

To: Chair Paul Atkins, SEC
Interim Chair Caroline Pham, CFTC

From: Ian Weisberger, CEO Coinroutes & Co Founder
David Weisberger, Board Member - CoinRoutes

We are pleased to comment on several of the issues to be discussed at the upcoming Joint SEC CFTC Roundtable on Regulatory Harmonization Efforts. While there are good reasons to harmonize rules and coordinate efforts between the agencies in the oversight of interconnected Futures and Equities markets, the need to regulate Digital Assets brings it to a new level. As you are aware, there are crypto assets that are deemed to be commodities, there is a robust swap/futures market on those assets and there will be assets deemed securities. As a result, unlike traditional finance, there will be transactions between spot commodities and securities that requires a new regulatory approach.

In addition, the crypto market structure has evolved without regulation, yet it functions extremely well for institutional investors. Arguably, it has become an excellent laboratory for understanding how markets would function in the absence of rules such as legislated tick sizes, prohibitions on locked or crossed markets, trade through protection and fee caps.

At CoinRoutes, we have a unique perspective into the functioning of crypto spot and derivative markets worldwide. Our firm, founded over 7 years ago, is a market leader in the provision of algorithmic trading software having facilitated over \$500 Billion in notional value traded, across spot and derivative products. CoinRoutes processes multiple terabytes of market data every day and connects to all the major US and international exchanges.

While many commenters will tell you the crypto markets are not “orderly” and are ripe for manipulation, our data shows them to be very transparent with lower barriers to entry than either futures or equity markets under Regulation NMS. In fact, our recent transaction cost analysis (TCA) shows that institutional orders using our algorithms can be handled at much lower trading costs than for similar sized orders in regulated markets. For example, in 2025, CoinRoutes handled over \$12 billion in unconstrained spot crypto comprising more than 3000 large institutional orders with an aggregate total execution cost of under 5 basis points from the aggregated “far” side of the market. This result, which compares quite favorably to NMS institutional order slippage, was achieved, despite markets that are consistently crossed, without any tick size constraints, or prudential regulators looking for market manipulation. In overseas perpetual swap markets, CoinRoutes software executed over \$65 billion across over 22,000 large, unconstrained, institutional orders at an average *improvement* of 1.7 basis points from the “far” side of the market. Such performance would be impossible in the current US futures markets where market makers have a virtual monopoly at trading inside of the spread.

As a result of this experience, we urge caution in considering “normalization” of regulation that would result in higher crypto trading costs in the U.S. while helping overseas competitors. We will go into more detail as we comment on three of the topics you plan to discuss in your roundtable.

Promoting Fair and Orderly Markets

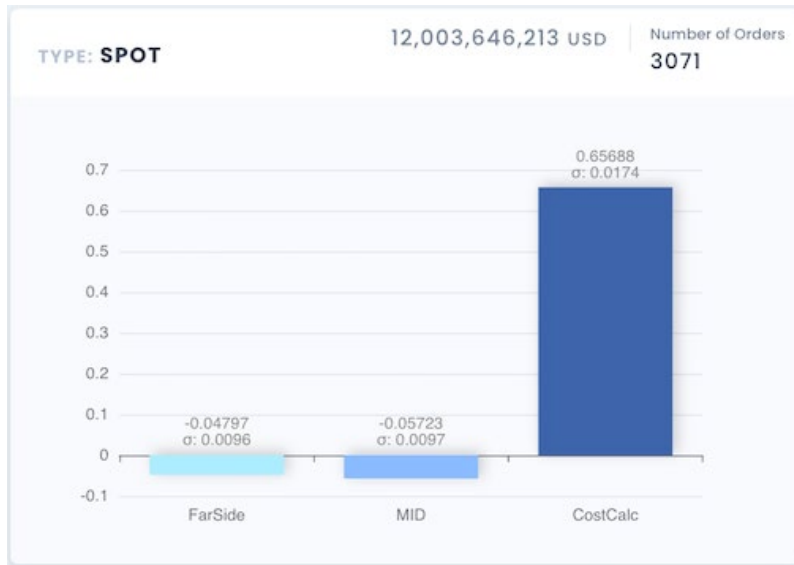
The bulk of our commentary is on this question, as CoinRoutes is in the business of helping our clients execute at low cost, with low market impact in both spot and derivative markets. Considering those markets best align with the SEC and CFTC respectively, we will discuss spot in the context of securities regulation and the perpetual swap markets in the context of futures regulation. In both sections we will start with a comparison of the market structures and then share actual execution statistics for CoinRoutes clients.

Spot Market Market Structure, Compared to NMS Securities

There are three main differences between the crypto spot markets and equity markets under Regulation NMS: zero intermarket regulation, no tick size regulation and no fee regulation. The result of these differences is a market with no substantive queueing at price levels, many more price level / market combinations and a requirement to consider fees in all routing decisions, particularly as markets on a gross basis are almost always crossed.

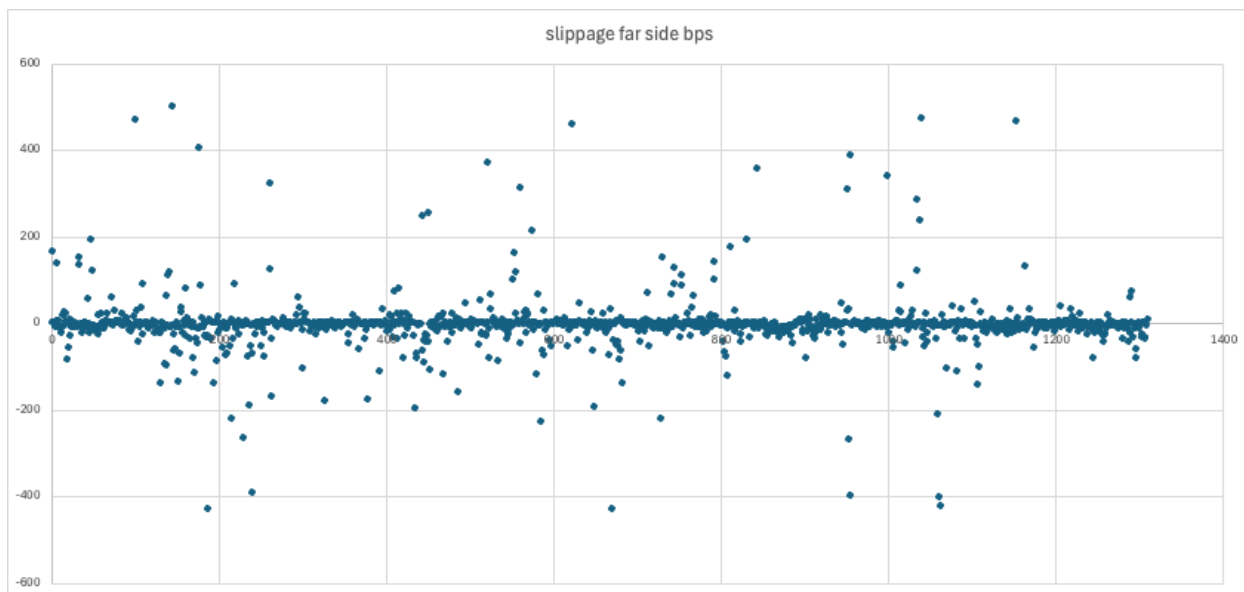
1. Queueing - In the crypto market it is virtually unseen to have significant order size across multiple orders at the same price at the same time. We have not calculated the percentage of time recently, but it was less than 1/100th of 1 percent when we last measured this and have no reason to believe it has changed as the tick sizes are so small, relative to the price of the asset, that it is much cheaper to price improve than to try and “race” orders to the exchange. The result is less emphasis on high frequency trading based on speed and a more competitive market that has lower barriers to entry.
2. More Market Data - To illustrate this point, we used CoinRoutes book aggregation service to determine how many individual price/exchange combinations were within 1% of the midprice for Bitcoin, which, considering its volatility, is a reasonable proxy for what trading algorithms might consider. On average, this number ranges between 500 to 1000 unique combinations per side of the order book. As a reference, standard equity algorithms rarely look beyond 5 price levels in their decision making, so the difference is substantial. From a regulatory perspective, this shows how the crypto markets have much more order competition than equities, proving that Reg NMS is likely counterproductive in its stated goal of increasing it.
3. Fees are unconstrained - To understand the magnitude of this, consider that the average institutional fee for top clients in spot crypto is 2 basis points (0.02%). Considering the tick size for Bitcoin, as the largest asset, is 1 cent (\$.01), that means the lowest fees charged, at today's price of \$115,000, is \$23, which is 2300 times the minimum tick. This compares to equity markets where access fees are a fraction of the tick size and is why

markets always appear to be crossed, but when fees are taken into account are not. We would suspect that market structure experts from the equity world would look at this situation and declare it “messy” and hard to navigate. The results we have shown at CoinRoutes, however, clearly disprove that assertion. As stated earlier, CoinRoutes clients achieved excellent results as shown here:



Notice the chart shows three benchmarks, the far side, the midprice and the CoinRoutes cost calculator. The far side shows lower slippage than the midprice, which is indicative of the fact that the offer price, on average for these orders, was 0.8 basis points lower than the bid price on a gross basis. Considering the size of these orders, it was also true that the average size available on the bid or offer was a miniscule fraction of the order size. That is shown in the outperformance of the cost calculator by over 65 basis points. That software uses the instantaneous aggregated order book to create the benchmark and is a rough approximation of what optimal smart routing would have achieved. To the extent that commenters point to the available liquidity being too thin for institutional trading, this disproves that assertion.

It is also instructive to look at the distribution of the performance. In the aggregate, the average slippage on an equal weighted basis was actually 3.66 basis points, while the standard deviation was 90 basis points indicating the volatility of the market. That said, the following dot plot shows consistent performance for the large majority of these institutional orders. This is indicative of a market with high predictability, particularly with respect to the volatility of the assets.



The point we are trying to make is not to extol the virtues of the CoinRoutes platform, however. It simply demonstrates, with modern technology, the market can adapt to a market structure deemed chaotic and unruly. It also shows, there is potentially a real risk of liquidity fleeing the U.S. if it becomes much cheaper to trade on markets that are not subject to over-regulation.

Perpetual Swap Market Structure, Compared to Listed Futures

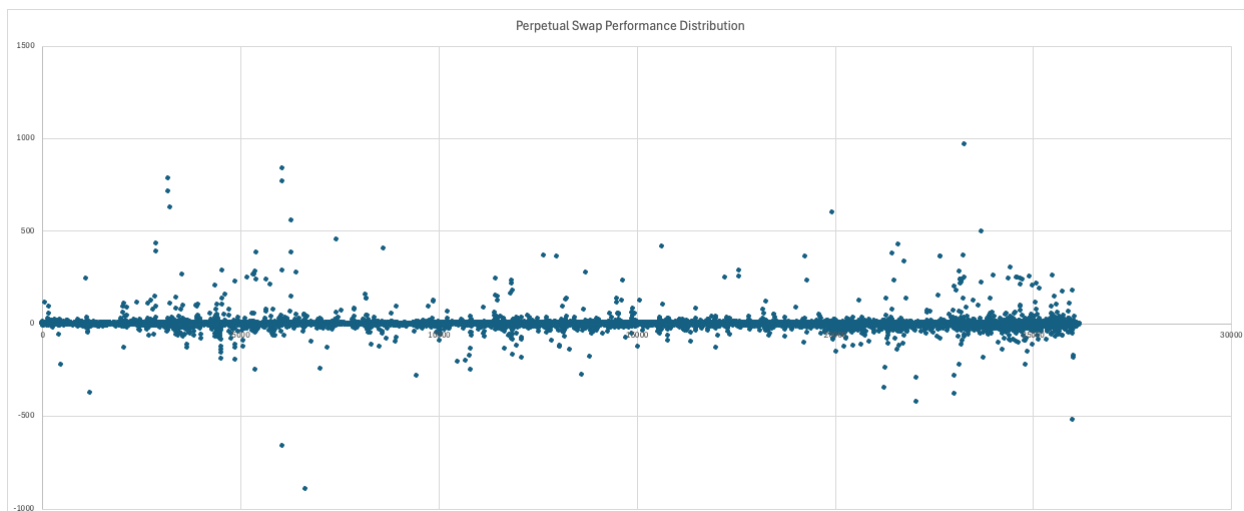
The main difference between the CFTC regulated futures markets and the perpetual swap markets overseas is direct client access. All the markets have tick sizes set by the exchanges and all are single counterparty markets insofar as it is very hard to manage margin across platforms. The perpetual swap exchanges, in general, do have smaller tick sizes, however and by allowing clients to connect directly, have more order competition. To put this in perspective, the average tick size for Bitcoin perpetual swaps is 10 cents, and that is, quite often the spread observed in each market. At the same time the tick size for the CME Bitcoin future is 5 dollars or 50 times higher, with observed spreads often much larger, albeit for much larger size.

Putting this tick size difference in perspective, here is a chart of CoinRoutes client performance for institutional sized orders on perpetual swap exchanges:



Notice that the performance vs the Far side shows more outperformance than vs the Mid price, which is due to the fact that the bid is always below the offer price on the individual exchange used. That said, the 1.7 basis points of outperformance is particularly important to contextualize as the average spread is much lower than for CME products. The larger outperformance of 6.5 basis points vs the cost calculator is indicative of the liquidity on the perpetual swap markets compared to spot, where the performance was roughly ten times higher. This leads to the conclusion that the perpetual swap market structure is extremely efficient and provides a valuable service to those firms looking for low cost hedging or speculation.

As with spot, we looked at the distribution of this performance as well. In the swap market, the average, unweighted, order showed a slippage of under 2 basis points and the standard deviation of performance was roughly 25 basis points. This consistency is shown in the following dot plot that shows more outliers with positive performance driving the weighted outperformance:



Public Dissemination of Trade Data

While it may not always be as it is today, the crypto markets are more transparent than traditional markets. Crypto exchanges publish their full order books and trade feeds for free, while on-chain data provides much more insight into large movements than traditional SEC filing data. In response to the lack of “official” consolidated data, many companies, including CoinRoutes, have created their own consolidation, while a number of firms take the publicly available data to do the same thing. If the SEC or CFTC contemplated the creation of a consolidated tape, however, it is important to point out how important fees and disparate tick sizes would complicate that endeavor. Due to those factors, different firms with different fee tiers at various exchanges would see the same data differently. That would limit the utility of such a feed for the average investor, while the existence of numerous free sources of data make it unnecessary.

It is also worth noting that supporting Best Execution reporting (Rule 605) was a major use of consolidated data in the equity markets. Due to the differences between the markets noted earlier, a consolidated tape would not be as useful in crypto, particularly since it would not likely be superior to any of the public sources of data. At the same time, firms such as CoinRoutes produce our own best execution reporting and the public data available would allow the leading firms in the space to do so broadly.

Monitoring of Underlying Markets

There is certainly scope for improved monitoring of crypto markets, particularly for manipulative behaviors such as “momentum ignition” as well as surveillance of potential conflicts of interest.

Such monitoring could improve investor confidence in the market, which would improve liquidity and smooth out some of the volatility.

The key, however, to momentum ignition surveillance would be to aggregate the data of both derivative and spot exchanges together, which does not exist today in the equity markets. The reason this could be important is that the derivative markets have more liquidity, but those markets and their participants use the spot price on reference exchanges for determining risk. Thus, if an unscrupulous participant builds up a sizeable position long spot and short perpetual swaps, for example, it is possible for them to profit by dumping the spot first, particularly during illiquid periods, and then buying back the perpetual swaps after a wave of liquidations was triggered. This past weekend, there was a Sunday night / Monday morning liquidation cascade in the crypto markets that might have been the result of such a trading strategy. According to coinglass.com, over \$1.6 Billion in notional value was liquidated, although it is worth pointing out over 75% of the liquidations were in less liquid assets than Bitcoin. Were there coordinated surveillance between the largest perpetual swap exchanges and spot markets, intentional selloffs would likely be uncovered and participants would be more confident in the integrity of the markets.

Conclusion: While there are many structural issues to work out over the long run as more assets become tokenized, it is important to let innovation continue in the crypto markets themselves. As more data becomes available to the regulators, we believe that it will become readily apparent to the participants in legacy financial markets that the current regulatory environment is overly prescriptive. As a result, we would suggest caution on how to regulate the digital asset markets in the U.S., by focussing on issues such as market integrity via surveillance and promoting the concept of best execution.

