theoretical portfolios of first- and second-month futures contracts on the Cboe Volatility Index ("VIX"). The 2x VIX Fund seeks exposure intended to approximate 200% (2x) of the return of its underlying index, while the Inverse VIX Fund seeks to reflect the returns that are potentially available from holding an unleveraged short position (-1x) in first- and second-month VIX futures contracts. Correlation between daily closes and daily index returns of the SPIKES Index and the VIX are expected to be at least 99% at all times. Therefore, SPIKES futures contracts would be expected to perform similarly to VIX futures contracts and any discussion herein of funds that seek returns benchmarked to indexes of futures contracts on the VIX should be viewed as applicable to the Commission's consideration of the Fund.

The Sponsor suspects that the Commission's policy concerns behind the Stay Orders are related to past volatility experienced by certain investment products that were benchmarked to an index of futures contracts that reference the VIX. The Sponsor recognizes the significant losses experienced in the past by the ProShares Short VIX Short-Term Futures ETF ("SVXY") and the VelocityShares Daily Inverse VIX Short-Term ETN ("XIV"), each of which sought to track the inverse (-1x) of a short-term VIX futures index. Without commenting on the validity of

³ The Fund will only buy and sell futures contracts in connection with inflows and outflows resulting from creation and redemption activity.

Commission concerns with respect to the VIX Funds, we are writing to emphasize that, because the Fund is not a "leveraged" or "inverse" Fund, it is not subject to the risks facing leveraged/inverse funds in concentrated markets that led to the large losses in SVXY and XIV. This ought to distinguish the Fund from SVXY and XIV in ways that the VIX Funds cannot distinguish themselves and, therefore, the Fund should not be caught in the same regulatory review currently facing the VIX Funds.

Leveraged and Inverse Exchange-Traded Products ("ETPs") Have to Rebalance Daily

Leveraged and inverse ETPs that track a certain multiple (other than 100%) of an index's daily return performance must rebalance their portfolios daily, which results in daily purchases and sales of futures contracts.⁴ We will demonstrate using a numerical example. For simplicity, we will ignore the roll between futures expirations, and consider only the total portfolio holdings in a fund as the weighted futures price moves from one day to the next.

First consider a 2x leveraged ETP with initial assets of \$10 million. With a weighted futures price of \$20, it will hold 1,000 contracts in order to have \$20 million of exposure, which is twice its assets (20,000,000/20/1,000 = 1,000 futures contracts, where 1,000 is the futures multiplier). On the next day the futures price jumps to \$30. The value of the futures portfolio increases from \$20 million to \$30 million, making a paper profit of \$10 million. The total asset value of the fund also increases by \$10 million to \$20 million. In order to maintain a 200% exposure, the fund needs to hold \$40 million worth of futures, up from \$30 million before the rebalance. That equates to 1,333 contracts, an increase of 333 lots.

Suppose on the second day, the futures price reverts back to \$20. The futures portfolio suffers a 33% decline, dropping from \$40 million to \$26.67 million for a loss of \$13.33 million. The total asset value of the fund dropped from \$20 million to \$6.67 million. The target exposure is now only \$13.33 million. As a result, the fund needs to sell 667 futures, or half the size of its portfolio. The table below summarizes what happens over the three days.

Day	Futures Price	Portfolio Before Rebalance	Portfolio After Rebalance	Asset Value	Holdings	Net Orders
0	20		\$20,000,000	\$10,000,000	1,000	
1	30	\$30,000,000	\$40,000,000	\$20,000,000	1,333	333
2	20	\$26,666,667	\$13,333,333	\$6,666,667	667	-667

As a result of its need to rebalance daily (i.e. negative gamma), the 2x ETP needs to buy additional contracts as the price rises and sell as the price drops in order to maintain the correct exposure at the end of each day. Over the three days, the 2x ETP has lost 33.3% due to the daily rebalancing, while both the underlying futures price and the 1x ETP would have returned net 0%:

⁴ For simplicity, we say that this daily rebalancing activity generates an inherent "negative gamma" effect. Because the Fund does not have to buy and sell futures contracts in conjunction with movements of the Index, we say that the Fund is "zero gamma."

The concept of gamma originates from options trading. It is defined as the rate of change of an option's delta, given a unit move in the underlying price. Since delta is often interpreted as an option's hedge ratio, gamma can be considered the rate of change of the hedge ratio.

1x ETP:	(1 + 50%) (1 - 33.3%) - 1 = 0%
2x ETP:	(1 + 100%) (1 - 66.7%) - 1 = -33.3%

An inverse ETP will also show a negative gamma effect, even though it does not appear to be leveraged. We will use the identical numerical example, as applied to a -1x ETP. As the futures price jumps from \$20 to \$30, the value of the futures portfolio changes from -\$10 million to -\$15 million while the total asset value of the ETP decreases from \$10 million to \$5 million. In order to maintain a -100% exposure, the size of the portfolio must be cut by two thirds from -\$15 million to -\$5 million. As a consequence, the fund needs to buy back 333 contracts, which is exactly the same action as the 2x ETP.

On the next day when the futures price reverts back to \$20, the value of the futures portfolio changes from -\$5 million to -\$3.33 million while the total asset value of the fund increases from \$5 million to \$6.66 million. As a result, the portfolio needs to double in size to maintain the -100% exposure. To achieve that, the fund needs to sell 167 contracts. Note that this action is also identical to the 2x ETP, which is selling four times the amount because its total asset value was four times the -1x ETP's on the previous day (\$20 million vs. \$5 million). The table below summarizes what happens to the -1x ETP over the three days.

Day	Futures Price	Portfolio Before Rebalance	Portfolio After Rebalance	Asset Value	Holdings	Net Orders
0	20		-\$10,000,000	\$10,000,000	-500	
1	30	-\$15,000,000	-\$5,000,000	\$5,000,000	-167	333
2	20	-\$3,333,333	-\$6,666,667	\$6,666,667	-333	-167

Note that both the 2x and -1x ETPs end up losing 33.3% due to the negative gamma rebalancing:

-1x ETP: (1 - 50%)(1 + 33.3%) - 1 = -33.3%

Issues Affecting SVXY and XIV⁵

On February 5, 2018, after a long period of low volatility that began in 2017, equity market volatility dramatically increased when the S&P 500 Index decreased by approximately 4%. The VIX, a measure of expected future volatility in the S&P 500 Index, reached an historical high that day, which led to large losses in SVXY and XIV. The reasons for these losses and the reasons that the Fund could not be subject to the same risks are explained below.

⁵ The accounts below regarding SVXY and XIV are largely based on the factual background presented in orders on motions to dismiss lawsuits relating to the events described. *See In re ProShares Trust II Secs. Lit.*, 19-cv-0886 (S.D.N.Y. Jan. 3, 2020), and *Set Capital LLC, Stefan Jager, Nikolay Drozhzhinov, Aleksandr Gamburg, ACM, Ltd., et al., v. Credit Suisse Group AG, David R. Mathers, Tidjane Thiam, Credit Suisse AG, Credit Suisse International, et al.*, No. 19-3466-cv (2d. Cir. Apr. 27, 2021). In motions to dismiss, the facts presented in the complaints are assumed to be true, and the defendants may have disputed certain facts if the cases were litigated on their merits. *See also* Christopher Carlson, *Recent 1933 Act ETF Regulatory Developments and Lessons from Recent Market Events*, The Investment Lawyer (Vol. 28, No. 7, Jul. 1, 2021).

<u>SVXY</u>

By 4:00 p.m. on February 5, 2018, the index tracked by SVXY and XIV, the S&P 500 VIX Short-term Futures Index (the "VIX Futures Index") increased by 33% from the prior day's close, and SVXY's closing share price at 4:00 p.m. that day had decreased by approximately 32% to reflect the expected decrease in net asset value. In order to meet its investment objective of tracking the daily inverse of its index, SVXY had to rebalance its portfolio between 4:00 p.m. (when SVXY's listing exchange closed) and 4:15 p.m. (when the VIX futures market closed) to reflect this decrease. For the reasons described above, this resulted in SVXY purchasing VIX futures contracts. SVXY's attempted orders to purchase large amounts of VIX futures contracts in furtherance of its investment objective during this 15 minute window were unsuccessful, however, due to competition with the purchases and sales of other volatility-related ETFs in the same market.

Arca, SVXY's listing exchange, halted trading in SVXY's shares on February 6 due to delays in publishing SVXY's February 5 net asset value. When SVXY's February 5 net asset value was published prior to the open of trading in shares of SVXY on February 6, SVXY's share price decreased from \$71.82 to \$11.11 at the open, which reflected a decrease of approximately 85%.

XIV

XIV exchange-traded notes ("ETNs") were issued by Credit Suisse and these ETNs were designed to track the inverse of the VIX Futures Index. Credit Suisse, as the issuer of the XIV ETNs, had to hedge its exposure for its payment obligations to ETN holders by buying or selling VIX futures contracts. Generally speaking, when the value of the VIX Futures Index decreased, Credit Suisse's payment obligations to XIV ETN holders would increase, which required Credit Suisse to short VIX futures contracts to hedge its position. Conversely, when the value of the VIX Futures Index increased, Credit Suisse had to purchase VIX futures contracts in order to hedge.

Following the 4% decrease in the S&P 500 Index on February 5, 2018, the VIX Futures Index increased, which lowered the value of XIV ETNs. Credit Suisse therefore had to purchase VIX futures contracts to hedge its exposure, which it did over the course of 15 minutes after the close of trading on Arca. Credit Suisse's purchases of approximately 105,000 VIX futures contracts on February 5 represented approximately 25% of the VIX futures market and trading on that market was more than 167 times the usual volume. This created a liquidity squeeze which contributed to a drop in the intraday indicative value (which is a rough intraday estimate of net asset value) of the ETNs from \$72.59 to approximately \$4. As this represented more than an 80% drop from the prior day's closing value, Credit Suisse was permitted to declare an acceleration event under the terms of XIV's ETNs and redeemed the ETN investors at the February 15, 2018 closing value of \$5.99 per note.

The Fund is Not Susceptible to Similar Issues Because It is Zero Gamma

The Fund is not susceptible to the types of market disruptions that led to the losses experienced by SVXY and XIV. The Fund would not engage in the kind of buying or selling of SPIKES futures contracts that SVXY and XIV were forced to engage in in order to rebalance their

portfolios in response to sharp movements of the VIX. Towards the end of each trading day, the Fund will update its total asset value using the latest market prices, and calculate the target futures position for the next day. This will result in rolling a portion of the front-month long futures position into the second-month contract according to the Index's methodology. The portfolio value of the SPIKES futures holdings before and after the roll does not change, except for the effects of contango and backwardation, and it remains the same as the total asset value of the Fund irrespective of price action.

The numerical example below illustrates operation of the Fund. We start with \$10 million in assets, and the entire futures portfolio resides in the front-month contract at the beginning of a 20-day roll cycle. On alternate days, SPIKES futures prices jump between \$20 and \$30 (or any pair of positive numbers). This, somewhat drastic, price action has no impact on the Fund's daily roll orders. On each trading day, 1/20 of the Fund's SPIKES futures front-month contracts (i.e. 25 lots) is rolled into the second-month contract. The Fund does not need to buy more contracts when volatility spikes or sell more when volatility plummets.

Deres	Futures Prices		Weighted	Futures Holdings		Daily ETF Roll Orders		Total Asset
Day	Expiry #1	Expiry #2	Price	Expiry #1	Expiry #2	Expiry #1	Expiry #2	Value
0	20	20	20	500	0			\$10,000,000
1	30	30	30	475	25	-25	25	\$15,000,000
2	20	20	20	450	50	-25	25	\$10,000,000
3	30	30	30	425	75	-25	25	\$15,000,000
4	20	20	20	400	100	-25	25	\$10,000,000
5	30	30	30	375	125	-25	25	\$15,000,000
6	20	20	20	350	150	-25	25	\$10,000,000
19	30	30	30	25	475	-25	25	\$15,000,000
20	20	20	20	0	500	-25	25	\$10,000,000

Instead of merely rolling their futures contracts, leveraged and inverse products, including SVXY and XIV, would have to adjust the number of futures contracts held each day, which was instrumental in their decline in February 2018.

The Sponsor believes that it is instructive to compare the experiences of SVXY and XIV on February 5, 2018, with the experience of the ProShares VIX Short-Term Futures ETF ("VIXY"), which seeks to track the VIX Futures Index. As an unleveraged, index-based fund, VIXY has no inherent gamma and its net order size will always be close to zero regardless of price. Therefore, VIXY did not enter into the VIX futures market as a result in the VIX spike on February 5, 2018. The leveraged and inverse products, however, were forced to buy more contracts as futures prices rise.

The charts below show the relationship between futures price and net order size for VIXY, SVXY and ProShares Ultra VIX Short-Term Futures ETF ("UVXY") on February 5th, 2018, which, as of that date, sought daily investment results that corresponded to two times (2x) the daily performance of the VIX Futures Index. Due to its large size of \$1.9 billion, SVXY was dominant and needed to buy over 100,000 contracts as futures prices exceeded \$25. On a "per

\$billion AUM" basis however, both UVXY and SVXY engaged in the same rebalancing transactions, while, invariably, VIXY was not required to purchase additional futures contracts.



Data Source: I-Volatility (https://www.ivolatility.com/)

The rebalance order from SVXY was substantial compared to average liquidity of VIX futures. During the last two weeks of January 2018, traded volume of the first two VIX monthly futures averaged 265,000 contracts. The two main inverse ETPs (XIV and SVXY) had combined assets of approximately \$4 billion by early February. Their rebalance orders on February 5th likely totaled more than 200,000 contracts. If we include the leveraged ETPs (such as UVXY), the total rebalance order for the day was likely close to 250,000 contracts.



Data Source: I-Volatility (https://www.ivolatility.com/)

The weighted price of VIX futures contracts increased 47% between 4:00 p.m. and 4:15 p.m. on February 5, 2018.

As is noted above, VIXY was not forced to enter the VIX futures market in a way that impacted the futures price on February 5. Likewise, there is no possibility that the Fund would become a buyer or seller of SPIKES futures contracts as a result of movements in the SPIKES Index. We have shown how SVXY's and XIV's negative gamma characteristics are what led to the drastic declines in 2018. Because the Fund exhibits zero gamma, it cannot have a similar experience.

For these reasons, the Sponsor believes that the Fund clearly should not be considered as a comparable product to the VIX Funds and any issues motivating the issuance of the Stay Orders should not be applied to the Fund. The experiences of SVXY and XIV should not be considered indicative of any risk inherent in the Fund because the Fund will behave in a fundamentally different way than SVXY and XIV in response to changes in expected stock market volatility.

Public Policy Weighs In Favor of Commission Approval of the Proposed Rule Change

The Sponsor believes that the approval of the proposed rule change is consistent with Section 6(b)(5) of the Exchange Act because of the benefits it would provide to investors as a new tool for hedging against negative movements in the stock market.

The Fund Would Increase Competition and Lower Costs

The Fund would inject healthy competition into the market for investors seeking to, among other things, hedge against the effects of stock market volatility. The Sponsor notes that the trading of SPIKES futures contracts on a designated futures contract market and derivatives clearing organization required an exemptive order of the Commission.⁶ In granting the exemption, the Commission stated that it was providing the exemption in order to "foster competition as [SPIKES futures contracts] could serve as an alternative to the only comparable incumbent volatility product in the market. Facilitating greater competition among these types of products should provide market participants with access to a wider range of financial instruments to trade on and hedge against volatility in the markets, particularly the S&P 500 Index. In addition, the introduction of an additional volatility product in the market should lower transaction costs for market participants." Likewise, the Fund is designed to provide a lower-cost investment vehicle that will allow market participants to hedge against the effects of volatility (see below) without the costs and complexity of trading the futures contracts themselves. Therefore, approving the proposed rule change with respect to the Fund is essential for achieving the increased competition and lower costs that the Commission sought to promote in granting the exemption for the trading of SPIKES futures contracts.

The Fund is Likely a Supplier of Liquidity

The Sponsor believes that the experience of the VIXY is instructive, as VIXY is an unleveraged fund that seeks to track the performance of an index of futures contracts that reference the VIX. The fund flow pattern of VIXY shows that it is likely used as a hedging instrument by investors against equity downside risk. The chart below indicates that, on average, since January 2011, inflows into VIXY tend to occur when the stock market is steady or rising (i.e. daily return over -1%) on a daily horizon. Redemptions take place when the market undergoes sizable corrections, as shareholders liquidate their position to lock in profits. The size of redemptions becomes significantly larger as the market drop gets deeper.

⁶ Order Granting Conditional Exemptive Relief, Pursuant to Section 36 of the Securities Exchange Act of 1934 with Respect to Futures Contracts on the SPIKESTM Index (available at: <u>https://www.sec.gov/rules/exorders/2020/34-90510.pdf</u>).



Data Source: I-Volatility (https://www.ivolatility.com/)

A similar pattern can be observed over a weekly time period.



Data Source: I-Volatility (https://www.ivolatility.com/)

As a result, the Fund will likely be net buying SPIKES futures contracts when the stock market is steady or rising, and market volatility is steady or declining; and net selling SPIKES futures contracts when the stock market declines and market volatility is rising.⁷ When the stock market drops abruptly, the Fund will likely sell a large quantity of SPIKES futures contracts if there are substantial redemptions from profit-taking investors. In other words, the Fund is likely a supplier of liquidity, with fund flows that tend to run opposite to the direction of the market. It is a desirable characteristic in an environment where liquidity is in high demand but short supply. The Fund will provide competition in this market, which will, among other things, lower costs to investors.

⁷ As explained above, the Fund will only buy and sell futures contracts in response to creation and redemption activity.

The Fund is Negatively Correlated to the Stock Market

Stock market volatility is typically negatively correlated to its price movements. Both the SPIKES Index and the Index tend to fall when the stock market rises, and increase when the market drops. The bar chart below demonstrates this relationship visually using VIX indices.



Data Source: I-Volatility (https://www.ivolatility.com/)

The table below summarizes the strong correlation between the VIX Futures Index, and both the S&P 500 Index (negative) and the VIX (positive). This signifies the tremendous diversification benefit of being long volatility (via the Fund) over a short-term basis. When the Fund loses money, it is likely to be offset by gains in the rest of the typical investor's portfolio.

Median Correlation	S&P 500 vs. VIX Futures Index	VIX Index vs. VIX Futures Index
Daily Returns	-86%	91%
Weekly Returns	-84%	92%

* * *

We very much appreciate the opportunity to comment on the proposed listing and trading of shares of the Fund. Please call the undersigned at with comments or questions.

Very truly yours,

/s/ Eric Simanek

Eric Simanek Partner