

coinbase DERIVATIVES

June 28, 2024

VIA CFTC Portal

Mr. Christopher J. Kirkpatrick
Secretary of the Commission
Office of the Secretariat
Commodity Futures Trading Commission
Three Lafayette Centre
1155 21st Street, NW
Washington, DC 20581

Re: CFTC Regulation 40.2(a) Certification: Listing of 1k Shib Futures Contract

Dear Mr. Kirkpatrick:

Pursuant to Commodity Futures Trading Commission (“CFTC” or “Commission”) Regulation 40.2(a), Coinbase Derivatives, LLC (the “Exchange” or “COIN”) hereby submits for self-certification its initial listing of the 1k Shib Futures contract to be offered for trading on the Exchange on or after July 15, 2024.

Contract Description

The 1k Shib Futures contract (the “Contract”) will be a monthly cash-settled and margined Contract with the following specifications:

Product	1k Shib Futures
Product Type	USD-settled index future
Contract Size	10,000,000 Shib (10,000 x 1k Shib Index)
Displayed Price Example	\$0.02439
Contract Notional	~\$200.00 Contract notional (i.e. ~\$0.00002 x 10,000,000)
Contract Code	SHB
Minimum Tick Size and Value	Min tick size: \$0.00001 per Shiba Inu Min tick value: \$0.10 per Contract
Listed Contracts	3 nearest monthly Contracts
Daily Settlement	Daily Settlement: 3:00 PM CT 1. 1-min VWAP of futures Contract rounded to the nearest tradable tick 2. 1-min TWAP of futures Contract midpoint of the bid/ask rounded to the nearest tradable tick 3. If a two-sided market is not available during the sixty (60) seconds prior to 3:00 PM CT, then the Settlement Price will be the Market Vector Coinbase 1k Shib index value - (difference between previous day's index value and previous day's futures settlement)

Final Settlement	<p>Final settlement price of the expiring Contract will be the value of the Market Vector Coinbase 1k Shib benchmark reference rate at 4:00 PM London time, calculated and disseminated by Market Vector. Contracts will be cleared by Nodal Clear.</p> <p>The index value is determined using a 2-hour settlement window, MVIS breaks the period into 40 3-minute intervals. In each of these intervals, MVIS aggregates all trades and volume from the constituent exchange and calculates a volume weighted median price for the interval. The settlement is based on a simple average of the 40 volume weighted median prices calculated.</p> <p>Should any abnormal activity occur during the settlement window, any combination of the following measures will be considered:</p> <ol style="list-style-type: none"> 1. Should the index provider detect an abnormal price during the settlement window, the price shall be removed from the calculation 2. Should the Coinbase Derivatives Command Center determine the settlement price is not representative of the market, it will manually settle the Contract using sources of historical data and prices on other exchanges and indexes.
Price Fluctuation Limits	10% of hourly calculated reference price
Last Trading Day	Trading terminates at 4:00 PM London time on the last Friday of the Contract month. If that day is not a business day in the U.S., trading terminates on the preceding day that is a U.S. business day.
Position Limits	30,000 SHB Futures
Large Trader Reporting	25 contracts
Trading Hours	5:00 - 4:00 PM CT Sunday - Friday, with a trading halt from 4:00 PM - 5:00 PM CT Monday - Thursday.

Contents:

- I. Shib Market Overview
- II. Contract Description
- III. Volatility
- IV. Analysis of Deliverable Supply
- V. Compliance with Core Principles

I. Shib Market Overview

Shiba Inu (SHIB) is a decentralized cryptocurrency that emerged in August 2020 as an experiment in community-driven projects. SHIB has quickly gained popularity, especially within the realm of meme coins. Shiba Inu aims to build on the success of Dogecoin by fostering a vibrant community and developing a robust ecosystem around the token.

Shiba Inu operates on the Ethereum blockchain, leveraging the security and functionality of the Ethereum network. This ERC-20 token was initially designed to be abundant, with a total supply of one quadrillion SHIB tokens. Half of these tokens were sent to Ethereum co-founder Vitalik Buterin, who subsequently burned a significant portion and donated the rest to various charities, significantly impacting the token's supply and distribution dynamics.

In addition to its meme coin status, Shiba Inu is also focusing on real-world applications and expanding its utility. The team behind Shiba Inu has announced plans for Shibarium, a Layer 2 solution aimed at improving scalability and reducing transaction fees on the Ethereum network. This development is expected to enhance the usability of SHIB and related tokens, making them more practical for everyday transactions and decentralized applications (dApps).

As the cryptocurrency market evolves, Shiba Inu's combination of community-driven development, expanding ecosystem, and strategic initiatives positions it as a noteworthy player among meme coins. While it remains highly speculative and volatile, the ongoing efforts to enhance its functionality and real-world applications may contribute to its long-term sustainability and relevance in the crypto space.

II. Contract Description

The 1k Shib Futures Contract is a cash-settled Contract based on the Market Vector Coinbase 1k Shib Benchmark Rate ("Index"). This Index tracks the price of Shib traded on the Coinbase, Inc. spot exchange. Market Vector is an Index Provider based in Frankfurt, Germany and is regulated by the Federal Financial Supervisory Authority ("BaFin").

Each Contract represents 10,000,000 Shiba Inu. The Exchange will initially offer the three front months of the Contract for trading.

III. Volatility

Shiba Inu (SHIB) is a relatively volatile asset. Several factors contribute to its volatility, including its relatively lower market cap, the meme coin nature of the asset, and its strong community-driven price movements. Since the start of 2022, the 30-day trailing standard deviation of daily price changes for SHIB has averaged 5.2%. Volatility spikes occur periodically, similar to other meme-based digital assets like Dogecoin.

While SHIB's price action is highly volatile due to the factors mentioned above, the Exchange has managed both periods of prolonged volatility and unexpected spikes in volatility in its existing products without market interruptions and with ample continuous liquidity. The Exchange is prepared to deploy its proven risk controls, applied to all of its listed products, including daily price limits, price banding, exposure limits, kill switches, and margin levels that appropriately reflect the volatility of SHIB.

SHIB's current 30D volatility is approximately 3.5%. Under comparable timeframes, other commodities have experienced realized volatility levels that are in line with SHIB's realized volatility. For reference, current Bitcoin and Ethereum 30D volatility are around 1.5%.

Since launch, the Exchange has had multiple instances of successful management of high volatility environments in its existing commodity contracts, as Bitcoin volatility was above 4% and Oil volatility was above 5% in 2022.

IV. Analysis of Deliverable Supply

Shib has a limited supply of 1 quadrillion tokens. There are 589T Shib tokens currently in circulation, which represent the deliverable supply.

Given that each COIN Shib cash-settled Contract represents 10M Shib, a single Contract is <0.000002% of the deliverable supply.

To set position limits, the Exchange will be referencing the position limits to market cap ratio for existing crypto currency futures such as its Bitcoin contracts and adjusting downwards.

The Exchange will set the position limit to 30,000 SHB futures, which is equivalent to 300B SHIB. With a \$0.00002 price of SHIB, this is equal to \$6.0M notional, which would be 0.05% of the SHIB market cap, currently at \$11.8B.

As a comparison, COIN Bitcoin Futures position limits are currently 0.10% of the Bitcoin market cap. The proposed SHB position limits would be 50% lower as a percentage of the underlying asset's market cap.

V. Compliance with Core Principles

The Exchange has reviewed the designated contract market ("DCM") core principles ("Core Principles") set forth in the Commodity Exchange Act and has identified that the Contract may most directly implicate the following Core Principles:

Core Principle 2 -- Compliance with Rules

Trading in the Contract is subject to the Exchange Rulebook (the "Rulebook") including Chapter 5, which prohibits fraud, non-competitive trading, market manipulation and abusive and disruptive trade practices. Additionally, as with all contracts traded on the Exchange, trading will

be subject to monitoring and surveillance by the Market Regulation Department, which has the authority to investigate and enforce Exchange Rules, as described in Chapter 7.

Core Principle 3 -- Contracts Not Readily Subject to Manipulation

The 1k Shib future is based on the Market Vector Coinbase 1k Shib Benchmark Rate, which will be published starting in July 2024. MV Index Solutions GmbH (“MVIS”) is governed by the European Benchmark Regulation (the “EUBMR”) and supports the International Organisation of Securities Commissions (IOSCO) “Principles for Financial Benchmarks” (the IOSCO Principles). COIN has a licensing agreement for the use of Market Vector for Coinbase 1k Shib futures. Market Vector manages the governance and oversight of the Index, as described in Appendix A below. COIN has signed an information sharing agreement with Coinbase, Inc. to allow the Exchange to request spot market data when necessary. Given that the Shib token is traded on multiple exchanges both in the United States and abroad, and the manner in which the Index is calculated, it would be difficult, if not impossible, to manipulate the price of the underlying market in a way that would affect the futures Contract. In addition Coinbase, Inc. has in place an experienced surveillance team and policies and procedures to detect suspected manipulation in the spot market. Given this oversight, the Index is not readily subject to manipulation.

Core Principle 4 -- Prevention of Market Disruption

Chapter 5 of the Rulebook prohibits Participants from manipulating, distorting the price of, and disrupting the settlement process of the Contract. As with all contracts traded on the Exchange, trading in the Contract will be subject to monitoring and surveillance by the Market Regulation Department. Further, trading in the Contract shall be subject to price fluctuation limits. In addition, the Index Provider uses a Methodology which makes potential manipulation of the underlying spot market unlikely to have an effect on the Index price.

Core Principle 5 -- Position Limits or Accountability

The Contract shall be subject to a position limit of no more than 30,000 1k Shib futures, or 300B SHIB, with a reportable level of 25 Contracts.

Core Principle 7 -- Availability of General Information

The Exchange shall publish on its website and in its Rulebook the specifications, terms and conditions of the Contract.

Core Principle 8 -- Daily Publication of Trading Information

The Exchange shall publish on its website on a daily basis the trading volumes, open interest, and price information for the Contract.

Core Principle 9 -- Execution of Transactions

The Contract shall be listed for trading on the Exchange’s trading system, which provides for efficient, competitive, and open execution of transactions.

Core Principle 10 -- Trade Information

All requisite trade information shall be included in the audit trail and is sufficient for the Market Regulation Department to monitor for market abuse.

Core Principle 11 -- Financial Integrity of Transactions

The Contract shall be cleared by Nodal Clear, LLC, a CFTC registered derivatives clearing organization subject to the CFTC regulations related thereto.

Core Principle 12 -- Protection of Markets and Market Participants

Chapters 4 and 5 of the Rulebook require all market participants, including futures commission merchants (“FCMs”) carrying customer accounts, to observe high standards of integrity, market conduct, commercial honor, fair dealing, and just and equitable principles of trade and prohibits, among other things, fraud, non-competitive trading, market manipulation, and abusive and disruptive trade practices. As with all contracts traded on the Exchange, trading will be subject to monitoring and surveillance by the Market Regulation Department.

Core Principle 13 -- Disciplinary Procedures

Rulebook Chapter 7 sets forth the rules and procedures for the investigation, enforcement, and sanctioning of persons that violate the Exchange’s Rules.

Core Principle 14 - Dispute Resolution

Disputes related to the Contract are governed by Chapter 8 of the Rulebook, which provides for arbitration procedures overseen by the National Futures Association.

Certification

The Exchange has spoken with FCMs and market participants who support the decision to launch a Shib Contract. The Exchange is not aware of any substantive opposing views to the Contract. The Exchange certifies that the Contract and related rules certified herein comply with the Commodity Exchange Act and the rules and regulations promulgated thereunder.

The Exchange certifies that this submission has been concurrently posted on the Exchange’s website at: www.coinbase.com/derivatives.

If you have any questions or require any further information, please contact me at jane.downey@coinbase.com.

Sincerely,

/s/

Jane Downey
Chief Regulatory Officer

Attachments:

- Appendix A Market Vector Coinbase 1k Shib Benchmark Rate Index Methodology
- Appendix B Amendments to COIN Rulebook Chapter 11
- Appendix C Amendments to COIN Rulebook Chapter 5

APPENDIX A

Market Vector Coinbase 1k Shib Benchmark Rate Index Methodology

The Market Vector Coinbase 1k Shib Benchmark Rate (“Index”) is produced by Market Vector Indexes of Frankfurt, Germany, an affiliate of Van Eck Associates Corporation (“MVIS”). The Index is calculated and disseminated in USD and tracks the price of 1k Shib as traded on the Coinbase, Inc. spot exchange.

Advisory Board

The MVIS Advisory Board is governed by the Rules of Procedure for the Advisory Board. The Advisory Board is responsible to supervise and advise the Managing Directors of MV. The approval of the Advisory Board is required for certain important decisions.

Independent Oversight Function

MVIS has implemented an Independent Oversight Function (“IOF”) that consists of employees of the Legal and Compliance department of VanEck (Europe) GmbH. Some of the key task and responsibilities of the IOF are:

- Periodic review of the Index Guide and Methodology;
- Review and approval of the procedures for index cessation;
- Oversee third parties involved in the provision of the indices, including calculation or dissemination agents;
- Assess internal and external audits or reviews, and monitor the implementation of identified remedial actions; and
- Monitor input data and contributors and MVI’s related actions in challenging or validating contributions of input data.

Managing Directors

MVIS has two Managing Directors (MD), the Operations and the Shared Services MD. The roles and responsibilities of the two different MDs are documented and serve to ensure mitigation of conflicts of interest and enhance governance standards. The Managing Directors are responsible for the ongoing review and monitoring of compliance with MVIS’ policies and procedures by all involved parties and the notification of possible breaches or incidents to the IOF.

The MVIS 1k Shib Benchmark Rate Index is not Subject to Manipulation

The Index is calculated as an average of 2-hour quantity weighted median prices, which are calculated for 40 3-minute intervals. The Contract price is determined by using a median price, which filters out any prices that might be considered outliers, either high or low.

$$Index\ Value = \frac{1}{n} \sum_{i=1}^n M(i).$$

where the quantity weighted median price for each interval i is

$$M(i) = \begin{cases} p_{i,k} & \text{if } k \text{ satisfies } \sum_{j=1}^{k-1} q_{i,j} < \frac{1}{2} \sum_{j=1}^{J_i} q_{i,j} \text{ and } \sum_{j=k+1}^{J_i} q_{i,j} \leq \frac{1}{2} \sum_{j=1}^{J_i} q_{i,j}, \\ p_{i,1} & \text{if } q_{i,1} \geq \frac{1}{2} \sum_{j=1}^{J_i} q_{i,j}, \\ \frac{p_{i,k} + p_{i,k+1}}{2} & \text{if } \sum_{j=k+1}^{J_i} q_{i,j} = \frac{1}{2} \sum_{j=1}^{J_i} q_{i,j}, \end{cases}$$

with the number of intervals calculated as the total index time window divided by the interval window:

$$n = \frac{T}{b},$$

and

- $p_{i,j}$ = j th price in i th interval,
- $q_{i,j}$ = j th quantity/volume traded in i th interval,
- J_i = number of trades in i th interval,
- b = interval window for the calculation of the median prices,
- n = number of intervals,
- T = total index time window for the calculation of an index price.

The set of trades for the total index calculation consists of transactions occurring within the total index time window as follows:

$$\theta_t = \{a_{i,j}(s_{i,j}, p_{i,j}, q_{i,j}) | t - T \leq s < t\},$$

with

- θ_t = set of trades for the calculation of the index price at time t ,
- $a_{i,j}$ = trade j in trade set A_i ,
- $s_{i,j}$ = time of trade $a_{i,j}$.

Each interval consists of a subset of trades of θ_t :

$$A_i \subset \theta_t$$

A_i being the set of trades for the calculation of the median price in interval i , where each trade $a_{i,j}$ within A_i is sorted by price $p_{i,j}$ in ascending order and it holds that trades occur within the interval window as follows:

$$A_i = \{a_{i,j}(s_{i,j}, p_{i,j}, q_{i,j}) | (t - T) + (i - 1)b \leq s < (t - T) + ib\}.$$

Due to the sheer number of times the price is recalculated, and the use of median prices, any attempt to manipulate the price of the Index would be extremely difficult. In addition to the calculation safeguards, MVI has procedures in place to prevent manipulation, MVIS has a number of policies and procedures in place to ensure a fair marketplace. MVIS has instituted measures to investigate and correct a potentially erroneous price due to bad data, late or delayed transactions and non-reporting exchanges. Incorrect or missing data is corrected immediately.

Disruptions with calculation agents are handled by Compliance and Senior Management at MVIS. MVIS will communicate any error to all affected clients. In addition, if MVIS identifies any conduct that may involve manipulation of an index by calculation/dissemination agent, it will report this to its regulator, BaFin.

The Exchange has in place an agreement with Coinbase, Inc. to share information and trade data occurring on Coinbase, Inc. in connection with regulatory inquiries. This agreement gives the Exchange the opportunity to investigate activity in the spot market which may have an impact on the listed futures Contract.

How Settlement is Calculated

During the 2-hour settlement window, MVIS breaks the hour into 40 3-minute intervals. In each of these intervals, MVIS aggregates all trades and volume from the Coinbase, Inc. spot exchange and calculates a volume weighted median price for the interval. The settlement is based on a simple average of the 40 volume weighted median prices calculated.

APPENDIX B

Additions underscored; deletion are ~~struckthrough~~

CHAPTER 11: CONTRACTS

* * *

RULE 1114. 1k Shib Futures

- (a) Scope. Rule 1114 is limited in application to the trading of the 1k Shib futures (“SHB Contract”). In addition to Rule 1114, the 1k Shib Contract is subject to all Rules of the Exchange as applicable. Unless otherwise stated, all times referred to herein are Central Time Zone. The relevant index for the SHB Contract is the MarketVector™ Coinbase 1k Shib Benchmark Rate (“Index”), as calculated and disseminated by MarketVector Indexes GmbH as the index provider and calculation agent (the “Index Provider”).
- (b) Trading Schedule. The 1k Shib Contract shall be offered for monthly trading in the front three (3) months during such hours as the Exchange shall determine from time-to-time.
- (c) Contract Size. The Contract size is equal to the price of 10,000,000 Shib.
- (d) Price Increments. The minimum price increment shall be 0.00001 Index points (\$0.10 SHB Contract).
- (e) Position Limits, Position Accountability, and Reportable Levels. Pursuant to Rules 530 to 533 and subject to the requirements and exceptions therein, the 1k Shib Contract is subject to the following:
 - (1) Position Limit. 30,000 SHB Contracts.
 - (2) Reportable Level. 25 SHB Contracts.
- (f) Price Fluctuation Limits. Trading in the SHB Contract shall be subject to price fluctuation limits. If a price fluctuation limit is reached on the lead month of SBH Contract, all related instruments will be halted. If a price fluctuation limit is reached on the non-lead month SHB Contracts, only the specific instrument which reached the price fluctuation limit will be halted.
 - (1) Each hour, a Reference Price is calculated for each Contract using the Lead Month settlement procedures outlined in Rule 906(b)(ii)(1) (the “Reference Price”).
 - (2) A 10% up and down price limit will be applied to that Contract’s Reference Price.
 - (3) The market will enter a halt state for two (2) minutes if a price fluctuation limit is reached. Orders can be submitted, canceled, and amended during this state but no matching will occur.
 - (4) If a price fluctuation limit is reached, the new Reference Price will be the last price fluctuation limit for the remainder of that hour.

- (g) Termination of Trading and Expiration. Trading terminates at 4:00 PM London time on the last Friday of the Contract month. If that day is not a Business Day, trading terminates on the preceding day that is a Business Day (“Termination of Trading”). Expiration will occur the same Business Day as the Termination of Trading for the Contract.
- (h) Settlement. The SHB Contract is cash settled.
- (1) Daily Settlement Price of the Contract, which is an Exchange Futures Contract based on a crypto currency, will be determined pursuant to the process set forth in Exchange Rule 906(b)(ii).
 - (2) On the day of expiration, the Final Settlement of the Contract, which is an Exchange Futures Contract based on a crypto currency, will be determined pursuant to the process set forth in Exchange Rule 906(c)(ii).
 - (3) Final Settlement. Clearing Firms holding open positions in an expiring SHB Contract at the Termination of Trading shall make or receive payment in accordance with the rules of the Clearing House.
- (i) Forks. In the event of a hard fork, the SHB Contract will settle to the Index. The Exchange may, in its sole discretion, take alternative action with respect to hard forks in consultation with its Index Provider, its Clearing House and its market Participants.
- (j) Disclaimer.

The MarketVector™ Coinbase 1k Shib Benchmark Rate is a trademark of MarketVector Indexes GmbH and its affiliates (collectively “MarketVector”). MarketVector or MarketVector’s licensors own all proprietary rights in the MarketVector™ Coinbase 1k Shib Benchmark Rate. MarketVector is NOT affiliated with Coinbase Derivatives, LLC, and neither approves, endorses, reviews or recommends the SHB Contract. MarketVector does not guarantee the timeliness, accurateness or completeness of any data or information relating to the MarketVector™ Coinbase 1k Shib Benchmark Rate, and neither shall be liable in any way to Coinbase Derivatives, LLC, investors in the SHB Contract or other third parties in respect of the use or accuracy of the MarketVector™ Coinbase 1k Shib Benchmark Rate or any data included therein.

APPENDIX C

Additions underscored; deletion are ~~struckthrough~~

CHAPTER 5: TRADING PRACTICES AND BUSINESS CONDUCT

* * *

RULE 533. Position Limit, Position Accountability, Reportable Level, and Volume Threshold Level Table

The reportable levels for all Contracts covering Position Limit, Position Accountability, Reportable Level, and Volume Thresholds will be made available to Market Participants.

Product	CDE Code	Contract Size	Aggregate Into Futures	Aggregate Ratio	Exchange Reporting Level	Position Limit
Nano Bitcoin Futures	BIT	0.01	BTI	100 BIT = 1 BTI	25	20,000 (BTI Aggregate)
Bitcoin Futures	BTI	1	BTI	N/A	25	
Nano Ether Futures	ET	0.1	ETI	100 ET = 1 ETI	25	40,000 (ETI Aggregate)
Ether Futures	ETI	10	ETI	N/A	25	
Bitcoin Cash Futures	BCH	1	BCH	N/A	25	14,000
Litecoin Futures	LC	5	LC	N/A	25	10,000
Dogecoin Futures	DOG	5,000	DOG	N/A	25	20,000
<u>1k Shib Futures</u>	<u>SHB</u>	<u>10,000,000</u>	<u>SHB</u>	<u>N/A</u>	<u>25</u>	<u>30,000</u>
Gold Futures	GOL	1	GOL	N/A	200	600,000
nano Crude Oil Futures	NOL	10	OIL	10 NOL = 1 OIL	350	40,000 three (3) days prior to the end of trading in the spot month
Micro Crude Oil Futures	OIL	100	OIL	N/A	350	40,000 three (3) days prior to the end of trading in the spot month