UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF NEW YORK

UNITED STATES OF AMERICA, - v. -

AVRAHAM EISENBERG,

Defendant.

23 Cr. 10 (AS) 24 Cr. 251 (AS)

AVRAHAM EISENBERG'S SENTENCING MEMORANDUM

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SANFORD TALKIN NOAM GREENSPAN Talkin Muccigrosso & Roberts, LLP 40 Exchange Place, 18th Floor New York, New York 10005 BRIAN KLEIN ASHLEY MARTABANO RILEY SMITH Waymaker LLP¹ 515 S. Flower Street, #3500 Los Angeles, California

¹ Waymaker LLP represents Mr. Eisenberg only in connection with 23 Cr. 10 (AS).

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Defendant Avraham Eisenberg ("Avi" or "Eisenberg")² respectfully submits this Sentencing Memorandum for the Court's consideration in determining his appropriate and reasonable sentence in the above-captioned case. Defendant objects to the United States Sentencing Guidelines ("Guidelines") calculation set forth in the Presentence Investigation Report ("PSR") and asserts numerous objections as detailed below. For all the reasons set forth in this memorandum, a sentence well below the applicable guidelines range is sufficient, but not greater than necessary, to satisfy the sentencing goals set forth in 18 U.S.C. § 3553.

INTRODUCTION

Though still in his third decade, Avi has already lived an extraordinarily complicated life shaped in large part by the strictures of his upbringing and his struggles with **Second**. From the time he was a small child, two things have been readily apparent about Avi: (1) he possesses an extremely high level of intelligence, and (2) he struggles to conform to social norms of behavior. The combination of these characteristics have shaped the lens through which he sees the world and through which the world sees him.

While Avi, largely as a result of his extreme intelligence, has managed a small number of (exclusively male) friendships, he has few close relationships. Moreover, he struggles with social cues and social situations and operates outside certain social norms until they are explained to him in a manner he can understand. Avi's thinking is linear and directed at problem solving, and he struggles with nuance and is thus sometimes delayed in understanding why people or groups disapprove of him or his behavior. Throughout his formative years, he was subject to instances of physically abusive

² Conforming to the defense summation, Defendant is referred to as "Avi," the nickname used by his family, friends, and counsel, in the first portions of this memorandum, which discuss his personal background and thought processes relating to the offense. In the latter portions of the memo, pertaining to legal arguments and objections, he is referred to by the more formal "Eisenberg."

various religious schools he attended, as well as being bullied, **by** other children. All of these traits and experiences have shaped Avi into who he is today and contributed to the legal situation that he, a fundamentally decent person, finds himself in.

Avi has pled guilty to the child pornography charge in violation of 18 U.S.C. § 2252A ("CP Charge") contained in the Information filed under case number 24 Cr. 251 and accepts full responsibility for his conduct. His time for self-reflection while incarcerated

have provided Avi with the opportunity and tools to effectively understand the causes and impact of the behaviors that led to this conviction and have provided him the ambition and knowledge to avoid recidivism. He is reflective about not only his serious transgressions but also the reductive thinking that allowed him to justify his absolutely unjustifiable behavior. He eagerly wishes to work with therapists to reinforce the gains he has made.

Avi was also convicted, after a trial by jury, of the charges in the Indictment in 23 Cr. 10—commodities fraud, commodities manipulation, and wire fraud (collectively "Crypto Charges")—relating to his trades on the cryptocurrency trading platform Mango Markets. The circumstances of these Crypto Charges are easily differentiated from those of most frauds. Avi reviewed several similar crypto trades in the months before, including one rather similar trade on Mango Markets, noting that no litigation or legal action had been pursued against the traders who profited, and concluded that his conduct was entirely permissible under the MNGO smart contract. He also believed that all the users of Mango Markets would be made whole from the design of the protocol which included an Insurance Fund to address transactions which caused a

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loss on the protocol, and ultimately ensured this by voluntarily and promptly returning approximately \$68 million worth of cryptocurrency.

Looking back, Avi understands that he had tunnel vision regarding the trades. Though he continues to challenge the legal validity of the jury's verdict (and is not waving any other objections), he nevertheless has regrets about his conduct. In his letter to the Court, he writes that he viewed his online trading as a challenge without sufficiently considering the real-world impact on others and provides additional support for a downward variance.

Enduring the daily horrors of living in the Metropolitan Detention Center, Brooklyn ("MDC") for the past year and half, including lockdowns, inedible food, witnessing fights and experiencing the consequences of multiple murders there has caused Avi to appreciate that his actions, regardless of his motivations, have dire consequences. His very difficult time at the MDC should also be factored into the Court's sentence.

Overall, Avi has learned many important life lessons and in his letter to the Court pledges, "I won't break any more laws. I don't want to be in this situation again, and I don't want to hurt anyone."³

This memorandum is comprised of three portions. The first is a discussion relating to the factors courts are to consider pursuant to 18 U.S.C. § 3553, focusing on Avi's background and the specific circumstances of the charged conduct. The second portion includes a discussion of the shortcomings of the particular Guidelines provisions applicable to this proceeding and a comparison with other sentences, which have varied down from the guidelines range, in crypto and market manipulation cases. The final portion includes factual and legal objections to the

³ Avi's letter to the Court is attached as Exhibit A.

PSR. For all the reasons stated below, the Guidelines vastly overstate Avi's culpability, and a sentence well below the applicable Guidelines range is just in this case.

DISCUSSION OF 18 U.S.C. § 3553(a) FACTORS

1. Personal Background

Avi was born on July 4, 1995 and is now 29 years old. PSR ¶ 98. At the time of the offense conduct, he was twenty-seven. His father is self-employed and works in finance and his mother is a pediatrician with her own medical practice. *Id.* He has five siblings, one older sister, one younger sister, and three younger brothers. PSR ¶ 99. His siblings range in age from 31 to 10. *Id.* Avi was born in Manhattan, but he grew up primarily in Rockland County, New York. His upbringing was middle class and his family was and remains close. Nevertheless, Avi, as he has in almost every social setting, often struggled mightily to fit in, eventually rebelling against the extremely strict rules of the ultra-Orthodox lifestyle of his family.

In an extremely informative yet heart-wrenching letter of support,⁴ Avi's mother, Sarah Eisenberg, a medical doctor, writes that Avi could solve "multiplication and division problems in kindergarten," an age when most children are still learning how to count. By the time he was in middle school, he taught himself calculus, and shortly thereafter earned a perfect SAT score with negligible study. His father, Chaim, writes that he was "the smartest person in the room" and could "take any side [of a debate] and present it convincingly" such that it was "impossible for me to win an argument with him." His grandmother, Susan Cohen, recalls that "[a]s a young boy ... he read all [of his mother's] medical books." His cousin, Rochel Leah Marinelli, recalls Avi's "natural talent for mathematics" which he used to help her with her high school math homework "[d]espite being several years younger than me." Another older cousin, Nechama

⁴ Letters of support from family and friends are attached collectively as Exhibit B

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Sternberg, recalls babysitting Avi as a tenth grader and telling him "we'd play a game after I finished the practice test" for the regents exam." Avi "helped me with all the math examples so that I'd be ready to play sooner."

All the while, Avi struggled socially and interpersonally. His mother relates that "he was a late talker and often expressed frustration physically, sometimes biting other children when he couldn't articulate his emotions." His father writes that "around the age of 5 or 6, we began to notice that he struggled with peer interaction. He seemed awkward, was often a loner, and rarely made eye contact." His mother writes that "Avi struggled to relate to his peers . . . often misread[ing] social cues, and the neighborhood boys would go inside when Avi came out to play." She further recalls that at age six Avi "

Avi still "struggled to relate to his peers," according to his mother. She also notes that Avi "had few friends growing up, and as a teenager, him learn to interpret social cues, maintain eye contact, and express empathy, but these interactions remained difficult for him." Avi writes that "[t]hrough elementary and high school, I was regularly bullied. I learned to run away when attacked and tried to avoid fights, often unsuccessfully."

Avi developed coping strategies, finding that he could relate to other boys who were social outsiders, especially ones who were several years older than him and thus on a similar intellectual level. Many of his friends and family describe his love for walks and intellectual conversation. Avi has always craved knowledge, and this has allowed him to connect with others. Many of the letters of support express how to this day his main means of connecting with others is through thought-provoking and often philosophical conversation. Several letters also

note that Avi's preferred means of letting others know he is thinking about them is often to send articles or book recommendations he thinks will be of interest.

Though it was more difficult for him than most, Avi did cultivate what his father recalls as "a small number of close friends who appreciated his gentle demeanor and sharp mind." One of those friends, a neighbor named Meir Fishman, writes about the significance to him of Avi's friendship, despite Avi being six years younger. Fishman writes that at the time, "I found myself struggling with challenges relating to personal identity, self-doubt, feelings of loneliness, and uncertainty about the future." Seeking a meaningful outlet for these feelings, Fishman cultivated a relationship with a nine-year-old Avi and "found that in the few times I discussed my thoughts with Avi, his penetrating insight helped untangle the web of internal confusion that was gnawing at me, offering a clarity I desperately needed." The two friends started a routine where they would talk for forty-five minutes every morning before school "work[ing] through whatever topic [Fishman] wanted to analyze." Fishman writes that even after Avi moved out of the neighborhood to go to college, he "consistently checked in to see how I was progressing, always offering gentle, thoughtful advice, often accompanied by a reference article he thought I might find interesting and useful." He calls Avi "a one-in-a-million person, possessing a rare and unique combination of extraordinary brilliance, deep insight, and an incredible work ethic."

Another childhood friend, Ari Gross, describes a similar dynamic. He states that "[e]ven though I am much older than Avi, that has never impeded our friendship" because Avi "has always respected people for who they are and for what they are interested in." He recalls that "Avi would walk with me and others for extended periods of time debating and discussing any

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random topic just to reach the truth of the matter" in conversations that "would range from deep religious and philosophical points to computer science and anything else."

Pessy Sloan, a close friend of the family and associate professor of clinical and social psychology at Daemen University, writes that "Avi displayed characteristics

"whose "brilliance in mathematics was accompanied by significant social difficulties, which often led to struggles in his academic and personal life." She writes that "his school experience was far from fulfilling" as his teachers in his ultra-Orthodox schools were "unable to meet his unique needs" and his "struggl[e] to fit in was a source of great distress for Avi and his family throughout his childhood." Avi agrees with this assessment, recalling that he "felt unfulfilled in school" as he was "many years ahead of the curriculum in the secular classes." Sloan continues by noting **Security of the security of the s**

Avi's uncle, Solomon Eisenberg, writes that Avi's "social interactions are often awkward, and he finds it difficult to initiate or maintain friendships. This isolation is a constant source of pain and frustration for Avi [who] longs for connection and understanding but lacks the social tools to achieve it." Rabbi Yechiel Richard, the Eisenberg family's congregational Rabbi for over twenty years, writes of his deep connection to Avi. He recalls Avi's childhood "experience[s] with bullying and isolation" and writes that he "always tried to encourage him." Rabbi Richard recalls seeking Avi's help "[w]hen we needed last minute assistance with Torah reading" during religious services or "to help me with my sermons," and writes that he has "spent many hours talking to him." Long-time neighbors Naftali and Chaya Amel write that they have long been impressed with the fact that "the Rabbi, a noted scholar, had a close connection

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with Avi." Another of the community's religious leaders, Chaplain Srulie Toiv, Director of the Jewish Heritage for the Blind, writes that he, too, has benefited from Avi's "ideas on solving problems or improving products" and has "incorporate[ed] his suggestions in my work assisting the visually impaired."

Despite his interpersonal challenges, family and friends who have gotten to know Avi describe him as gentle and kind. Though they tend to find his manner of relating to them unusual, they also describe him as thoughtful. Moreover, Avi's experience with the criminal justice system, and the extremely trying experience of being incarcerated at the notorious MDC for almost one-and-a-half years (two-and-a-half years total incarceration), particularly for someone like Avi who struggles with forced interaction and is sensitive to light and touch, has fundamentally transformed his worldview and caused him to have a deeper understanding of his potential to contribute to society and of society's expectations.

Though he has managed to connect with some of the community's religious leaders, Avi expresses in his own letter a complicated relationship with his Orthodox Jewish upbringing. He describes his rearing as "a very religious and sheltered environment" and details the ways in which non-Orthodox and popular culture were excluded from his surrounding, including by his being forbidden from "play[ing] or even communicat[ing] with non-Jewish non-Orthodox people, including our neighbors." He also describes the strict segregation between the sexes, noting that he was "not allowed to even look at a girl with a short skirt, or with a shirt with short sleeves," and that his schools, including college, were "gender segregated." He was "not to socialize at all with girls, and . . . could not have any contact with someone of the opposite

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gender, even so much as a handshake." He writes, "I had very little exposure to modern culture, and I have long found it very awkward to talk to women."

In his own letter, Avi describes what he calls the "very religious and sheltered environment" of the ultra-Orthodox Jewish community of Rockland County, New York in which he was raised. He writes about a childhood in which he was forbidden from consuming popular culture or talking to children outside his community and in which his interaction with women was limited by extremely strict codes of modesty and propriety.

Avi writes that he dislikes physical contact and believes this aversion may be
He recalls an elementary school
Rabbi/teacher
He further remembers being afraid of the principal of that school, who was
known to use corporal punishment on students and was later convicted of federal child abuse
charges. In middle school,

Id.

Avi also observes that his views on sex have been shaped by his religious upbringing which strictly forbade any "contact with girls [**1999**]" and taught that "sinners will suffer horribly in Hell." Avi describes feeling that "everything associated with sex [i]s wrong" and feeling great shame when he first discovered pornography as an adolescent. When he was about sixteen or seventeen, Avi chose to discontinue strict observance, a decision his parents disagreed with but nevertheless respected. PSR ¶ 101.

After attending a series of religious primary schools, Avi attended a religious boarding school in Colorado but returned home in tenth grade because he felt academically unfulfilled; instead pursuing independent study and attaining his GED equivalence in 2014. PSR ¶ 113. Avi moved away from home in 2015 to attend Yeshiva University in nearby New York City. PSR ¶ 114. The decision to stop being strictly observant contributed to his motivation to move away from home. PSR ¶ 101. During his freshman year, he began an e-commerce business selling goods primarily on Amazon. The business did well almost immediately with millions of dollars in revenue per year. PSR ¶ 116. Unfortunately, Avi's business's success spurred an unfair and unethical backlash from some of his competitors who, as Avi writes, "started a campaign to harass me off of the Amazon platform" with false complaints alleging that he "was selling counterfeit products." Amazon expelled him from its site and seized his inventory, leaving him "hundreds of thousands of dollars in debt" while still in college. He recalls this being "a very difficult time for me." Though Avi would win his suit against Amazon and was awarded \$775,000, PSR ¶ 116, litigation took over two years at great expense, and, as Avi writes, "I was left to start essentially from scratch."

Molson Hart got to know Avi during this period, as both were Amazon sellers. Hart writes that he quickly noticed that Avi "is missing certain awareness when it comes to people," but could tell that "in his unique way he cares about people." Avi traveled to Austin, Texas and New York to visit Hart and his wife—amusing them both with a discussion of "how he was eating lots of sardines and walking around his apartment in circles to create a caloric deficit"—and "came to listen" when Hart "testified before Congress about Amazon." Hart continues that

Avi has "always kept his word" and that "[w]henever he found an article that was relevant to my interests, he would send it to me," showing, in his unique way, that he cared.

Rather than go back into e-commerce, Avi switched his focus to cryptocurrency, which appealed to his analytical nature and utilized his computer programming abilities. Over the next few years, Avi successfully found a career path in crypto trading and even became a well-known commentator in that space.⁵

After starting Yeshiva in 2019, Avi moved home with his parents in March 2020 during the Covid-19 pandemic. In 2021, Avi moved to Puerto Rico, where he found a small community of like-minded people, many of them also cryptocurrency enthusiasts and traders.⁶ Avi ultimately completed his coursework and earned his BA from Yeshiva in 2022. Though he lived in Puerto Rico for less than two years before his arrest, this was the phase of Avi's life where he was most successful in forming relationships with peers. Carlos Gonzalez, a real estate agent and community guide, writes that Avi was "commit[ed] to embracing Perto Rico as his home" and "immersed himself in understanding our traditions." Gonzalez writes that Avi began to learn Spanish, "volunteered to help organize community cleanups at beaches," and "support[ed] local businesses." Assaf Urban writes that "[d]espite social differences that initially made connection challenging," he came to understand that Avi truly yearned for self-improvement including what was for him a challenging "goal[] to establish a family." Urban "personally helped guide [Avi's] fitness and nutrition journey" and recalls "Avi's infectious enthusiasm during movie outings" and "boyish excitement" during outings like river diving. Zvi Goldstein, to whom "Avi [also]

⁵ See, e.g., http:///twitter.com/Sebblki/status/1524341967102038017 "@avi_eisen Avraham you saved my and my family's life savings. . . you are the reason I have a good lucking [sic] future rather than hell now." (May 11,2022, produced as R03_002296.txt).

⁶ In part due to its favorable tax laws, Puerto Rico has become a hub for the crypto industry and is reputed to have the highest concentration of crypto tokens of any place in the world. Nitasha Tiku, <u>"Crypto colonizers' in Puerto Rico try to sell locals on the dream,"</u> *The Washington Post* (January 13, 2022).

expressed a desire to get married . . . and start a family," writes that he was impressed by Avi's "extraordinary ability to master new topics [and] unmatched persistence." Yotam Nadler also notes Avi's desire to have a family, writing that this was "a strong uphill battle for him due to [his social] limitation." Despite Avi's awkwardness, Nadler "found him to be a fascinating conversation partner" and the two would "often discuss topics around crypto concepts," including Avi's thoughts regarding "ethical and social impact considerations towards every action he took."

Even though he has been arrested and incarcerated for the last two plus years, Avi's family has remained deeply committed to him. His mother attended every day of his trial last Spring, and his father would join her when his nerves would permit it, otherwise sitting and waiting in the car outside the courthouse. They regularly try to visit, though that has been difficult at the MDC where Avi's assigned visitation period is on Friday afternoons and evening, which his mother writes "has made it impossible for us to see Avi for several months" due to their "observing the Sabbath."

Avi's mother relates that "even now, his communications with me are often formal and focused on practical matters rather than personal connection." Nevertheless, she writes that "Avi's siblings admire him and respect him greatly" and that he has been missed both on a day-to-day basis and on special occasions. His father writes that Avi "has been calling me several times a week while incarcerated, but the repeated recording reminding us that the call is from a federal prison is a painful reminder." His sister Leah Biala writes that Avi always "enjoyed hearing my thoughts and opinions," and she "fel[t] good that my older brother . . . wanted to be part of my life"; "no one can replace Avi and everything he means to me." His brother Menachem Eisenberg writes that Avi is "visibly missing at [family] special occasions and we are

hoping that he will be back soon." His sister Esther Kranz recalls quarantining with Avi during the Covid lockdown with her husband and children and the family bonding as Avi helped her set up a makeshift workspace in their parents' house and directed her "to books discussing tax topics and business management, as I'm a CPA," then seeking "feedback" and discussion about these suggestions. His aunt and uncle, Chaya and Eliyahu Neiman, relate that Avi "always took time to come to family gatherings" and "would often bring along little gifts to distribute to his younger cousins." Avi's father writes that "Avi's absence has been profoundly felt." His mother agrees, "As a family, we are incomplete without him."

2. <u>Circumstances of the Crypto Charges Meriting a Downward Variance</u>

There are a number of important circumstances relating to the Crypto Charges that differentiate Avi's offense conduct from that of most individuals convicted of fraud that support the requested sentence significantly below the Guidelines. These include, but are not limited to: (1) that he researched the legality of the MNGO trade and found ample reason to draw the conclusion (which was rejected by the jury's verdict) that the trade was not illegal; (2) that he acted in an environment where the practice of actively identifying and exploiting vulnerabilities or "bugs" in cryptocurrency platforms is commonplace and financially rewarded; and (3) that he intended to, and did, repay a substantial amount of the money he obtained well before he was charged with any offense. None of these circumstances are offered as an excuse. These facts do, however, help inform the Court regarding Avi's mindset and motivations when executing the trades, and they significantly differentiate his case from the vast majority of frauds and market manipulations and provides a compelling basis for a downward variance.

Before his MNGO trades, as he states in his letter and as is demonstrated by trial evidence and discovery, Avi researched several other similar cryptocurrency trades, including

the COPE liquidation in 2022, the Venus liquidation in 2021 and the Rari Ichi liquidation the following year.⁷ The most noteworthy of these precedents was his analysis of the COPE liquidations on Mango Markets in July 2022. In the article that ultimately served as the authoritative recap of Avi's MNGO trades—including confirming his identity as the trader —a prominent commenter using the moniker "Austerity Sucks" compared his trades and the COPE incident as follows:

Some actors were executing baby versions of a variation of the attack — where COPE was being pumped on FTX to impact the market value of COPE holdings, in order to pull USDC out of the system — on the order of \$500K taken. It did not directly involve a PERP, but the core mechanisms of the exploit were the same: build a position on Mango, pump underlying cash markets to manipulate oracle, and take out a loan against it to pull off platform. This is about 2.5 months before the MNGO-PERP Avi exploit.⁸

Mango Markets users, including Tyler Shipe, testified at trial regarding their awareness of the

COPE incident. Tr. 417.9 James Casey recalled that one of his first reactions to seeing Avi's

trading in real time was to post on the chat app Discord that it appeared "similar to what

happened when COPE spiked up on Mango a few months ago." Tr. 823. Though the size of the

COPE-related withdrawals were significantly smaller, Avi writes that he took note of the fact

that "Mango did not sue anyone for not repaying debt in connection with the COPE trades, nor

did they suggest that it was illegal, or against Mango's rules." Avi further writes that he "figured

that if the COPE trades, which made around a million dollars, were legal, then a larger trade

would also be legal."¹⁰ Indeed, strong evidence that Avi was unconvinced that his trading was

⁷ A review of Avi's cell phone that was seized by the government reveals that he searched the COPE/MNGO trade numerous times on October 9, 2022.

⁸ "Thoughts on \$110M Mango Markets Exploit" <u>https://medium.com/@Austerity_Sucks/thoughts-on-110m-mango-markets-exploit-10e3d01ab0b5</u> (Oct. 15, 2022).

⁹ "Tr." refers to the trial transcript.

¹⁰ The defense recognizes that the jury concluded with respect to Count 1 that Avi's trading was willful and therefore with a "with a purpose to disobey or disregard the law." Tr. 1498. The defense has made a Rule 29 motion, which is currently pending, challenging the sufficiency of the evidence relating to this conclusion. *See* Tr. 943.

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illegal may have been the fact that well after the trading was over and Avi was in Israel, he continued to research the law on market manipulation and other potentially applicable legal concepts. *See*, *e.g.*, GX-121A, 122A.

A related important circumstance of the offense is the overarching atmosphere of normalcy, if not acceptance, in the cryptocurrency community towards the identification and exploitation of weakness or "bugs" in protocols and smart contracts, as well as what Mango Market's own terms of service stated. Avi operated in this environment of exploration and pushing the envelope to identify smart contract weaknesses. He does not contend that community attitude toward identifying bugs alone justifies his actions, but he points out that his actions were taken in a place where social norms often accepted such behavior, and the line between acceptable and prohibited conduct could be difficult to delineate. Further, the Mango Markets user interface, which deliberately did not include any terms of use, informed users that the protocol "is unaudited software, use at your own risk" and required users to check a box that they "understand and accept the risks." GX-1010. These circumstance make cases like this and others relating to cryptocurrency substantially different from cases dealing with traditional banking and trading markets.

Moreover, when investment techniques in traditional markets push the envelope, Congress and regulators have provided clarity, as they did regarding spoofing, which had long been considered suspect but was definitively outlawed with the passage of Dodd-Frank. *See* Meric Sar, "Dodd-Frank and the Spoofing Prohibition in Commodities Markets," *Fordham Journal of Corporate and Financial Law*, Vol. 22, Iss. 3 (2017). By contrast, there has not yet been such regulatory or legislative guidance regarding crypto. As a result, Avi's conduct and his motivation for the charged conduct is categorically different than that of others convicted of

fraud and market manipulation. This fact, of course, is not offered as an excuse, but it does distinguish this case from others not relating to cryptocurrency.

The concept of "bugs" was so prevalent in cryptocurrency at the time of Avi's trade that an industry wide standardized system of providing rewards for identifying flaws in the code, known as "bug bounties," was in place. GX-1110.¹¹ In its documentation, Mango Market informed its users that it was offering ten percent of the value of bugs that, among other things, "drain the contract's holdings." *Id.* Similarly, the documentation states, "The code has been looked over by volunteers, but there has not been a formal audit. While there are bounties offered for responsible disclosure of potential vulnerabilities, there is no guarantee that the hackers will choose the bounty over a profitable exploit." *Id.* at USAO_SDNY_01_00018483.¹² Mango Markets' own documentation therefore recognized both that users would look for ways to exploit the platform, a common practice in the industry, and that an exploiter may not submit to the Mango Markets bug bounty process.

Because of this permissive attitude, the reaction of the crypto community—and particularly those familiar with MNGO—to Avi's trades was decidedly mixed on the point of whether his actions had been legal and/or acceptable. While some believed Avi's trades were criminal, many others were not so certain and some even believed his actions were proper because he simply followed the terms of the smart contract. Perhaps the most prominent commentator was Austerity Sucks, who in the above-described article (a well-informed and contemporaneous dissertation of Avi's trades) wrote, "I do not think he should be criminally

¹¹ See page bates stamped USAO_SDNY_01_00018483, "Severity of bug bounties 'based on Immunefi's classification system."

¹² It is important to note that Avi's conduct was indisputably not a hack and better characterized as an exploit of what the smart contract explicitly permitted. The word "hackers" was used by Mango Markets to include individuals that find bugs without "hacking."

charged per se."¹³ This opinion was rendered even though Austerity Sucks made a disclosure, at the beginning of the article, that he is biased in favor of Mango Markets because, "I am a MNGO holder, have been a member of the DAO, and involved in the project from very early on." Moreover, a fact that Austerity Sucks did not disclose in this disclaimer was that he was an advisor to the Mango Markets founders, was issued tokens from the treasury when Mango Markets was founded, and regularly spoke to the founder, including in the immediate aftermath of Avi's trades.

Numerous others agreed, and many of them offered a more full-throated defense of Avi's conduct. On the Discord thread dedicated to Mango (produced by the government in discovery under the label R03 0016091.csv), the following posts were made

2022-10-12 10:21:10.321000+00:00 ichi#0707 Not really an "exploit" or a "hack". He simply followed the protocol rules. He has no contractual obligation to repay a negative balance.

2022-10-12 10:27:39.971000+00:00 abnor#9069 the protocol itself allowed for this to happen

2022-10-12 10:27:32.689000+00:00 abnor#9069 this was a Mango feature, otherwise they would've patched it 7 months ago, when it was initially reported

2022-10-12 02:00:52.298000+00:00 swappadoodledooooo#5389 its [sic] not borrowing against perp position its borrowing against unrealised profit earned on the position...

Similar sentiments were expressed on the "CSP" Discord thread (produced by the government in

discovery under the label R03_0002296.csv), a chat of sophisticated cryptocurrency investors,

many of whom knew Avi, and included the following:

2022-10-12 04:28:36.631000+00:00 JohnBe#9746 they just didnt [*sic*] have any safeguard against price manipulation despite knowing it was a risk

¹³ "Thoughts on \$110M Mango Markets Exploit" <u>https://medium.com/@Austerity_Sucks/thoughts-on-110m-mango-markets-exploit-10e3d01ab0b5</u> (Oct. 15, 2022).

2022-10-12 04:28:18.778000+00:00 JohnBe#9746 protocol literally worked as intended by devs

2022-10-12 04:27:30.640000+00:00 CrunchWrapSupreme#1469 avi did nothing wrong

2022-10-12 05:21:52.216000+00:00 Bodo#0453 Hate to be that guy, but someone has to say it... In this case the code worked as expected and the "attacker" played within the rules of the game. Except they "won" too much. That's not supposed to happen.

2022-10-12 05:23:21.860000+00:00 mahnamahna#6508 but i agree he used the protocol as it was intended to be used

2022-10-12 05:23:52.987000+00:00 Danski#5149 Yeah like what he did was within the bounds of the protocol so they're kinda at fault too

2022-10-12 06:05:53.382000+00:00 JohnBe#9746 since its [sic] not a rug or hack really

2022-10-12 06:08:30.905000+00:00 Danski#5149 He didn't really blatantly steal it

2022-10-12 06:08:09.013000+00:00 JohnBe#9746 the borrowing worked as intended

2022-10-12 06:07:54.503000+00:00 JohnBe#9746 the oracle worked as intended

2022-10-12 08:53:46.053000+00:00 FlyTheAire#1485 I'm sure this can be spun as a crime, but feels like dumbfucks getting what they deserve. Feel bad for the customers

https://twitter.com/ichimikichiki/status/1580101237122682880

I wouldn't call him a "hacker". He simply traded an opportunity that took advantage of the rules as the exchange had set them. If anything, it's the exchanges [*sic*] negligence that is to blame for this.

While this public commentary is far from a definitive statement of the law, and to be sure, there

were others who took the position that Avi had broken the law, the tenor of the discussion

demonstrates just how unsettled the law was and that Avi's own mindset that his conduct was

defensible and non-criminal was hardly singular or irrational.

Additionally—as the government would presumably concede—Avi made no extravagant purchases after the trades. By all accounts, Avi led a modest lifestyle. These facts demonstrate that Eisenberg's primary motivation in executing the trades was not greed, as is typically in fraud and market manipulation, but rather the challenge of proving that the platform had flaws that could be exposed and the plaudits from the on-line crypto community that come from such an achievement.

Another distinguishing feature of this case is that Avi has paid back or has arranged to pay back every individual or entity that lost money by virtue of the MNGO trades, the specifics of which are discussed in greater detail below. Relatedly, at all times Avi was convinced that no individual would suffer financial harm and that he ensured that this was so by returning approximately \$68 million dollars' worth of assets very shortly after trade. He entered negotiations to achieve this goal within hours of executing the trade and completed the repayment just a few days later.¹⁴

Between 7:00 pm and 8:00 pm on October 11, 2022, Eisenberg completed his MNGO trades. In less than two hours, and well before he was identified as the person that executed the MNGO trades, Avi commenced negotiations that were resolved early the next day that, as he wrote at the time, left Mango Markets with "a healthy 30M treasury and achieves our shared goal of making users whole, with any profits paid out of the insurance fund as per the protocol design." GX-912.¹⁵ Ultimately, Avi agreed to return cryptocurrency worth approximately \$68 million and the Mango DAO Treasury agreed to cover the remaining "bad debt" and agreed "not

¹⁴ The defense does not contend that this repayment qualifies as a "credit against loss" as discussed in Application Note 3(d)(i) of U.S.S.G. § 2B1.1 for repayments made "before the offense was detected." However, as set forth in his Objections to the PSR below, this fact does not limit his other arguments regarding loss amount.

¹⁵ This and other marked email exhibits reflecting the negotiation between Avi and representatives of the Mango DAO regarding repayment between October 11 and October 13, 2022, GX-902 – GX-913, were not offered into evidence and are attached collectively as Exhibit C.

to pursue claims in the legal system against you." Id.

As Avi describes, he "prioritized coming to an agreement quickly so that all users would get paid back quickly" and "did not prioritize keeping as much money as possible." Avi always expected that the public would learn his identity because he had used a Circle account in his own name, but he was surprised by how quickly his identity was exposed and by some of the threatening backlash that followed. As a result of the chatter online, he realized he was at risk both physically and legally, and he chose to leave the country, flying to Israel the next day. Once he landed, he immediately concluded the negotiations with the Mango DAO and returned the agreed-upon assets. Repayment sufficient to make individual victims whole, especially well before any charges are filed and in the amounts repaid here, is extremely rare. Additionally, since arrest, Eisenberg has directed that enough funds be held in an escrow-type account that he does not personally control earmarked for further repayment if such payment is warranted once all issues regarding restitution are resolved. All of these circumstances, whether considered individually or collectively, support a substantial downward variance from the applicable Guidelines range.

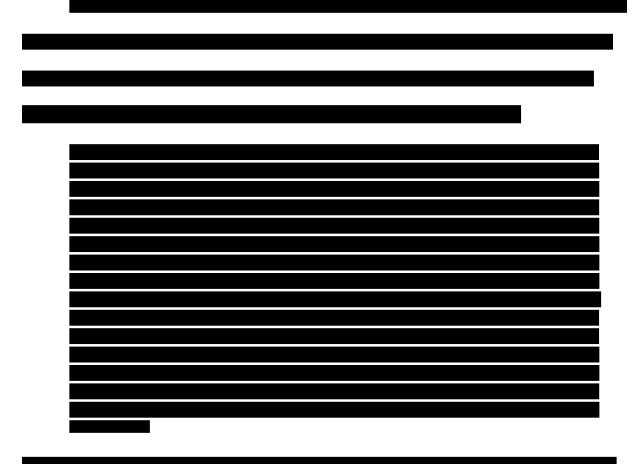
3. <u>Circumstances of the CP Charge Meriting a Downward Variance</u>

Avi's personal background, his openness to therapy and support, and his unlikeliness to recidivate are all circumstances of the CP Charge that suggest a substantial downward variance is warranted, as does his pre-indictment acceptance of responsibility.

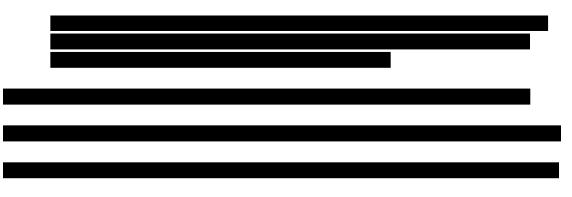
Avi explains in his letter to the Court that due to the strict teachings of his childhood, he initially considered all depictions of sexual activity so extremely sinful that he made no distinction between child pornography and adult pornography. As he grew older and became less religious, he began to understand that it was illegal and, as he writes, at first came to regard

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possession of child pornography as "a vice like drug or alcohol addiction, with the primary victim being myself." He has since, particularly since his arrest, evolved considerably and understands that "my actions were harmful and there were real victims. I was just fooling myself to pretend otherwise." Armed with this new perspective, Avi writes that he is prepared to seek out therapy and to approach his self-betterment with the same laser-like focus and unmatched work ethic his supporters describe in their letters.



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For this reason,

Eisenberg respectfully requests that the Court recommend that he be placed in the Sex Offender Treatment Program - Nonresidential ("SOTP-NR") which is 9-12 month program that consists of cognitive-behaviorally based psychotherapy groups with sessions totaling 4-6 hour a week.¹⁷ The program is available to prisoners in their last 36 months of incarceration. He wishes to participate in this treatment despite the fact that the closest facility to New York, and his family, is FCI Elkton located in Lisbon, Ohio.¹⁸ The result of this introspection and recognition of the utility of continued treatment is that Eisenberg should be taken at his word when he tell the Court, "I am confident [], and can promise both you and society, [] that I won't break any more laws."

4. The Harsh Conditions Pre- and Post-Trial of Confinement

Avi has remained in the custody of the Federal Bureau of Prisons ("BOP") since his arrest on December 26, 2022. During this entire period of incarceration, he has endured, and still endures, excessively harsh conditions of confinement. The trauma suffered by Avi as a result of these severe conditions was, and is, significantly exacerbated **Excession** For this reason, Avi

¹⁷ Alan Ellis and Maureen Baird, Federal Prison Guidebook, Revision 6 2022, § 6.30.1.

¹⁸ Additionally, after he completes treatment within the BOP, as a special condition of his supervised release, Avi must "undergo a sex-offense-specific evaluation and participate in an outpatient sex offender program approved by the U.S. Probation Office" and "abide by the rules, requirements and conditions" of any such program. PSR p. 42. Avi's sentence in the CP Charge requires a minimum of 5 years of supervised release. The defense acknowledges the 5-year minimum even though the plea agreement on the CP Charge states that the potential maximum amount of supervised release was 3 years and that counsel advised him of the same before he accepted the plea.

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respectfully submits that the harsh conditions of incarnation he has experienced are part of his history as contemplated in 18 U.S.C. § 3553(a) and are a convincing reason for a downward variance from his applicable Guidelines range.

As detailed above and explained in his mother's interview with probation, the many letters of support filed on Avi's behalf

PSR ¶ 105, 109.

His mother informs the Court that Avi has difficulty with interacting and relating to others in a normal fashion. Additionally, as Avi describes in his letter to the Court, he is "highly sensitive to light and noise" and "has issues with physical contact;" difficulties markedly problematic in the prison environment. All of these personal characteristics, in combination with the deplorable conditions at the various facilities at which he has been detained, particularly at the MDC, have rendered Avi's incarceration exceptionally onerous.

After his arrest, Eisenberg was incarcerated in Puerto Rico and Oklahoma for a total of almost five weeks while awaiting transfer to the New York metropolitan area. That confinement was spent in the Metropolitan Detention Center Guaynabo ("Guaynabo") and the Grady County (OK) Jail ("Grady"). When Eisenberg arrived in the metropolitan area, he was placed at the Essex County Correctional Facility ("Essex") from February 1, 2023 through October 26, 2023. PSR ¶ 12. Since then, he has been housed at the MDC and remains there to date. PSR ¶ 13. Throughout this entire period of challenging detention and despite the volatility of his places of incarceration, Avi has maintained an unblemished disciplinary record.

While at the MDC, Eisenberg has been subject to threats from correction officers. As he describes in his letter, on two occasions separated by only a weekend, staff "raided my cell. I

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was forced to strip and an officer threatened me with being sent to the SHU (Special Housing Unit) if I did not 'snitch' on others. He threatened me specifically 'I can send you to the SHU and they do 90 days to do an investigation. On day 89, I can request to extend it for another 90 days so you will be stuck there for almost 180 days. He knew I had done nothing wrong, yet still tore apart my entire room, throwing books all over the place."

Having others physically touch him, whether by staff or other inmates, is a common occurrence in jail and entirely unavoidable. Eisenberg informs the Court that he has "responded poorly" to this and taken it as a sign of aggression. "In the jail environment it is not possible to run away and avoid someone and I kept getting triggered and feeling attacked when people would touch me." Although he has learned that while incinerated touching is not always indicative of aggression, "it has continued to create issues." Similarly, despite his high sensitivity to light and noise, "For several weeks when in MDC Guaynabo quarantine, a bright light was kept right above my bed for the majority of the day" and at Essex "they would use the loudspeaker at all hours of the day and night, causing further sensory issues for me. In MDC Brooklyn, at one point I made a small cover from a towel, to dim the light in my cell." Indifferent to Eisenberg's sensitivity, an officer observed the towel cover during an inspection and threatened to discipline him if he covered the light again. As a result, has been forced to endure the constant intense glare radiating from the light in his cell. In a vacuum, these circumstances may not appear as severe as the other conditions of incarceration discussed below, but the felt, as he describes, that his inability and the prison staff's unwillingness to mitigate intense light and noise exposure "left [him] to suffer."

Avi also tells the Court, "In every jail I have been in, there were extended periods with me stuck in my cell, unable to communicate." Lockdowns, especially those at MDC, have been

extensively documented and are no doubt well-known to the Court. In summary, Avi states that in the approximately eighteen months he has been in the MDC for various reasons, many of which were never explained to him and the other inmates, "[W]e've been locked down more than we have been on 'normal' operations." He explains that "[d]uring a lockdown, we typically get 15 minutes every 3 days for showers and are otherwise in the cell for 24 hours a day. During one of the lockdowns last year, the water was turned off and we were not given sufficient water for several days." Avi was sick during another recent lockdown and "threw up in [his] cell for several days." He was seen by staff but told that "the pill-line would refuse to provide [the needed medicine] because 'it's already on commissary." However commissary is only every two weeks, so he did not receive the medicine "in time for it actually to help [him]." In essence, Avi has spent approximately eight months, to date, of his incarceration at MDC confined to his small cell without any contact with the outside world and without basic human necessities such as medications and showers. This is a horrific fate for any person but an unthinkable one

The harsh conditions at MDC are so prevalent and often discussed that human nature allows them to become routine and accepted. Avi respectfully submits that the practice of restricting a human being's world to a small cell, for extended periods of time on a regular basis, is never acceptable and unduly harsh.

While the Court has long been aware of the well-documented and long-standing inhumane conditions at the MDC, a thoughtful and thorough opinion issued by Judge Jesse Furman early last year underscores both the failings of that institution and the systemic reasons for those failings. Judge Furman noted that "the dockets of this Court and the Eastern District have been filled with cases in which defendants complain about near-perpetual lockdowns (no longer explained by COVID-19) dreadful conditions, and lengthy delays in getting medical

care," and noted that it was now "routine" for judges "to give reduced sentences to defendants based on the conditions of confinement in the MDC." *United States v. Chavez*, No. 22 Cr. 303 (JMF), 2024 U.S. Dist. LEXIS 1525, at *1-2 (S.D.N.Y. Jan. 4, 2024). Judge Furman went further to note the severe staffing shortages and horrible working conditions for jail staff before concluding that "there is no reason to believe that the political branches are likely" to do what is necessary to fix the MDC "any time soon" and that "the only way to mitigate the ongoing tragedy is to improve the ratio of correctional officers to prisoners by reducing . . . the prisoner population." *Id.*

Later last year, Judge Gary Brown of the Eastern District expanded on Judge Furman's opinion in light of even more recent events, noting "the dangerous, barbaric conditions that have existed for some time at the" MDC. *United States v. Colucci*, No. 23 Cr. 417 (GRB), 2024 WL 3643857, 2024 U.S. Dist. LEXIS 138497, *1 (E.D.N.Y. Aug. 5, 2024). As documented by Judge Brown, the time since Eisenberg arrived at the MDC has included numerous acts of violence and subsequent lockdowns:

Each of the five months preceding this opinion was marred by instances of catastrophic violence at MDC, including two apparent homicides, two gruesome stabbings and an assault so severe that it resulted in a fractured eye socket for the victim. One knife attack was captured on a surveillance video producing images that are horrifying beyond words. The activities precipitating these attacks are nearly as unthinkable and terrifying as the ensuing injuries: drug debt collection, fights over illegal narcotics, resisting an organized gang robbery, internecine gang disputes and as-yet-unidentified "brawls."

Id. at *11. Since these opinions, deaths, assaults and lockdowns have continued at the MDC.

Recently, in other cases in this District, the government has pointed to Judge Caproni's oral opinion in *United States v. Alexander et al.*, 24 Cr. 676 (S.D.N.Y.), stating that "The number of defendants who are ending up in lock down for substantial periods of time are minimal...But the horror stories from a year ago are just—it's not the facility." The substantial anecdotal and

objective information known to the defense causes us to disagree respectfully and strongly. Recent meetings with numerous defendants housed at the MDC reveal that all have endured extended lockdowns over the past few months. These lockdowns have been more often executed on a unit by unit basis rather than jail-wide of late but they are, nonetheless, prevalent and endured by virtually all inmates. Additionally, as revealed in the press, a large-scale race riot occurred in one unit on February 22, 2025 and a lockdown of the entire jail that lasted nearly two weeks was instituted.¹⁹ Avi further describes being on lockdown "[t]he last month . . . because of the elevator not working."

While Judge Caproni also cited the hiring of additional staff at MDC, the effects of understaffing are still acutely felt in the jail. Inmates are constantly informed they are unable to move within the facility or that requests for necessities are denied due lack of staff. Anecdotally, at least the last ten times the undersigned has arrived at the MDC to visit an inmate at 8:00 am, the designated time for the commencement of legal visits, the undersigned, along with many other attorneys, were required to wait at a minimum of 45 minutes, and often well over an hour, before even being let into the visiting room and were told that the wait was necessitated because no staff member was available to fill the visiting room post. The lack of staff to run the MDC safely and sufficiently.

Most importantly, even assuming that conditions at the MDC were improving—and the undersigned sincerely hopes that to be true—that fact, while pertinent to pretrial release, is largely irrelevant to sentencing, as inmates like Avi have already had to suffer months and years of terrible conditions. As stated above, Eisenberg has been housed at the MDC since October of

¹⁹ A "Notice to the Inmate Population" provided by the BOP identifies the actions taken as placing the jail in "modified operations" with a suspension "of all inmate activities," but, by all accounts, the characterization was nothing more than a euphemism for jail-wide lockdown. A copy of the Notice is attached as Exhibit E.

2023 and has long borne the burden of the extraordinarily harsh conditions at the MDC. As Judge Paul Engelmeyer observed, "When a defendant has already, before sentencing, suffered from unusually arduous conditions, it's appropriate to consider that experience in determining the appropriate sentence. I'll do so today. . . The sentence I impose today will be farther below the guidelines sentence than it otherwise would have been on account of the conditions in which you've been held." *United States v. Marmolejos*, No. 19 Cr. 626 (PAE), 2021 U.S. Dist. LEXIS 39943, at *10, 2021 WL 807128 (S.D.N.Y. March 3, 2021). Likewise, Judge Kiyo Matsumoto considered at sentencing that the defendant "had experienced the harsh conditions of the MDC during the COVID-19 pandemic" and imposed a sentence below the Guidelines range. *United States v. Beckett*, No. 20 Cr. 213, 2022 U.S. Dist. LEXIS 127899, *10, 2022 WL 2819075 (E.D.N.Y. July 19, 2022).

Although it is certainly true that all the inmates at the MDC have endured harsh conditions, that fact does not diminish the negative impact it has had upon Avi. The long-term and consistent mistreatment of prisoners has been raised with this Court with great frequency over the past few years. While the unintended consequence of these multiple applications has been the normalization, and perhaps even the acceptance of the conditions at MDC, to Avi, and his fellow inmates, the conditions are far from acceptable and far more oppressive than lawmakers and the Sentencing Commission could have anticipated. Avi's unique sensitivities only serve to exacerbate the harshness of his incarceration to date. The conditions of confinement endured by Avi are thus a convincing reason for a downward variance pursuant to 18 U.S.C § 3553(a).

DISCUSSION OF THE GUIDELINES AND SENTENCING COMPARISON

As discussed above, various aspects of the defendant's personal history and the specific circumstances of the offenses mitigate his culpability. Additionally, a downward variance is justified because of the Guidelines themselves. Both the fraud guidelines and the slew of enhancements that are a feature of the child pornography guidelines have been roundly criticized by the courts, which have routinely varied well below the guidelines.

1. Vagaries of the Fraud Guidelines (Crypto Charges)

Eisenberg respectfully submits that the vagaries of the Guideline applicable to fraud offenses, U.S.S.G. § 2B1.1, (the "Fraud Guideline") are a well-recognized and important circumstance of his offense that warrant a considerable downward variance. When applying the Fraud Guideline, the prerequisite "amount of loss" determination disproportionally (if not, in effect, entirely) drives the offense level computation. This mathematical "amount of loss" determination is paradoxically not tethered to any empirical data or based on any criminal justice or economic objective. As discussed below, various courts have recognized that a mechanical application of the Fraud Guideline runs contrary to the sentencing goals set forth in 18 U.S.C. § 3553(a) and the overall objective in our criminal justice system of just and fair sentencing of defendants. The Court should therefore discount the enhancement relating to the Crypto Charges caused by the Fraud Guidelines.

In *United States v. Algahaim*, 842 F.3d 796, 800 (2d Cir. 2016), the Second Circuit agreed with the long-standing criticisms of the Fraud Guideline, finding that the Sentencing Commission, in promulgating § 2B1.1, "let the amount of loss, finely calibrated into sixteen categories, become the principal determinant of the adjusted offense level and hence the corresponding sentencing range" thereby causing an "unusualness . . . that a sentencing court is entitled to consider" in determining the appropriateness of a non-Guidelines sentence. *Id.* While

recognizing that the Sentencing Commission was "entitled" to use this approach, the Second

Circuit expressed its concern regarding this method of calculating an appropriate criminal

sentence and noted that it lacked any precedential support. Id.

In United States v. Johnson, No. 16 Cr. 457 (NGG), 2018 U.S. Dist. Lexis 71257, at *11-

13 (E.D.N.Y. Apr. 25, 2018) (available at https://casetext.com/case/united-states-v-johnson-

2478), Judge Nicholas Garaufis of the Eastern District of New York acknowledged and

expounded upon the admonition of the Second Circuit and other courts, explaining, in part, his

rationale for a below-Guidelines sentence for a defendant convicted of a large-scale fraud as

follows:

As far as this court can tell, the Sentencing Commission's loss-enhancement numbers do not result from any reasoned determination of how the punishment can best fit the crime, nor any approximation of the moral seriousness of the crime. It is no wonder that Judge Stefan Underhill, concurring in a recent Second Circuit opinion, called the loss enhancement Guideline "fundamentally flawed, especially as loss amounts climb." United States v. Corsey, 723 F.3d 366, 380 (2d Cir. 2013) (Underhill, J., concurring); see also United States v. Gupta, 904 F. Supp. 2d 349, 351 (S.D.N.Y. 2012) (Rakoff, J.) ("By making a Guidelines sentence turn, for all practical purposes, on [loss enhancement], the Sentencing Commission ... effectively guaranteed that many such sentences would be irrational on their face."). Given the feeble underpinnings of the loss enhancement, it is particularly galling that this factor is often more or less solely responsible for a white-collar offender's Guidelines sentence. Accordingly, Judge Underhill opined that, because the loss Guideline "was not developed by the Sentencing Commission using an empirical approach based on data about past sentencing practices . . . district judges can and should exercise their discretion when deciding whether or not to follow the sentencing advice that guideline provides." See Corsey, 723 F.3d at 379 (op. of Underhill, J.). I agree with Judge Underhill and refuse to mechanistically impose such an illogical sentence. That this situation continues unabated is a great shame for the many offenders sentenced under this Guideline who do not receive a sentence that makes any sense for the actual crime of conviction.

Id.

The undiscerning application of the loss amount enhancement to Eisenberg in the PSR,

which exponentially increases his sentencing range, clearly implicates the concerns expressed by

the Second Circuit in Algahaim and by Judge Garaufis in Johnson. The sixteen loss categories that are set forth in the Fraud Guideline are not based on any empirical data or any logical policy concerns. This lack of any reasoned proportionality is the exact reason that the Second Circuit identified this bracketing procedure as "unusual." Algahaim, 842 F.3d at 800. The Sentencing Commission has arbitrarily assigned certain loss amount categories, with no defined explanation of how those categories were arrived at, to trigger an increase in a defendant's offense level. For example, a fraud that involved more than \$6,500 increases the offense level by 2 points, and a loss of over \$15,000 increases it by 4 points. Absent is any reasoning for why a difference of \$8,500.00 doubles the increase. Equally perplexing is the fact that the next two-point increase does not occur until the fraud causes greater than \$40,000 of loss. Thus, when looking consecutively at two of the sixteen "finely calibrated" categories, an \$8,500 difference in loss has equal importance and effect as a \$25,000 difference. Taking this analysis to the extreme, the difference between a scheme involving a loss amount of \$6,500.01 and one involving a loss amount of \$15,000.01 is two offense levels. The difference between a scheme involving a loss amount of \$250,000,000.01 and one involving a loss amount of \$550,000,000.01 is also two offense levels. As a result, a delta of \$8,500 and \$300,000,000 may have an identical impact on a Guidelines calculation. This absurdity is the practical (and potentially significant) result of these random seeming loss categories created by the Sentencing Commission in the Fraud Guidelines.²⁰

The Guidelines lack of differentiation of similar loss amount from case to case clearly

²⁰ Although at first glance it may appear that offenders at high end of the scale seem to benefit from the large spreads, that is not the case because the spreads are not founded on any representativeness and these defendants are subject to same randomness of Fraud Guideline as any other offender. Importantly, as Judge Stefan Underhill noted, that "the loss guidelines [is] fundamentally flawed, especially as loss amounts climb" and that "[t]he higher the loss amount, the more distorted is the guideline's advice to sentencing judges." *United States v. Corsey*, 723 F.3d 366, 380 (2d Cir. 2013) (concurring).

results in a situation where the "determination of how the punishment can best fit the crime" or "any approximation of the moral seriousness" are entirely absent from the determination of an offense level. *Johnson*, 2018 U.S. Dist. LEXIS 71257 at *11. Specifically, the twenty-fourpoint increase for loss applied to Eisenberg, an increase of four times the base offense level and resulting in a nearly eleven-year increase in his sentencing range, exemplifies the unreasonable and unfairly disproportionate effect loss calculation has on his sentencing calculation.

For these reasons, Eisenberg respectfully submits that the PSR's mechanical application of § 2B1.1 results in an inequitable Guidelines calculation and that this substantial inequity is a nature and circumstance of the offense that warrants a downward variance pursuant to 18 U.S.C. § 3553(a).

2. <u>Substantive Unreasonableness of U.S.S.G. § 2G2.2 (CP Charge)</u>

In paragraph 158 and within the recommendation section of the PSR, Probation stated its belief that a downward variance as to Eisenberg's child pornography possession is warranted. Probation based this belief on his acceptance of responsibility regarding the CP Charge and the Second Circuit's decision in *United States v. Dorvee*, 604 F.3d 84, 95 (2d Cir. 2010)²¹ in which it discussed the "irrationality" of § 2G2.2 and its resulting sentences.

In *Dorvee*, the Second Circuit "found and identif[ied] [] certain serious flaws in U.S.S.G. § 2G2.2" and addressed how district courts should address these flaws. The Second Circuit noted that many of the enhancements in the Guidelines—e.g., the two-point enhancement for use of a computer and the number of images possessed—are applicable in almost all cases, resulting in "irrational[]" sentence recommendations. *United States v. Dorvee*, 616 F.3d 174, 187 (2d Cir. 2010). The Second Circuit also noted that "the § 2G2.2 sentencing enhancements . . . routinely

²¹ This decision was amended on August 4, 2010. *See United States v. Dorvee*, 616 F.3d 174 (2d Cir. 2010). The amendments do not alter the holding relied upon by Probation and are irrelevant to this case.

result in Guidelines projections near or exceeding the statutory maximum, even in run-of-themill cases." *Id.* at 186.

Recognizing that this circumstance "typically yields a sentence 'greater than necessary' to achieve the goals of § 3553(a), the Second Circuit held that a downward variance is permissible even when the variance affects "a wide class of offenders." *Id.* at 188. More recently, the Second Circuit, citing *Dorvee*, stated that, in child pornography cases, "'[d]istrict judges are encouraged to take seriously the broad discretion they possess in fashioning sentences . . . bearing in mind that they are dealing with an eccentric Guideline of highly unusual provenance which, unless carefully applied, can easily generate unreasonable results." *United States v. Elhage*, No. 22-763, 2023 WL 3772266, 2023 U.S. App. LEXIS 13671, *5 (2d Cir. 2023) (quoting *Dorvee*, 616 F.3d at 188).

Eisenberg respectfully submits that the considerations in *Dorvee* are directly applicable to his case. The § 2G2.2 enhancements applied in the PSR's Guidelines calculation are exactly those that the Second Circuit identified as leading to "irrational" sentences. For this reason, he respectfully requests that the Court consider this factor in determining his overall sentence and vary downward from his applicable Guidelines range.

3. Crypto Charges Sentencing Comparison

An analysis of recent sentences for offenses analogous to the Crypto Charges further suggests that a significantly below guidelines sentence is warranted. While this case is unique there has never before been a case charging cryptocurrency market manipulation under the commodities laws—past sentences relating to both violations in the cryptocurrency markets and to non-crypto market manipulation weigh in favor of a substantial downward variance.²²

²² While two of the three charged counts were technically fraud (commodities fraud and wire fraud), the theory of deception/criminality underlying all of the charges was market manipulation.

Regarding the former, sentences in crypto market cases typically involve minimal prison time, with an appreciation for the fact that these markets are novel and lightly regulated and therefore defendants are relatively less culpable because they have less notice that their conduct is violative of the law. Regarding the latter, market manipulation sentences typically vary down substantially from the Guidelines because the conduct is done openly and does not target any individual or group of individuals.

Overall, prosecutions in the cryptocurrency space have routinely resulted in lenient sentences, often with no incarceration, in recognition of the novelty of cryptocurrency and the lack of established regulation and guidance in the industry. What follows is a representative sampling of the recent criminal prosecutions in the cryptocurrency industry which demonstrate that a substantially below guidelines sentence is just in this case. This sampling includes cases, like this one, where the question of liability turned on the mechanics and accepted practice in the cryptocurrency industry and not on thefts and frauds where cryptocurrency was incidental to whether the conduct was legal. For example, this sampling does not include United States v. Bankman-Fried, 22 Cr. 673 (LAK) (S.D.N.Y.), because the inner workings of cryptocurrency and questions of what is and is not permitted in the industry were largely irrelevant to the issue of defendant's liability for misappropriation of customer funds (even though those funds happened to be in crypto). Likewise, in cases like United States v. Lichtenstein, 23 Cr. 239 (D.D.C.), and United States v. Carmona, 22 Cr. 551 (JLR), the criminality of the defendants' actions—hacking and stealing cryptocurrency from an exchange and running a Ponzi scheme, respectively-did not turn on the innerworkings of cryptocurrency and were, rather, "gardenvariety" frauds where the stolen funds happened to be cryptocurrency. By contrast, even the

government has acknowledged that this case turns on the mechanics of the MNGO Perpetual and the smart contract and on Eisenberg's intent to comply with the smart contract.

In *United States v. Arthur Hayes*, 20 Cr. 500 (S.D.N.Y. 2020), the defendant pleaded guilty to a Bank Secrecy Act charge that his crypto trading platform, BitMex, failed to establish, implement, and maintain an adequate anti-money laundering ("AML") program despite and conducted more than \$200 million in suspicious transactions and failed to file SARs with FinCEN on nearly 600 specific suspicious transactions. *Id.* Dkt. 334 (Government Sentencing Submission) at 5. The government requested an above-guidelines sentence of incarceration. *Id.* at 1-2. The district court sentenced Hayes to two years' probation, with the first six months to be served on home detention, and a \$100 criminal fine. *Id.* Dkt. 344 (Judgement).

In *United States v. Changpeng Zhao*, 2:23-cr-179 (W.D. Wash. 2023), the founder of Binance, the largest cryptocurrency exchange in the world, pleaded guilty to failing to maintain an effective AML program and was sentenced to four months' incarceration. *See id.* Dkt. 90 (Judgment). Binance was accused of failing to implement comprehensive know-your-customer ("KYC") protocols, systematically failing to monitor transactions, and Binance never filed a suspicious activity report (SAR) with FinCEN despite warnings from Binance compliance employees. The exchange also lacked protocols to flag or report transactions for money laundering risks, which employees recognized would attract criminals to the exchange. DOJ Press Release, "Binance and CEO Plead Guilty to Federal Charges in \$4B Resolution" (Nov. 21, 2023).

In *United States v. Flashdot Limited et al.*, 1:24-cr-168 (S.D.N.Y. 2024), Peken Global Limited d/b/a/ KuCoin pleaded guilty to one count of operating an unlicensed money transmitting business. The firm agreed to criminally forfeit \$184.5 million and pay a criminal

fine of \$112.9 million. The company was accused of failing to implement effective AML and KYC programs designed to prevent money laundering and terrorist financing, failing to report suspicious transactions, and failing to register with FinCEN. KuCoin employees repeatedly stated publicly that KYC was not mandatory, including in response to posts made by US customers. The company's principals, Chun Gan and Ke Tang received deferred prosecutions for a period of two years. They agreed to forfeit \$2.7 million each received from KuCoin's operations in the U.S. DOJ Press Release, "Kucoin Pleads Guilty to Unlicensed Money Transmission Charge and Agrees To Pay Penalties Totaling Nearly \$300 Million" (Jan. 27, 2025).

An analysis of market manipulation cases also suggests that the Guidelines vastly overstate the culpability of the defendant. The first and most obvious comparison is to *United States v. Neil Phillips*, 22-cr-138 (S.D.N.Y. 2022), a case the parties and Court cited and relied upon at various proceedings. As the Court is aware, Phillips, the head of an investment fund, was convicted at trial of manipulating the exchange rate of the South African rand against the dollar in order to trigger a \$20 million one touch barrier option. Judge Lewis Liman explained his decision to vary from the guidelines range of 78-96 months' imprisonment and impose a sentence of time served (one month) on the basis of several factors. Among those was that "prosecution of this case was novel . . . first of its kind." Tr. 37 (Dkt. 125). Judge Liman noted that the affected parties were not "anonymous victims" but were instead "sophisticated and . . . able to protect themselves." Similarly, Judge Liman noted that "[1]here were no false statement." *Id.* Judge Liman further accounted for the fact that "[1]here were no false statements apart from the one – a significant one created by the trades." *Id.* at 38. Finally, Judge Liman remarked that "[1]here crime's duration was very short." *Id.*

The parallels with respect to all of these factors are significant. Like Phillips, Eisenberg was transacting in a highly volatile unregulated market. The prosecution theory against him was novel, arguably more novel than that against Phillips. Also, like in *Phillips*, there were no individual victims in this case. All of the Mango Markets users were swiftly made whole. Indeed, Eisenberg personally saw to that by returning sufficient funds to ensure that all users were redeemed and by insisting that the DAO actually make the redemption payments. As a result, not a single user has submitted a statement or in any manner asserted victimhood. Finally, like *Phillips*, the duration of Eisenberg's trades was very short, less than 30 minutes.²³

The only entity to have arguably lost funds was the Mango DAO, a decentralized autonomous organization which did not challenge the SEC's allegations that those funds were raised illegally. Moreover, the Mango DAO was a sophisticated organization fully capable of protecting itself, like Morgan Stanley was in *Phillips*, but which had simply chosen not to. *See id.* at 37 ("If Morgan Stanley wanted to protect against that risk, there are measures it could have taken."). Indeed, as discussed before the Court in motion practice regarding expert testimony, Mango Markets was put on notice in March 2022 of its susceptibility to the precise strategy employed by Eisenberg. Dkt. 86 at 15.²⁴ The platform was again placed on notice of the risk it faced to such a scenario during the COPE coin trading, but chose to not take action, seemingly

²³ Judge Liman also found that a sentence of time served was sufficient in *Phillips* to "serve the general interests of general deterrence." Tr. 41 (Dkt. 125). Empirical research shows no relationship between sentence length and deterrence. In a pre-Guidelines study of specific deterrence, which involved white collar offenders (presumably among the most rational), no difference in deterrence was found as a result of sentence severity, including between probation and imprisonment. *See* David Weisburd et al., *Specific Deterrence in a Sample of Offenders Convicted of White Collar Crimes*, 33 Criminology 587 (1995). *See also* Andrew von Hirsch, et al., *Criminal Deterrence and Sentence Severity: An Analysis of Recent Research* (1999) (concluding "correlations between sentence severity and crime rates . . . were not sufficient to achieve statistical significance," and that "the studies reviewed do not provide a basis for inferring that increasing the severity of sentences generally is capable of enhancing deterrent effects.").
²⁴ In a Discord chat conversation from March 30, 2022, almost seven months before the trades at issue, Mango Markets was informed that its platform was susceptible to a transaction in which a trader "open[s] a big long and short position for example \$2,000,000" and "push[es] the price of MNGO-SPOT up by 25%." Decoding Mango's Vulnerability, Neptune Mutual (Oct. 12, 2022) available at https://neptunemutual.com/blog/decoding-mangos-vulnerability/.

because it wished to "have a 'competitive advantage' in offering more exotic products," like MNGO Perpetuals. #Austerity Sucks, "Thoughts on \$110M Mango Markets Exploit" https://medium.com/@Austerity_Sucks/thoughts-on-110m-mango-markets-exploit-10e3d01ab0b5 (Oct. 15, 2022). While that does not mean that Eisenberg's conduct was appropriate, here, as Judge Liman found, it contributes to a finding of reduced culpability because the defendant did not harm and did not intend to harm a vulnerable victim. *See* 22 Cr. 138, Dkt. 125 at 37-38.

Though sentencing has not yet proceeded, *United States v. Aleksei Andriunin*, 24 Cr. 10190 (D. Mass.), stands as a useful comparison because it relates to market manipulation of cryptocurrency. The defendant and his company pled guilty last week to fraud and market manipulation charges for a scheme in which they offered services to create artificial trading volume for multiple cryptocurrency companies, including wash trading tactics. DOJ Press Release, "Cryptocurrency Financial Services Firm 'Gotbit' and Founder Plead Guilty to Market Manipulation and Fraud Conspiracy" (Mar. 21, 2025). As part of the plea, the defendants agreed to forfeit \$23 million worth of cryptocurrency and the government agreed not to recommend a sentence of more than two years in prison. *Id*.

Another instructive sentence was that given to securities trader Joseph Taub in *United States v. Taub*, 18 Cr. 79 (D. NJ 2018). Taub pleaded guilty to securities fraud and conspiracy and was sentenced to eighteen months' imprisonment for what the government described as "orchestrating a massive, long-running market manipulation and tax fraud scheme that netted more than \$17 million in illegal profits. USAO Press Release, "Securities Trader Sentenced to 18 Months in Prison for Market Manipulation Scheme that Netted more than \$17 Million in Illicit Profits (Dec. 22, 2020). From 2014 to 2016, Taub and others conspired to manipulate the securities prices of numerous public companies by coordinating trading in dozens of "straw accounts" held in the names of others. *Id.* Taub used Run Based Manipulation and Order Based Manipulation to give the market an inflated sense of market interest in the securities. *Id.* "Run Based Manipulation" refers to taking long or short position on a security and then entering trades designed to inflate or deflate the price of the same security. "Order Based Manipulation" refers to taking long or short position.

Several spoofing cases similarly demonstrate that courts routinely vary downward substantially in market manipulation cases brought under the CEA. In United States v. Michael Coscia, 14 Cr. 551 (N.D. Ill. 2014), the defendant was convicted at trial of six counts of commodities fraud and six counts of spoofing (in violation of 7 U.S.C. §§ 6c(a)(5)(C) and 13(a)(2). Despite the government's recommendation of a guidelines sentence of between 70 and 97 months, the court sentenced Coscia to 36 months. 14 Cr. 551, Dkt. 159 (Judgement). Coscia used an automated trading technique known as "spoofing" to earn \$1.4 million in illegal profits from orders he placed in the commodities markets using computer algorithms to place (and then cancel) massive orders which were intended deceive traders into believing there was substantial supply or demand and then filling Coscia's much smaller position on the other side of the trade (e.g., the script would place a massive sell order and then cancel that order when Coscia's buy order was filled). The district court made a finding that Coscia obstructed justice by lying when he testified at trial. Tr. 22 (Dkt. 162). The district court stated that the guidelines "tend to be excessive and particularly in cases which do not involve any way, shape, or form any kind of danger to anybody else" and determined that the case did not "warrant[] anywhere near the sentence that the guidelines would prescribe." Id. at 49. Among other things, the district court expressed reservations regarding the manner in which loss amount played a role in the sentence

and the punitive manner in which the guidelines treated a defendant's exercise of the right to trial by jury. *Id.*

Similarly, in *United States v. Gregg Smith*, 19-cr-669 (N.D. Ill.), the defendant was sentenced to two years' imprisonment. The government recommended a below guidelines sentence of 72 months. Smith was a former precious metals trader at J.P. Morgan convicted after trial of numerous counts of wire fraud and securities fraud for spoofing. Between 2008 and 2016, Smith and other J.P. Morgan traders placed orders for precious metals futures contracts that they intended to cancel before execution to drive prices on orders they intended to execute on the opposite side of the market involving tens of thousands of unlawful trading sequences and resulting in over \$10 million in losses to market participants.²⁵ JPMorgan Chase & Co. entered into a deferred prosecution agreement with the government and agreed to pay over \$920 million in fines relating to the spoofing of Smith and other trades.

Likewise in *United States v. Ed Bases*, 18-cr-48-1 (N.D. Ill. 2018), and *United States v. John Pacilio*, 18-cr-48-2 (N.D. Ill. 2018), Bases and Pacilio were each convicted of wire fraud and conspiracy charges for spoofing (Pacilio was also convicted of Commodities Fraud) and both were sentenced to 12 months and one day after trial. Dkt. 742 (Bases Judgment); Dkt. 744 (Pacilio Judgment). Probation's guideline range in both cases was 37 to 46 months. Dkt. 712 (Pacilio Sentencing Memorandum); Dkt. 716 (Bases Sentencing Memorandum). In a related case, *United States v. James Vorley*, 18-cr-48-2 (N.D. Ill. 2018), the defendant also received a sentence of a year and a day after the government recommended a sentence at the lower end of the guidelines range of 57 to 71 months. Dkt. 404 (Judgment); Dkt. 383 (Government Sentencing Memorandum).

²⁵ The government alleged losses of over \$55 million, but the district court reduced this amount at sentencing. Dkt. 856 at 4.

Finally, in *United States v. Connolly*, 16 Cr. 370 (CM), the district court sentenced Michael Connolly and Gavin Black to time served after a jury convicted them of wire and bank fraud charges. The defendants were Deutsche Bank traders of USD LIBOR-based derivative products, and were convicted of influencing the bank's LIBOR rate submitters to submit manipulated rate submissions beneficial to the traders' positions. DOJ Press Release, "United States v. Matthew Connolly and Gavin Campbell Black – Updates" (Oct. 17, 2018). Their conviction was later reversed on appeal by the Second Circuit for insufficient evidence of deception, as discussed at length in Eisenberg's Rule 29 motion papers. *See* Dkt. 183 at 55-56.

While every sentence bears unique factors influencing the Court ultimate determination, and this case is no different, these previous sentences in crypto and market manipulation cases are instructive. In virtually all such cases, sentencing judges have recognized that the guidelines range and the government's recommendation, often based on the guidelines range, vastly overstate the defendant's culpability. In this case, as in each of the cited cases above, a sentence substantially below the guidelines is appropriate.

<u>APPLICATION OF 7 U.S.C. § 13(a)(5)</u>

The commodities fraud statute states that "no person shall be subject to imprisonment under this paragraph for the violation of any rule or regulation if such person proves that he had no knowledge of such rule or regulation." 7 U.S.C. § 13(a)(5). The Supreme Court has explained that this language, in an analogous provision of the securities laws, means that the defendant has an affirmative defense to imprisonment if he proves he did not know of the rule or regulation pursuant to which he was convicted. *United States v. O'Hagan*, 521 U.S. 642, 666 (1997). While the statutory text makes clear that the burden of proof in § 13(a)(5) is clearly on

the defendant, since the issue applies to sentencing, the burden, is at most, by a preponderance of the evidence.

Here, the trial record was devoid of any evidence that Eisenberg was aware of 17 C.F.R. § 180.1. Moreover, despite the government's possessing Eisenberg's phones and computer and extensive discussion of his google search history, including legal research he conducted prior to executing his trades, there was no evidence that he ever searched for or accessed any information regarding this regulation. This omission circumstantially establishes that Eisenberg lacked knowledge of § 180.1. While there was evidence that Eisenberg viewed and tweeted about the press release in *United States v. Phillips*, the case discussed above that charged commodities fraud, the press release made no mention of § 180.1 and Eisenberg never accessed the indictment or any other document in *Phillips* discussing this regulation prior to his trades according to the information produced in discovery from Eisenberg's electronic devices. Because Eisenberg did not know this regulation, he cannot be subject to imprisonment for his conviction on Count 1.

OBJECTIONS TO THE PSR

1. FACTUAL OBJECTIONS

The following represent Eisenberg's objections to the PSR, including the February 26,

2025 Addendum ("Addendum"):

• Paragraph 15:

- <u>Defense Objection to Probation</u>:
 - Defense Objection 1: As discussed in greater detail in Eisenberg's opening and reply briefs in support of his post-trial Rule 29 motion to set aside the verdict (Dkts. 183 and 191), Mango Markets was a dollar-based market in which USDC was used only as a stand-in for USD, with no exchange or other conversion rate between the two. Multiple witnesses and a plethora of trial exhibits confirmed that the MNGO Perpetual was based on the relative value of MNGO and the US dollar. *See, e.g.*, Tr. 373 (government witness and Mango Markets contributor Tyler Shipe noting that the value of MNGO and MNGO Perpetual was listed in USD (not USDC)). Among other documents establishing this fact, depictions of the

transactions, deposits, withdrawals, and other activity in both Eisenberg's long and short accounts depict in USD the reference price paid, the value of each position, the processing fee charged, the total value of the account, the amount of collateral available, the amount deposited, the amount withdrawn, the profits and losses, and the amount of margin available. GX 916 – GX-921. None of these documents make any mention of USDC. Because the MNGO Perpetual is traded on the Solana blockchain, cryptocurrency is necessary to stand in for USD (which cannot be converted into computer code), and the platform used USDC for this purpose during the relevant time period. Because there was no conversion between the value of USDC and USD—USDC was always assumed, whether accurately or not, to equal a dollar—*the value of* USDC was irrelevant, and the value of the MNGO Perpetual depended exclusively on the relative value of MNGO and USD.

- Defense Objection 2: The MNGO Perpetuals in this case were not "swaps" at all under the Commodities Exchange Act ("CEA") because Eisenberg held both the long and short positions in connection with all of his MNGO Perpetual contracts, and, as a result, he was not exposed to any risk, a requirement in the statutory definition of "swap." 7 U.S.C. § 1a(47)(A)(iii). This is discussed more fully in Eisenberg's opening posttrial brief. Dkt. 183 at 23-24.
- Alternatively, because it was uncontested that MNGO was a "security," it was similarly uncontested that the MNGO Perpetual was a "security-based swap." Generally, under 7 U.S.C. § 1a(47)(B)(x), security-based swaps are excluded from the definition of swap and not covered by the CEA. The government's argument that the MNGO Perpetual fit within the very narrow definition of "mixed swap," 7 U.S.C. § 1a(47)(D)—effectively, an exception to the security-based swap exception—was briefed extensively and is without merit. See Dkt. 183 at 25-41; 191 at 15-31.
- Defense Objection 3: For reasons described more fully below, it is more accurate to state that borrowing power on Mango Markets was based on profit level or profitability than on value because a user could borrow without closing out any of their positions.
- Defense Request: Replace all referenced in this and other Paragraphs from "USDC" to "USD" and either delete reference to MNGO Perpetuals being "swaps" or clarify that they are "security-based swaps" which are specifically carved out of the CEA.
- Defense Requested Rewrite: Mango Markets is a decentralized cryptocurrency exchange that has its own native crypto token, called MNGO. Investors can buy and sell MNGO and other cryptocurrencies on Mango Markets. Investors on Mango Markets can also buy and sell perpetual futures ("Perpetuals") based on the relationship between the value of MNGO and the <u>US dollar value of a crypto stablecoin called</u>

(USD)-Coin ("USDC"), which is designed to be pegged to the dollar. Perpetuals are "swaps" under the Commodity Exchange Act. An investor who buys a Perpetual for MNGO stands to profit if the value of MNGO rises relative to the value of USDC, and an investor who sells a Perpetual for MNGO stands to profit if the value of MNGO falls relative to the value of USDC. Finally, Mango Markets allows investors to borrow cryptocurrency from the exchange, in amounts based on the value profit level of the borrower's portfolio, and to withdraw that borrowed cryptocurrency.²⁶

- <u>Government Response:</u>²⁷
 - The Government objects to all of the defense's proposed revisions to PSR ¶ 15. The defendant's first two objections claim that MNGO Perpetuals are based on the value of dollars, rather than USDC, and are not "swaps" under the Commodities Exchange Act. The jury convicted the defendant of commodities fraud and manipulation, which necessarily required finding that MNGO Perpetuals are "swaps." *See* Tr. 1466. There was also extensive evidence at trial that MNGO Perpetuals are based, in part, on the value of USDC. That evidence is summarized at pages 13-19 of the Government's opposition to the defendant's post-trial motions (the "Government Opposition"). *See* 23 Cr. 10 (AS), Dkt. 186. Finally, the defense's third objection— that borrowing is based on "profit level" instead of "value"—is incorrect: witness testimony established that borrowing on Mango Markets was a "a loan against the value of the assets that you have in your account." Tr. 306.
- o Defense Reply:
 - Regarding Defense Objections 1 and 2, these issues—whether the Mango Perpetuals were "swaps" covered by the CEA and whether they were based on the value of the dollar rather that USDC—have been addressed to the Court at length in Defendant's Rule 29/33 motion. Defendant incorporates those arguments herein and relies upon them.
 - Regarding Defendant's Objection 3 (borrowing power depending on profits, not value), the government's omission of a critical portion of the text is notable. Their expert, Jain, stated that "borrowing on a cryptocurrency exchange is *essentially kind of like* taking out a loan against the value of the assets that you have in your account." Tr. 306. He therefore made it clear that he was being imprecise for purposes of explaining the concept to the jury. Mordecai's charts, which the government relied upon to depict the withdrawals activity in the case clearly show that Eisenberg's ability to withdraw assets (whether by

²⁶ Edits were made in redline so that Probation could see the defense's requests marked against the draft PSR.

²⁷ The government letter dated February 10, 2025 responding to Eisenberg's objection is attached as Exhibit F.

borrowing or otherwise) depended on the profitability (the "P&L) of his accounts. The defense articulation is thus both more precise and more accurate, which, in turn, better describes the mechanics of withdrawing assets because the perpetuals were not themselves assets: the value of the unrealized (but settled) pnl counted as an asset.

Paragraph 16:

- <u>Defense Objection to Probation</u>:
 - Defense Objection 1: Same objections as Paragraph 15.
 - Defense Objection 2: This Paragraph, as currently written, is inaccurate in its use of the term "steal" and misleading and vague regarding its use of the term "price."
 - The value of the MNGO Perpetual was determined by the settlement price (or as the PSR refers to it in Paragraph 22, the "oracle price"), an algorithm based upon the value of MNGO (relative to USD) on three trading platforms. The settlement (oracle) price was distinct, and often different, from the "market price," *i.e.*, the price at which a user could purchase a MNGO Perpetual contract on Mango Markets (which, after purchase, would become the reference point/price for whether the perpetual was profitable). For the reasons stated in Eisenberg's motion, he neither sold nor ever intended to sell his MNGO Perpetual contracts so the market price was irrelevant and moving it was not Eisenberg's "objective."
 - Eisenberg's objective was to withdraw the assets from Mango Markets. Under the terms of the smart contracts that governed the platform, he was entitled to do so when his MNGO Perpetuals reached a certain level of value. The term "steal" is thus inaccurate because it incorrectly implies that Eisenberg lacked permission or authority to withdraw the assets. Moreover, the contract did not require a user to repay borrowed funds instead, permitting the user to expose themselves to the risk of liquidation, Tr. 106, 307, 1116, 1186—and the documentation explicitly stated that users could choose not to settle a negative balance. *See* GX-1011 at 133.
 - Defense Objection 3: The market price of MNGO never reached 0.54 USD/MNGO. GX-993A. The settlement price of the Perpetuals also did not go to 0.54 USD/MNGO. GX-1309. The statement that an undefined price reached this level in 20 minutes is incorrect.
 - Defense Objection 4: Given the vagueness of the term "price," the statements that Eisenberg's objective was to "artificially manipulat[e]" or "artificially increase[e]" the "price" are misleading. There was no evidence that Eisenberg cared at all about the market price of the MNGO Perpetual, the relevant price for purposes of analyzing whether he committed the charged crime of commodities manipulation under the CEA. Dkt. 191 at 40.

- Defense Requested Rewrite: In October 2022, AVRAHAM EISENBERG participated in a scheme to withdrawsteal approximately \$110 million by artificially manipulating increasing the settlement price of MNGO Perpetuals on Mango Markets (the "Market Manipulation Inflation Scheme"). The scheme worked as follows: EISENBERG used an account that he controlled on Mango Markets to sell a large amount of Perpetuals for MNGO and used a separate account on Mango Markets to purchase those same Perpetuals. In other words, EISENBERG sold himself MNGO Perpetuals. EISENBERG then engaged in a series of large purchases of MNGO, with the objective of artificially increasing the price of MNGO relative to USDE, which had the effect of increasing the settlement price of MNGO Perpetuals on Mango Markets. That purchasing achieved the desired effect, causing the <u>settlement</u> price of MNGO Perpetuals on Mango Markets to increase precipitously over the course of approximately 20 minutes. Over that time span of approximately 20 minutes, the price of MNGO Perpetuals rose from approximately 0.0382 USDC/MNGO to approximately 0.54 USDC/MNGO, an increase of approximately 1300 percent.
- o Government's Response:
 - The Government objects to all of the defense's proposed revisions to PSR ¶ 16. The defendant first reiterates his objections to PSR ¶ 15, but none of those are correct. The defendant next claims that the PSR is wrong to use the terms "steal." This is simply fighting with his conviction. The use of the term "steal" is correct because, in finding the defendant guilty of multiple counts of fraud, the jury concluded that the defendant deceptively represented that he was borrowing money from the Mango Markets platform when he in fact had no intention to repay that money. That is fraudulent theft, as described in more detail at pages 36-43 of the Government Opposition. The defendant is similarly wrong to object to the PSR's use of the terms "price," "artificially manipulat[e]," and "artificially increas[e]." The jury convicted the defendant of commodities manipulation, which required finding that the "defendant caused [an] artificial price" for a swap—namely, MNGO Perpetuals. Tr. 1470. There was ample evidence to support the jury's conclusion that the defendant manipulated, and artificially increased, the price of MNGO Perpetuals, which is explained in more detail at pages 30-36 of the Government **Opposition**.
- o <u>Defense Reply</u>:
 - Defense Objection 1 is addressed with regard to Paragraph 15. Regarding
 Defense Objections 2 and 4, these issues—whether the government's
 theory of "fraud theft" based upon a supposed contractual obligation that

did not exist and the government's lack of proof regarding manipulation of the market price—have also been addressed to the Court at length in Defendant's Rule 29/33 motion. Defendant incorporates those arguments herein and relies upon them.

• The government fails entirely to respond to Defense Objection 3, which relates to an objectively false statement in the PSR. No price ever reached 0.54 USD/MNGO during the relevant time period.

• Paragraph 17:

- Defense Objection 1: The term "value" does not accurately describe Eisenberg's borrowing power for the reasons described above; namely, he was not selling his MNGO Perpetuals in the open market. Rather, the positions, according to the government's own expert's exhibits, attained the ability to borrow and withdraw at a particular level based on their Profit and Loss ("P&L"), or level or profitability. See GX-1337.
- Defense Objection 2: Only approximately \$61 million was borrowed, not \$110 million. The evidence demonstrated that Eisenberg had settled at least \$50 million in profit immediately prior to his first withdrawal, and, as a result, his withdrawal of at least 50 million USDC was a withdrawal of profits, not a borrow. Tr. 1119; *see also* Dkt. 183 at 56. Indeed, the assertion that all of the funds were borrowed is demonstrably false because it would mean that Eisenberg's withdrawal of his own \$10 million in cryptocurrency was somehow a borrow (presumably from himself). The fact that some (nearly 10%) of the funds on Mango Markets were deposited by Eisenberg is also omitted, rendering the assertion that Eisenberg's withdrawal came from the deposits of others incomplete and misleading.
- Defense Objection 3: The assertion that Eisenberg "had no intention to repay the borrowed funds" is both inaccurate and internally inconsistent with the assertions in Paragraph 40 detailing Eisenberg's repayment of the majority of the funds he withdrew from the platform two days later. Indeed, Eisenberg initially offered to repay a portion of his withdrawals (millions of dollars in cryptocurrency) the same evening he withdrew the assets. *See* GX-1003.
- Defense Objection 4: All of the Mango Markets users were fully reimbursed so the statement that "investors with deposits on Mango Markets lost much, or all, of those deposits" is inaccurate (as well as being somewhat vague regarding the term "investors").²⁸ While it is true that users were unable to withdraw their assets for as long as two weeks, the Mango Markets documentation explicitly warned users that they may unable to access funds temporarily if they are all withdrawn from the platform. GX-1011 at 169 ("There is a chance the user is not able to withdraw deposits because it's borrowed.").

²⁸ Mango Markets documentation does not use the term "investor." Eisenberg requests that all references to "investor" be changes to "user," which is the term Mango Markets itself used.

- Defense Requested Rewrite: As the settlement price of MNGO Perpetuals on 0 Mango Markets rose as a result of the Market Inflation Manipulation Scheme perpetrated by EISENBERG, the profitabilityvalue of the MNGO Perpetuals that EISENBERG had purchased also rose. Because Mango Markets allows usersinvestors to borrow and withdraw cryptocurrency based on the profitabilityvalue of their assets on the platform, the increase in the profitabilityvalue of the MNGO Perpetuals EISENBERG had purchased allowed EISENBERG to borrow, then withdraw, approximately \$6110 million worth of various cryptocurrencies from Mango Markets (in addition to withdrawing another \$50 million worth of USDC in profits), which primarily came from deposits of other usersinvestors in of the Mango Markets exchange. When EISENBERG borrowed and withdrew that cryptocurrency, he had intended to exercise his contractual right not intention to repay some of the borrowed funds. Accordingly, after EISENBERG borrowed and/or withdrew essentially all of the cryptocurrency deposits on the Mango Markets platform, EISENBERG ceased manipulating increasing the price of MNGO-Perpetuals, causing the settlement price of MNGO Perpetuals to fall significantly. Due to EISENBERG's withdrawals, other usersinvestors with deposits on Mango Markets temporarily lost their ability to access much, or all, of those deposits.
- o <u>Government's Response</u>:
 - The Government objects to all of the defendant's proposed revisions to PSR ¶ 17. The defendant's first objection—which is to the term "value" is wrong for the reasons given in the section addressing PSR ¶ 15. The defendant is also wrong to claim, in his third objection, that the PSR should not state he had "no intention to repay the borrowed funds." As summarized in the Government's Opposition at pages 1-4 and 36-43, a key component of the defendant's fraud was manipulating the value of his assets Mango Markets, then representing he was "borrowing" against those assets when he, in fact, had no intention to repay. It is true that, days later, the defendant engaged in a negotiation with the Mango DAO and agreed to return some of the stolen money in exchange for a promise that Mango DAO and investors on Mango Markets would not pursue civil or criminal charges against him. But that does not mean he had an intent to repay the loan. Quite the opposite, it shows that he had no intention to repay, and instead made a partial payoff to obtain a separate benefit namely, protection from civil and criminal claims.

The defendant is similarly wrong to claim, in his fourth objection, that the PSR should not say that "investors with deposits on Mango Markets lost much, or all, of th[eir] deposits" because they were not "investors" and they were ultimately reimbursed. On the naming convention, it is correct to call people who put cryptocurrency on Mango Markets "investors"

because they used the platform with the hope of making money from loans based on, and investments based on the value of, different cryptocurrencies. As for losing their deposits, the evidence at trial showed— and the defendant admits—that investors on the platform did, in fact, lose their cryptocurrency for days or weeks. The PSR already addresses the subsequent reimbursement of Mango Markets investors in PSR ¶ 40, so there is no need to change PSR ¶ 17, which is correct.

Finally, the defendant is incorrect to claim that he borrowed only \$61 million, instead of \$110 million. Mango Markets kept records showing the amount that each user borrowed, and the total amount borrowed from the platform at any particular time. Those records clearly showed that the defendant borrowed \$110 million worth of cryptocurrency from the platform, including more than \$50 million of USDC. *See* GX1002, 918, 929; Tr. 1206-11. The \$50 million withdrawal of profit was just an assumption the defense expert made, contrary to these clear records. Tr. 1198- 1211. The defendant is correct that he deposited approximately \$10 million of USDC on Mango Markets, which can be accounted for elsewhere in the PSR.

o <u>Defense Reply</u>:

Defense Objection 1 is addressed above. Regarding Defense Objection 2, the government badly misstates the evidence relating to whether the initial 50 million USDC withdrawal was a borrow. The undisputed evidence was that Eisenberg's Long account had profits of well over \$100 million at the time of that withdrawal, GX-1341, that he settled his profits approximately seventeen seconds prior to the withdrawal, Tr. 1130-31, and that the settlement function allowed the user to withdraw profits from their account. Tr. 1119 ("Settle PnL is . . . most often used in a profit scenario where a user will settle their PnL to withdraw their profit from a specific account."). In response, the government cites irrelevant testimony and documentary evidence that is clearly stale, depicting timeframes long after the trading, and thus irrelevant. While the government claims "that Mango Markets kept records showing the amount that each user borrowed, and the total amount borrowed from the platform at any particular time," it failed to get any such records for October 11, 2022. Instead, the government cites GX-918, which is dated December 15, 2022 and is irrelevant because it depicts no borrows of USDC; GX-929 which is also dated December 15, 2022; and GX-1002, which is undated but clearly post-dates the relevant timeframe. GX-929 is instructive. In that snapshot of the long account, it has an account value of approximately negative \$115 million and a negative health of over 92%. The account has thus reclassified what was a withdrawal of 50 million USDC in profit into a

borrow because of the negative health of the account. The government can point to no evidence that when the account had positive health, which it undisputedly did during the relevant timeframe, the withdrawal of settled profits was actually a borrow. That position is nonsensical and inconsistent with the evidence on several levels. It is belied by the testimony of Sheridan and by the Mango documentation's explanation of how settled P&L works. Further, it suggests that Eisenberg borrowed (from himself) the \$5,000,000 he initially deposited despite having positive health. Neither evidence nor logic supports such a position and demonstrates the total lack of probative value of the exhibits cited by the government.²⁹

- The government's response to Objection 3, regarding the erroneous statement that Eisenberg had "no intention to repay the borrowed funds," suffers from numerous factual and logical defects. Initially, the government asserts that Eisenberg "engaged in negotiations with the Mango DAO" "days later" than the trading. In fact, Eisenberg began that negotiation within hours on the very same evening as his trading, before his identity was known, a process that resulted in his paying back the majority of the assets he had withdrawn two days later. See GX-1003. Moreover, while the government concedes, as it must, that Eisenberg paid back "some" of the withdrawn assets at some later point-the government appears reluctant to concede the objective fact that Eisenberg paid back most of what he took almost immediately-the government nevertheless persists in objecting to any clarification of the misleading statement that Eisenberg's intent was not to pay any funds back. The government cannot point to any evidence to support its narrative that Eisenberg only paid back assets because he received a guarantee that the Mango DAO would not press its legal claims against him. But even if that were true, which it is not, Eisenberg's intention to strike a deal with the Mango DAO is still an intention to pay funds back. Moreover, as discussed in further detail below, Eisenberg always intended to insure that the users of the protocol be made whole and insisted on this in negotiations with the Mango DAO. See GX-909. The defense's proposed edit is therefore accurate, unlike the government's position.
- Regarding Defense Objection 4, the government concedes that all users were reimbursed but nevertheless argues that it is accurate to write that they lost their deposits (without any caveats) because these users "did, in

²⁹ The government tacitly acknowledges the (ultimately fatal) problem inherent in its claim that Eisenberg borrowed all of the assets on the platform including that Eisenberg would have "borrowed" his own money. But rather than dealing with this obvious flaw in its reasoning, the government attempts to deflect, stating this "can be accounted for elsewhere in the PSR." Whether the PSR mentions this fact elsewhere, however, does not resolve the fact that the government's "borrow theory" is clearly wrong or the fact that the government cannot explain the mechanics or logic behind its (utterly illogical) position other than pointing to outdated records that it can find no witness testimony to support.

fact, lose their cryptocurrency for days or weeks." In fact, Eisenberg's initial proposal, the night of the trading, called for making all users whole and a deal to that effect was formalized two days later. GX-1003. Within another week and a half, every user who chose had been reimbursed. The blanket statement that they lost their money is simply false and indefensible. Moreover, Mango Markets was not a bank. The platform's documentation specifically warned users that they could lose access to their funds. GX-1011 at 169 ("There is a chance the user is not able to withdraw deposits because it's borrowed."). The government offers no response to this point. Finally, the government objects to use of the term "user," which conforms with the language used by Mango Markets itself, instead preferring "investors" because "they used the platform with the hope of making money." There is no evidence for the government's myopic view that all of the users simply sought profits. Documented uses of DeFi platforms include transparency, lack of involvement of banks and government, and faster transaction speeds. Nor has the government provided a single word of explanation for why it would be inaccurate to use the terminology used by both the platform itself and the Mango Markets contributors who testified at trial. GX-1011 at 169; Tr. 108, 385. In fact, even the Court and the prosecutors referred to Mango "users" throughout the trial. Tr. 51, 56, 101, 104, 108, 110, 111. The government's unsupported preference for its own term, which is inconsistent with the evidence, should be rejected.

• Paragraph 21:

- Defense Objection 1: Same objections as above: "USDC" should be replaced with "USD" and "investor" replaced with "user."
- Defense Requested Rewrite: For example, if a <u>usern investor</u> buys a MNGO Perpetual at a price of 0.02 USDC/MNGO, the <u>userinvestor</u> is "long" on MNGO, and the value of that perpetual will rise if the value of MNGO rises above 0.02 USDC/MNGO. Conversely, if a <u>usern investor</u> sells a MNGO Perpetual at a particular price, the <u>userinvestor</u> is "short" on MNGO, and the value of that Perpetual will rise if the value of MNGO falls relative to USDC.

Paragraph 22:

- Defense Objection 1: Same objections as above: the "price" being referenced is vague and should be clarified to be the "settlement price." Also, the currency pair, as in the case of MNGO, can include USD and need not always be a pair of cryptocurrencies. The developer of the Mango Markets oracle testified unequivocally that that MNGO oracle reported prices in USD (not USDC or some other cryptocurrency). Tr. 480.
- Defense Requested Rewrite: The price of a Perpetual at any particular time depends on the relative value of two *crypto*currencies. To determine the relative value of *crypto*currency pairs for purpose of pricing Perpetuals, Mango

Markets uses an "oracle," which is a computer program that calculates the relative value of *crypto*currency pairings by looking at the exchange rate of those *crypto*currencies on various cryptocurrency exchanges (the "Oracle"). When the Oracle price changes for a particular *crypto*currency pairing, the <u>settlement</u> price of Perpetuals in that *crypto*currency pairing also changes on Mango Markets. Accordingly, changes in the relative <u>market</u> price of <u>crypto</u>currency pairs on other exchanges impact the <u>settlement</u> price of Perpetuals on the Mango Markets platform.

- <u>Government's Response</u>: The Government objects to the defendant's proposed changes to PSR ¶¶ 21 and 22 for the same reasons given above because the proposed changes reflect the defendant's objection to the terms "USDC" and "investors."
- <u>Defense Reply</u>: Please see above.

• Paragraph 23:

 Defense Objection 1: It is not necessary to click the "borrow button" in order to borrow on Mango Markets. Borrows can also be executed by initiating a withdrawal. The Mango Markets documentation, GX-1011 at 78, states in pertinent part:

Borrowing on Mango Markets 🦲

First, ensure assets are deposited into your margin account for use as collateral. Then, simply click "Withdraw" under the Accounts tab *or* "Borrow" under the Borrow tab.

- Defense Requested Rewrite: In addition to allowing investors to use deposits and other positions as collateral for leveraged trades, Mango Markets also allows investors to use those deposits and positions as collateral for borrowing and withdrawing cryptocurrency from the Mango Markets exchange. One way *Tto borrow through Mango Markets, is for a userinvestors must to* access the Mango Markets website and click a button labeled "borrow" that allows the user to borrow cryptocurrency. The user can withdraw the cryptocurrency the user has borrowed by clicking another button labeled "withdraw." <u>Another way to borrow cryptocurrency on Mango Markets is to click the "withdraw" button after enabling borrows.</u> The cryptocurrency that <u>usersinvestors</u> borrow through Mango Markets comes from cryptocurrency that other <u>platform usersinvestors</u> have deposited in Mango Markets accounts.
 - <u>Government's Response</u>: The Government objects to the defendant's proposed changes to PSR ¶ 23. Any method of borrowing on Mango Markets requires clicking a "Borrow" button. As the Mango Markets user manual shows, even when an investor uses the "Withdraw" function to borrow cryptocurrency, the investor is still sent to a page that requires the user to select a button to "Borrow Funds." The defense's proposed revision is, therefore, incorrect and misleading.

 <u>Defense Reply</u>: The government's response is factually inaccurate. Eisenberg's transactions were done through the "withdraw" button under the Accounts tab, with the borrowing toggle enabled. See DX-20. The defense's proposed revision to Probation acknowledged the need to enable "borrows." Users transacting that way are not sent to some sort of borrowing page, as the government asserts without citation. The defense edits tracked the language of the cited section of the documentation. The government, in defending its factual misstatement to Probation, cited nothing and ignored the record.

• Paragraph 28:

- Defense Objection: Same as above: prices on Mango Markets were listed in USD, not USDC. Similarly, the settlement or oracle price was reported in USD.
- Defense Requested Rewrite: EISENBERG used Mango Account-2 to sell MNGO Perpetuals to Mango Account-1. The Perpetuals were based on a total of approximately 488,302,109 MNGO, at a price of 0.0382 USDC/MNGO. Accordingly, Mango Account-1 held a ''long'' position, the value of which would rise if the value of MNGO relative to USDC rose above 0.0382 USDC/MNGO (the ''Long MNGO Perpetual Position''). Mango Account-2 held a ''short'' position, the value of which would rise if the value of MNGO relative to USDC fell below 0.0382 USDC/MNGO (the ''Short MNGO Perpetual Position''). EISENBERG, however, was the owner of both positions.

• Paragraph 29:

- Defense Objection: Same as above: prices on Mango Markets were listed in USD, not USDC. Similarly, the settlement or oracle price was reported in USD.
- Defense Requested Rewrite: Immediately after the creation of the Long and Short MNGO Perpetual Positions, EISENBERG used USDC and another stablecoin called USDT to purchase large amounts of MNGO on multiple cryptocurrency exchanges with the objective of artificially increasing the value of MNGO relative to USDC on the exchange on which EISENBERG traded. EISENBERG's purchases had their intended effect and caused the value of MNGO to increase relative to USDC.
- Paragraph 30:
 - Defense Objection 1: The exchange described is FTX, which operated in USD (automatically converting cryptocurrencies like USDC 1-to-1 into USD) and reported prices in USD, not USDC. Tr. 455, 456, 480.
 - Defense Objection 2: The government's framing that one sells dollars to buy goods is nonsensical and should be rejected. A coffee drinker buys a cup of coffee for \$3, they don't sell \$3 for a cup of coffee.
 - Defense Requested Rewrite: Specifically, Exchange-1 was one of the exchanges from which the Oracle gathered data for pricing Perpetuals. Between approximately 6:26 p.m. and 6:40 p.m., EISENBERG used the

Exchange-1 Account (which was registered to a different person but controlled by EISENBERG) to sell USDC for to buy a total of over 16 million MNGO. During that period, the price of MNGO on Exchange-1 rose from a low of approximately 0.0388 USD C/MNGO to a high of approximately 0.1557 USD C/MNGO.

- <u>Government's Response</u>: The Government objects to the defendant's proposed changes to PSR ¶¶ [28-30] for the same reasons given above because the proposed changes reflect the defendant's objection to the terms "USDC" and "investors."
- <u>Defense Reply</u>: Please see above.
- Paragraph 33:
 - Defense Objection 1: The exchange described is AscendEX. Its general counsel testified at the trial unequivocally that while the exchange extensively utilized independent contractors employed by a company called HD Consulting in New York, it did not have an office (or any employees) in the United States. Tr. 141.
 - Defense Objection 2: Eisenberg never provided false information to AscendEX about his location. The trial testimony was that the exchange assumed a "nationality" based on the ISP—a term the witness could not accurately define—used to access the exchange. Tr. 154-55.
 - Defense Objection 3: There was no evidence at trial of any wire transmitted to Manhattan. The government was challenged on this point in the post-trial briefing and failed to identify any such evidence. Dkt. 183 at 66.
 - Defense Objection 4: As noted above, the government framing that one sells dollars to buy goods is nonsensical and should be rejected.
 - Defense Requested Rewrite: A cryptocurrency exchange with offices in New York, New York (""Exchange-2"), is another one of the exchanges from which the Oracle gathered data for pricing Perpetuals. On October 11, 2022, EISENBERG opened and funded an anonymous account on Exchange-2 (the "Exchange-2 Account")., providing false information about his location to circumvent Exchange-2's restrictions on traders from the United States.
 Opening, funding, and trading through Exchange Account-2 resulted in wires and data being transmitted to Exchange-2's office in Manhattan. Between approximately 6:26 p.m. and approximately 6:45 p.m., EISENBERG used the Exchange-2 Account to sell USDT forbuy over 1 million MNGO. During that period, the price of MNGO on Exchange-2 rose from a low of approximately 0.04 USDT/MNGO to a high of approximately 0.45 USDT/MNGO.
 - <u>Government's Response</u>: The Government objects to the defendant's proposed revisions to PSR ¶ 34, which relate primarily to the location of AscendEx and the existence of a wire through the Southern District of New York. The defense's arguments are wrong for the reasons given in pages 51-62 of the Government's Opposition. The defense's objection to the term "sell USDT for over 1 million MNGO" is also incorrect. In the

foreign-exchange context, people regularly talk about selling one currency to buy another (e.g., selling dollars to buy yen or selling Euros to buy pesos). The same applies in the context of cryptocurrencies. Here, for example, the defendant sold USDC or USDT (depending on the market) to buy MNGO.

- Defense Reply: The government makes no attempt to specifically respond to Defense Objections 1 and 3 regarding its misstatements about Ascendex, instead citing its brief. But even the government's brief does not claim that Ascendex had an office in New York. Nor did the government ever identify a wire that would have been sent to New York. The government also offers no response at all to Objection 2 regarding its misstatement that Eisenberg provided false information about his location. The government's sole substantive response relates to Objection 4, in which the government claims, with no support, that "[i]n the foreign exchange context, people regularly talk about selling one currency for another." This, of course, is not a foreign exchange case. Moreover, it could make sense to discuss selling one currency for another in a market like foreign exchange in which one could conceivably sell multiple different currencies in exchange for any currency they buy. That's not how Ascendex (or any other exchange involved in this case) worked. Anyone transacting on Ascendex would be using USDT so there is no need to employ the convoluted and confusing verbiage proposed by the government in which a transaction to buy something is recast as the reselling of currency (i.e. selling dollars for a cup of coffee). The only reason the government insists on this is to justify its utterly illogical attempt to justify Counts 1 and 2 by inserting stable coins used as a medium of exchange into the analysis of the risk exchanged in the swap and claiming that this triggers the mixed swap exception. The government's verbal gymnastics in its recitation of the facts further illuminates the weakness of this argument.
- Paragraph 34:
 - Defense Objection 1: Same as above: both settlement and market prices on MNGO Markets are stated in USD, not USDC.
 - Defense Objection 2: Same as above: This Paragraph ambiguously refers to "price," but appears to be describing the settlement price, *i.e.*, the price reported by the oracle, rather than, for example, the market price that a user would pay to buy a MNGO Perpetual contract. Also, as discussed above, references to artificiality and manipulation are misleading without a defined price term because the evidence demonstrated that Eisenberg had no intent to influence the market price of the MNGO Perpetual.

- Defense Objection 3: Same as above: The settlement price of the Perpetuals did not go to 0.54 USD/MNGO. The statement that it reached this level by 6:45 pm is incorrect.
- Defense Requested Rewrite: By artificially manipulatingincreasing the value of MNGO relative to USDC, EISENBERG also intended to and did artificially increase the Oracle price of used to settle MNGO Perpetuals on Mango Markets. Specifically, between approximately 6:26 p.m. and 6:45 p.m., on October 11, 2022, the price of MNGO Perpetuals on Mango Markets rose from approximately 0.0382 USDC/MNGO to a high of approximately 0.54 USDC/MNGO (an increase of over 1300 percent).

• Paragraph 35:

- Defense Objection 1: Same as above: The term "price" should be clarified as "settlement price."
- Defense Objection 2: The term "apparent value" is inaccurate in two ways.
 - The term "value" is used in a misleading way. Borrowing power on Mango Markets is based on the value of the user's collateral, which is not the same as the value of the MNGO Perpetual itself. It is more accurate to state this as the "profit" that the MNGO Perpetual was entitled to, or the instrument's "profitability."
 - Moreover, this profit (or value) was not "apparent," it was the actual amount that Mango Markets recognized at the time.
- Defense Requested Rewrite: As the <u>settlement</u> price of those Perpetuals rose as a result of the <u>manipulative</u> trading by EISENBERG, the <u>apparent</u> <u>valueprofitability</u> of the Long MNGO Perpetual Position that Mango Account-1 had purchased rose, accordingly. Because of that increase in <u>apparent</u> <u>valueprofitability</u>, EISENBERG, who controlled Mango Account-1, was able to use the ''borrow'' and ''withdraw'' function on Mango Markets to borrow and withdraw a large amount of cryptocurrency, without the ''health'' of Mango Account-1 dropping low enough to trigger liquidation.
 - <u>Government Response</u>: The Government objects to the defendant's proposed revisions to PSR ¶¶ 34-35. Those objections relate to the use of terms such as "price," "manipulation," "artificial," and "value." As explained above, it is correct for the PSR to use those terms, because the defendant was convicted of manipulating the price of a swap.
 - <u>Defense Reply</u>: See above.

• Paragraph 36:

- Defense Objection 1: Same as above, Eisenberg borrowed only \$61 million worth of cryptocurrency. Part or all of his settled profit balance (totaling 50 million USDC), including the 10 million USDC he had initially deposited, was directly withdrawn profit that was not a "borrow."
- Defense Objection 2: "Users" is more accurate than "investors."

- Defense Objection 3: Assets deposited by users on the Mango Markets platform did not belong to those users. Rather, they had a contractual right to withdraw those assets if there were funds available. Unlike a bank, there was no absolute right to withdraw deposits on demand. *See* GX-1011 at 169 ("There is a chance the user is not able to withdraw deposits because it's borrowed.").
- Defense Requested Rewrite: Following that increase in borrowing power, EISENBERG borrowed and withdrew approximately \$6140 million worth of different cryptocurrencies from Mango Markets. The cryptocurrency that EISENBERG borrowed and withdrew came from the deposits and assets belonging to other Mango Markets users investors had deposited on the platform. As a result of these actions, EISENBERG withdrew nearly all thenavailable funds from Mango Markets.
 - Government Response: The Government objects to the defendant's proposed revisions to PSR ¶ 37. His objections to the \$110 million figure and the use of the term "investors" are wrong for the reasons given above. The defendant's third objections—that assets deposited on Mango Markets did not belong to investors—is also incorrect. Investors who deposited cryptocurrency on Mango Markets were entitled to that cryptocurrency and had the right to withdraw it. It is true that it was theoretically possible Mango Markets might not have enough available cryptocurrency to support a withdrawal, just like a bank might not have enough cash on hand to support a withdrawal during a bank run. But that does not mean that an investor does not own their deposits, just cash in the bank belongs to the bank depositor, even though the bank can lend the money out to others.
 - Defendant's Reply: The government's attempts to analogize Mango Markets to a bank fail for the same reasons that its prior attempts both before the court and the jury to compare borrowing on Mango Markets with traditional mortgages failed. Mango Markets was not a bank and did not operate like a bank. It was a peer-to-peer decentralized financial platform. As noted above, its documentation was specific that users could at any time withdraw the assets deposited by other users, and, as a result, users may not be able to withdraw their funds. This warning was not reliant on a "run on the exchange" scenario and required only that another user access the funds. It could have happened at any time and, indeed, had happened in the recent past. In September 2022, just weeks before Eisenberg's trade, ETH became 100% utilized on Mango Markets. During this period, the interest rate spiked to the max rate for ETH, and users who deposited ETH were not able to access their funds. Eventually some ETH was paid back and users were able to access funds again. Unlike a bank, this was an entirely normal occurrence on Mango Markets. The government's response is also emblematic of its failure to grapple with the evidence, particularly as it related to idiosyncratic features of Mango

Markets, instead attempting to substitute its own pre-conceived notions and flawed comparisons divorced from the facts of the case.

• Paragraph 37:

- Defense Objection 1: Same as above: Eisenberg both intended to and actually did repay most of the assets he withdrew.
- Defense Objection 2: It is not entirely accurate (and unnecessary) to describe Eisenberg's MNGO purchasing as being done with "USDC" since he was also using other currencies (USD and USDT) to purchase MNGO.
- Defense Objection 3: Same as above: "profitability" is more accurate than "value" in order to describe the health of Eisenberg's account.
- Defense Objection 4: Both Eisenberg's Long and Short accounts were, in fact, partially liquidated so the final sentence is inaccurate.
- Defense Objection 5: It is not correct to state that the Long account was "revealed to be worthless." While the account had become worthless, it had not always been. For example, when Eisenberg purchased the MNGO Perpetuals in the account for \$5 million, the account had substantial worth (approximately \$5 million). The profitability of the Long account thereafter exceeded \$100-200 million at various points during the trading. See GX-1337 (government expert's chart depicting profitability of Long account exceeding \$200 million).
- Defense Requested Rewrite: While EISENBERG purported to be borrowing some of the cryptocurrency, the contract did not require him to repay the borrowed funds and, indeed, he had no intention of repaying all of them. After EISENBERG stopped purchasing MNGO-with USDC, the price of MNGO Perpetuals on Mango Markets, (which was no longer being artificially propped up by EISENBERG) collapsed to approximately 0.02 USDC/MNGO. As a result, the Long MNGO Perpetual Position dropped to having a-negative profitabilityvalue and the health of Mango Account-1 fell below zero, making Mango Account-1 subject to liquidation. There wereas, however, nothing tolimited funds to liquidate because EISENBERG had already withdrawn the cryptocurrency and the Long MNGO Perpetual had be<u>comeen revealed to be</u> worthless.
 - <u>Government</u> Response: The Government objects to the defendant's proposed revisions to PSR ¶ 38. The defendant's first three objections relate to his intent to repay and the use of terms like "USDC" and "value." As explained above, those objections are unfounded. The defendant's fourth and fifth objections effectively argue that the long and short MNGO Perpetual positions against which the defendant "borrowed" had actual value, and that the PSR should be revised to reflect as much. That position is at odds with what the jury found in convicting him. The defendant's MNGO Perpetual positions appeared to have value only because he manipulated the price of MNGO Perpetuals, and that value collapsed as soon as the defendant ran off with investors' funds and stopped

manipulating the price. That was the whole point of the defendant's fraudulent scheme. Revising the PSR as the defendant proposes would incorrectly make it seem like the defendant had an asset with genuine value and borrowed in good-faith against the value of that asset, which is a defense the jury rejected.

- <u>Defendant's Reply</u>: See above regarding objections 1-3. Regarding objections 4 and 5, the government, without explanation, ascribes to the jury findings the jury did not make. Regarding Objection 4, the government otherwise offers no response and certainly does not explain its baseless assertion that the jury's finding somehow conflicts with the objective fact that liquidations occurred. The Long account was partially liquidated repeatedly so the statement that it could not be liquidated is clearly wrong and requires the minor edit the defense proposes.
- Regarding Objection 5, the government's assertion, without evidence, that Eisenberg's Long account was at all times "worthless," makes little sense and is certainly not a finding the jury made. Eisenberg paid \$5 million when he purchased MNGO Perpetual contracts on October 11, 2022. The market accurately valued his account at that time. The government's assertion that the account "appeared to have value only because he manipulated the price of MNGO Perpetuals" is not correct. The assets were worth millions of dollars before Eisenberg had made a single trade. It was only once the value of the MNGO token decreased below four cents that the account became worthless, as the defense's proposed edit reflects. Once again, the government refuses to accept even a minor edit to clean up its sloppy draftsmanship.

• Paragraph 41:

- Defense Objection: The final sentence of this Paragraph is inaccurate and vague and should be deleted.
 - No cryptocurrency was withdrawn from the Mango DAO; all of the cryptocurrency was withdrawn from Mango Markets.
 - It is unclear what or who is meant by "members of the Mango DAO and Mango Markets." All of the Mango Markets users (many of whom were also holders of Mango tokens, *i.e.*, the members of the Mango Markets DAO) were reimbursed within 2 weeks. There is no such thing as members of Mango Markets.
 - The Mango DAO directed the return of the assets Eisenberg transferred back to the Mango DAO in addition to funds from the insurance fund to the users.
 - The entire \$104 million was returned either by Eisenberg or by the insurance fund controlled by the Mango DAO (of which Eisenberg was the single largest member).

- Defense Requested Rewrite: After the transfer described, members of the Mango DAO voted to approve the October 13, 2022, proposal. Following that approval, multiple cryptocurrency wallets sent the Mango DAO approximately \$57 million worth of cryptocurrency, in addition to the 10 million USDC that the Mango DAO had already received. Members of Mango DAO and Mango Markets did not receive the rest of the cryptocurrency that had been taken, which amounted to approximately \$40 million worth of different cryptocurrencies.
 - Government's Response: The Government objects to the substance of the defendant's proposed revisions to PSR ¶ 42, but would agree to a revision of the sentence at issue. The point of PSR ¶ 42 is to explain that, after reaching an agreement on or about October 13, 2022, the defendant sent a total of approximately \$67 million of cryptocurrency that went toward reimbursing investors who lost deposits on Mango Markets, and that this did not fully reimburse those investors, who lost over \$110 million worth of cryptocurrency. The defendant's proposed revision would be misleading because it would leave out that the defendant did not fully reimburse investors. To clarify, the Government proposes revising the challenged sentence to read: <Those repayments did not fully reimburse investors in Mango Markets, who had lost over \$110 million worth of cryptocurrency as a result of the defendant's scheme.>
 - Defendant's Reply: The government's proposed edit, which Probation accepted, is inaccurate. The government can point to no user of Mango Markets who was not made whole almost immediately after October 11, 2022 so it is at a minimum misleading to say that users "lost" their money. Moreover, the figure of \$110 is wrong because it includes the \$10 million that Eisenberg put on the platform. Also, all of the user assets were returned from the funds returned by Eisenberg and those contributed by the Mango DAO's insurance fund. The fiction being pushed by the government is that the Mango DAO's insurance fund somehow belonged to individual users. The government has provided no evidence or explanation for this assertion. This issue is addressed in more detail below.

• Paragraph 49:

- Defense Objection: Both facets of the second sentence (that Eisenberg used "fraudulent identities" and that this was done "to avoid detection") are unsupported by any evidence, and the sentence should be deleted. Indeed, the government abandoned this theory of deception in its jury addresses at trial and in post-trial briefing.
 - The only account related to the trades that was in the name of someone other than Eisenberg was an FTX account that belonged to a business that Eisenberg had purchased. GX-116, GX-116A.

- There was no evidence at trial that Eisenberg took any steps to avoid detection. As noted in the tweets above, Eisenberg claimed responsibility for the trading a few days after it occurred.
- <u>Government's Response</u>: The defendant challenges the second sentence of PSR ¶ 51, which states: <Eisenberg used multiple accounts under fraudulent identities to avoid detection.>. The Government disagrees with the basis for the defendant's objection. The evidence at trial showed that the defendant used an FTX account in the name of a Ukrainian woman to commit his crime, along with an anonymous account on the platform AscendEx. The evidence at trial also showed the defendant took other steps to avoid detection and apprehension, including fleeing to Israel. The defendant's public admission to the scheme took place only after a cryptocurrency reporter informed the defendant that he planned to publish a piece identifying him as the Mango Markets attacker. The Government proposes modifying the challenged sentence to read: <Eisenberg attempted to avoid detection by, among other things, using a cryptocurrency account opened using another person's identity.>.
- <u>Defendant's Reply</u>: The government's proposed edit, which Probation accepted, is inaccurate. Notably, the government's position is so flawed that one of the government's main arguments is that Eisenberg attempted to avoid detection by flying to Israel, which occurred *after he had been publicly identified*. Eisenberg purchased a company that owned the bochen.clean FTX account using his own name and home address in the contract, doing so because the FTX account he had in his name had been frozen. Additionally, he used a Circle account in his own name to move the funds both before and after the trades. He then withdrew much of the funds to an address on Ethereum that was associated with him, including via an affidavit he had submitted in the Waves case. Not surprisingly, he was identified within hours of the trading. The more plausible inference is that he used the FTX account for convenience because his own account with FTX had been closed.³⁰

• Paragraph 52:

- The final draft of the PSR stated for the first time that Mango Labs LLC ("Mango Labs") claimed to be a victim.
- In its "Victim Impact Statement" Mango Labs claims to be a victim, without citing any facts or law to justify such a statement. While Mango Labs asserts, without citing any evidence, that 90% of Mango users assigned their claims to Mango Labs and contends that Mango Labs is the vehicle Mango DAO has funded to pursue recovery, it has made no attempt to explain why any of this would render it a victim. The Crime Victim Restitution Act states that ""crime

³⁰ For similar reasons, Eisenberg objects to the reference in Paragraph 69 that says that "Eisenberg attempted to avoid detection and apprehension by using a cryptocurrency account using another person's identity." Eisenberg does not otherwise object to the sophisticated means enhancement in this paragraph.

victim' means a person directly and proximately harmed as a result of the commission of a Federal offense." 18 U.S.C. § 3771(e)(2). Mango Labs cites this definition but makes no attempt to explain how it could possibly be considered a victim. Instead, it asserts that it "now stands in the shoes of the depositors" and cites a case generally discussing the concept of assigning civil claims.³¹ Mango Labs cites no authority that restitution claims under the CVRA can be assigned to a third party, let alone a third party like Mango Labs that paid nothing nor otherwise gave any consideration to obtain a right to the claims.

- Mango Labs offers no explanation of how it derived the authority to force users to 0 assign their claims to it in order to be reimbursed in violation of both the terms stated in the Mango Markets documentation and the agreement between the Mango DAO and Eisenberg. The Mango Markets documentation touts a \$70m DAO-controlled insurance fund that "will pay off losses incurred by token lenders" in the event of "bankrupt accounts." GX-1011 at 111. Nothing in the documentation states that the insurance fund will only pay out if the user assigns its claims to a third party. Nor has Mango Labs asserted that a vote of the DAO was taken authorizing this action. Moreover, in its agreement with Eisenberg, the Mango DAO expressly acknowledged that it was agreeing to Eisenberg's demand "to make users whole" and explicitly stated that the DAO treasury would be used "to cover the remaining . . . bad debt." GX-912. Nothing in this agreement gave the Mango DAO the right to withhold funds expressly returned for transmittal to the users unless those users agreed to assign their claims to a third party not mentioned in the Eisenberg-DAO discussions. This agreement was confirmed in the proposal voted on by token holders and passed by the DAO on October 14, 2022 which stated that the funds sent by Eisenberg "and the mango DAO treasury will be used to cover any remaining bad debt" and that "[a]ll mango depositors will be made whole." GX-1008. Nothing in this passed DAO proposal or any other gave Mango Labs the right to demand that users assign their claims in order to receive the funds to which they were already entitled.
- Mango Labs has a single member, Dafydd Durairaj, according to a recent lawsuit Durairaj, through Mango Labs, filed against several other creators of Mango Markets. See Complaint, Mango Labs, LLC v. John Kramer et al., 3:24-cv-01469, Dkt. 1 ¶ 17 (D. P.R. Oct. 7, 2024). Durairaj, though present in a New York hotel room at government expense during the trial in this case, was not called as a witness by the prosecution. There is no guarantee that Durairaj would pass along any of the proceeds from a judgment in this case to any other person. Nor have Mango Labs and/or Durairaj explained why he should receive approximately \$40 million to which he is not entitled.

³¹ For the reasons stated below, Eisenberg disputes the claim that the Mango Markets users are victims.

2. <u>PSR Guidelines Calculation Objections</u>

a. Acceptance of Responsibility for 24 Cr. 251 Under a Grouping Analysis

Eisenberg respectfully objects to being denied an acceptance of responsibility reduction pursuant to § 3E1.1 as to the Possession of Child Pornography (18 U.S.C. § 2252A) charge ("CP Charge") contained in the Information filed under 24 Cr. 251, which is set forth in the grouping analysis in Paragraph 89 of the PSR.

Probation's determination to deny Eisenberg this reduction was the result of its grouping analysis of his convictions in two wholly separate (and separately charged) cases; one relating to the CP Charge and the other to the Crypto Charges. While. Eisenberg pled guilty to the CP Charge, he subsequently went to trial and was convicted of the Crypto Charges. Probation determined that the acceptance of responsibility adjustment is applied only after the grouping analysis of the charges of conviction had been completed and, because the Crypto Charges, to which. Eisenberg had not pled guilty, carried a higher Guidelines level and thus drove the post-grouping level, no acceptance of responsibility deduction was applicable. Though this is an understandable application of the Guidelines, the result is manifestly unjust and inconsistent with the policy underlying the acceptance of responsibility deduction to conserve government and judicial resources. Moreover, such a factual scenario does not appear to have reached the Second Circuit, or to have been contemplated by the Guidelines, and at least one other circuit has endorsed defendant's position that an acceptance of responsibility deduction should be given in such a scenario.³²

³² Depending on the Court's ruling on his Rule 29/33 motion, Eisenberg reserves the right to take the position that he has sufficiently accepted responsibility to receive the § 3E1.1 reduction as to the Crypto Charges as well. As the Second Circuit has recognized, "Conviction by trial [] does not automatically preclude a defendant from consideration for [an acceptance of responsibility] reduction.' In 'rare situations' a defendant may demonstrate acceptance of responsibility 'even though he exercises his constitutional right to a trial,' as 'where a defendant goes to trial to preserve issues that do not relate to factual guilt.'" *United States v. Elia*, 374 Fed. App'x 184, 186 (2d Cir.

As an initial matter, there is no dispute that Eisenberg waived his right to an indictment, entered a plea of guilty to the CP Charge pursuant to a criminal Information, allocuted to his commission of the offense, and fully accepted responsibility as to the CP Charge. By this guilty plea and allocution, he "clearly demonstrated acceptance of responsibility for his offense" and "timely notif[ied] authorities of his intention to enter a plea of guilty, thereby permitting the government to avoid preparing for trial," the prerequisites for a § 3E1.1 reduction. U.S.S.G. § 3E1.1(a), (b). Additionally, this plea was entered pursuant to a plea agreement in which the government expressed its intention to move for the deduction of a third acceptance point pursuant to § 3E1.1(b) if certain conditions are met. Eisenberg has met all of these conditions, and the government does not oppose the full three-point reduction regarding the CP Charge.

Under ordinary circumstances, during a grouping analysis, the § 3E1.1 acceptance reduction is applied after: (1) the relevant offenses are grouped pursuant to U.S.S.G. § 3D1.1; (2) the multicount adjustments are made per U.S.S.G. § 3D1.4; and (3) a Combined Adjusted Offense Level is determined. Probation followed this general procedure, first ascertaining the Combined Adjusted Offense Level and then determining the applicability of the acceptance reduction. Probation found the reduction inapplicable because the "defendant has not clearly demonstrated acceptance of responsibility for his offense, as he put the Government to its burden of proof at trial." PSR ¶ 89. Here, however, unique circumstances exist, and Probation erred in conducting the grouping analysis in this manner because there is absolutely no relation between

^{2010) (}quoting U.S.S.G. § 3E1.1, cmt. n.2). If Probation or the Court were to determine that. Eisenberg has accepted responsibility as the Crypto Charges, the above-described objection would become academic because the § 3E1.1 reduction is currently not applied in the PSR based only on the lack of acceptance of responsibility as to the Crypto Charges. In such a scenario,. Eisenberg would receive the reduction even under the current application of the grouping analysis. Probation's discussion of acceptance of responsibility appeared to focus almost exclusively on this footnote, which is ancillary to the main argument stated above and is largely a reservation of rights depending on the Court's ruling on the pending Rule 29 and 33 motions. *See* PSR Addendum at 32-33.

the two cases other than. Eisenberg being the defendant. The offenses subject to the grouping analysis are charged in two separate, entirely unrelated charging instruments and there is no factual overlap. The defense has not found, and neither Probation nor the government has cited, any authority supporting Probation's initial determination not to apply a deduction for acceptance of responsibility.

By contrast, the Ninth Circuit in *United States v. Kellum*, 372 F.3d 1141, 1146 (9th Cir. 2004), held that it was "not clear error for a district court to grant a defendant charged in two separate indictments later grouped for sentencing a deduction for acceptance of responsibility if the defendant pleads guilty to all (non-dismissed) charges in one indictment, even if the defendant goes to trial on the charges in the other indictment." The Ninth Circuit held in a case where grouping appeared to be mandatory that "the acceptance of responsibility provision of the Guidelines, in light of its purposes, should permit Kellum to receive an acceptance of responsibility adjustment because he pleaded guilty to the charges in the [separate] indictment, saving the government and judiciary the time and expense of proceeding to trial on that indictment." *Id. see also, United States v. Yip*, 362 Fed. Appx. 659, 663 (9th Cir. 2010) (citing *Kellum* approvingly but denying defendant acceptance of responsibility deduction because case did not involve two separate indictments). The Second Circuit has not ruled on this issue.

Eisenberg's claim for acceptance of responsibility is considerably stronger than that in *Kellum* because. Eisenberg pled guilty to the CP Charges *before* going to trial on the Crypto Charges. Kellum, on the other hand, first went to trial and was convicted, and only subsequent to this conviction informed the government that he wished to plead guilty in his other case. Even so, the Ninth Circuit stated that the benefit to the government of the subsequent guilty plea were "not wholly negated by Kellum's prior venture in trial on the [other] indictment, nor are the

benefits insubstantial." *Id.* at 1146. The Ninth Circuit therefore applied the acceptance reduction as to the charges which he pleaded guilty even though his circumstances are far less favorable than those presented by. Eisenberg. In this case, Eisenberg, prior to the trial on the Crypto Charges, allowed the government to avoid the process of obtaining an indictment by agreeing to the filing of an Information, and promptly pled guilty and accepted responsibility to the CP Charges before having the benefit of knowing the result of his trial on the Crypto Charges. Even had Eisenberg prevailed at the Crypto Charges trial, his CP Charge conviction would have remained.

For these reasons,. Eisenberg believes a three-point acceptance of responsibility adjustment should be applied to Group 2 (the CP Charge). As a result, the adjusted offense level of Group 2 is 28, not 31 as set forth in Paragraph 79 of the PSR.³³ The ultimate effect this will have on the final Guidelines calculation is dependent on the determination of Eisenberg's other Guidelines objections and Probation's and the Court's resolution of these objections. However, as an example, if the Group 1 Crypto Charges adjusted offense level remains at 35 as stated in Paragraph 75, Group 2 would be 7 points less than Group 1 and ascribed a half unit instead of a full unit as set forth in Paragraph 85 and the total units would be 1.5 instead of 2. The half point reduction in the number of units would result in a 1 level increase in the Total Offense Level pursuant to §3D.4 instead of the 2 called for in Paragraph 87.

³³ It appears that in *Kellum*, the Ninth Circuit applied the acceptance of responsibility reduction after the Total Offense level was determined. Above, Eisenberg suggests a different way to apply the reduction. However, should Probation follow *Kellum*, deducting the acceptance points from the Total Offense Level is also a reasonable methodology.

b. Loss Amount, Paragraph 69 of the PSR³⁴

Eisenberg objects to "being held accountable for losses of approximately \$104,000,000." PSR ¶ 67. The government has not yet articulated a clear theory of its loss calculation but at trial it seemed to be that Eisenberg borrowed money that he was not entitled to and which he did not intend to repay. Though the government argued repeatedly to the jury that Eisenberg had stolen the funds, that theory of theft was always premised on the notion that Eisenberg had falsely claimed that the money was being borrowed when, in fact, Eisenberg was taking it with no intent to pay it back. See, e.g., Tr. 1337 ("He said he was borrowing, but he was simply stealing."); 1338 ("He borrowed from Mango Markets based on fake collateral."); *id.* ("[T]he defendant was not borrowing, he was stealing."); Tr. 1340 ("Using inflated collateral to borrow, it's fraud."); Tr. 1341 ("He is going to say that he is borrowing when he's really stealing."); Tr. 1356-57 ("The defendant represented to the platform he was borrowing. But he wasn't borrowing. This was a lie. The defendant was stealing.") Tr. 1358 ("[T]he defendant had no intention of borrowing, he had no intention of maintaining collateral. He was stealing and running away with it."); Tr. 1368 ("He lied about borrowing. He wasn't borrowing, he was just stealing."). Accepting the Jury's verdict, the evidence at trial established that the amount of money Eisenberg borrowed without intending to repay was far less than \$104 million because many of the withdrawn assets were either not borrowed or were borrowed with the intent to repay (and were, in fact, repaid).

At the outset, the government is simply wrong regarding the amount of money that was borrowed in this case—even after finally relenting and subtracting the funds the government

³⁴ Eisenberg motions for Judgment of Acquittal and for a New Trial are currently pending. The below arguments may be affected by the decisions on those motions, particularly the resolution of his arguments for dismissal of the commodities manipulation charge (Count 2).

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previously alleged Eisenberg borrowed from himself. As described above, the initial withdrawal of 50 million USDC (and subsequent smaller USDC withdrawals) were not borrows; rather, these were withdrawals of then-existing profits. Eisenberg, under the terms of the smart contract, was under no obligation to repay these funds.

Moreover, the evidence clearly demonstrated that a significant portion of the funds that Eisenberg did borrow, he intended to repay—and did repay. As Eisenberg recounts in his letter, his intention was always to ensure that users were made whole, and he "understood that I would have to return some funds to make sure users wouldn't lost out." Substantial evidence corroborates this assertion.

First, as discussed above, Eisenberg proposed the return of many of these assets within hours of the trades and before his identity was publicly disclosed.

Second, Eisenberg kept these assets on the Solana blockchain, which was done to facilitate the planned return because they could simply be transferred between wallets on the same blockchain at roughly the same value. Agent DeCapua's testimony and exhibits established that all of the assets were transferred to wallets on the Solana chain within minutes of their withdrawal. GX-1354, GX-1356, Tr. 578, 581, 587-88. From there only the USDT (after conversion into USDC) and USDC were transferred out of the wallet and off the Solana blockchain. GX-1357, Tr. 590 ("Q: What happened with the non-USDC cryptocurrency? A: It just stayed in that [Solana] wallet."). Leaving the assets on the Solana blockchain was important both because it simplified their transfer back and because it meant that the funds could did not require conversion, as non-stable coins often have different values on different blockchains. Conversely, if Eisenberg's intention was to somehow shield these funds so as to retain them, he could and would have removed them from the Solana blockchain.

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Third, Eisenberg at all times expressed his desire to ensure that all users were made whole. As discussed above, in an email on the morning of October 12, just hours after the trades, Eisenberg again stated that his goal was "making users whole" and that any of his profits should be "paid out of the insurance fund as per the protocol design." GX-909. Mango agreed that their wish was to "make depositors whole" and to "avoid litigation and everyone can move on." GX-910, 911. Had Eisenberg simply wished to keep all the money, he could have made the trades from abroad and not waited to leave the country until afterwards, and/or not made a proposal before anyone knew he was responsible.

Finally, within days of the trades, Eisenberg returned all of the assets from the Solana wallet plus an additional 10,000,000 USDC totaling an approximate value of \$68 million.

The government has further argued in its opposition to Eisenberg's objection to the PSR that were lodged with Probation that reducing the sum (if any) that Eisenberg either did not borrow or borrowed with intent to repay should not reduce the loss amount because his ability to withdraw the funds came from fraudulently manipulating the price of the MNGO Perpetuals. But even the government's apparent "price theory" at trial was premised on the notion that Eisenberg borrowed on the basis of these profits. The government has never argued for any scenario other than that all of the withdrawals were comprised of borrowed funds that needed to be repaid. Relatedly, the government has to date offered no explanation for its position that the funds Eisenberg repaid should nevertheless be included in the loss amount because they are not part of the offense. Indeed, the government's press release announcing Eisenberg's conviction neglected to mention that Eisenberg repaid the majority of the assets he withdrew, in addition to counting Eisenberg's own money in the loss amount. "Man Convicted for \$110M Cryptocurrency Scheme: Justice Department's First Cryptocurrency Open-Market Manipulation

Case" <u>https://www.justice.gov/archives/opa/pr/man-convicted-110m-cryptocurrency-scheme</u> (April 18, 2024).

As discussed below regarding the number of victims, the government has for the first time taken the position that the holders of MNGO token were entitled to the funds in the Mango treasury. Were the Court to accept this new argument, the logical conclusion is that the MNGO Perpetuals were substantially undervalued at less than four cents when Eisenberg bought them. Indeed, dividing the approximately \$70,000,000 in the treasury 500,000,000 tokens gives a per token value of fourteen cents. In such a scenario, MNGO tokens were artificially devalued and any rise in value up to and including fourteen cents was not artificial. Accordingly, the government's position results in the logical conclusion that at least \$50,000,000 of Eisenberg's withdrawals were legitimate profits and not the result of fraud or manipulation.

c. More than 10 Victims Enhancement as to 12 CR 10, Paragraph 70 of the PSR

In Paragraph 68 of the PSR, Probation applied the 2-point U.S.S.G. § 2B1.1(b)(2)(A)(i) increase because the offense "involved 10 or more victims, specifically thousands of Mango Markets users suffered losses." The Crypto Charges did not involve 10 or more victims. At most there was one party that lost funds, the MNGO DAO.³⁵ There is no evidence that any Mango Markets user was not promptly reimbursed or suffered any material adverse effect from. Eisenberg's action. In fact, the evidence shows that the users' funds were returned within two weeks with little effort and without any financial loss.

In *United States v. Abiodun*, 536 F.3d 162, 168 (2d Cir. 2008), the Second Circuit directly addressed whether the definition of "victim" as contemplated in § 2B1.1(b)(2) for fraud

³⁵ In Paragraph 54 of the PSR, Probation notes that Mango Labs intends to file a victim impact statement. Mango Labs is not a victim and has not articulated any viable legal theory for that position.

and theft offenses includes individuals that "have been fully reimbursed for their financial losses." The Second Circuit held that reimbursed individuals could qualify as "victims" but only "if – as a practical matter – they suffered (1) an adverse effect (2) as a result of the defendant's conduct that (3) can be measured in monetary terms."³⁶ *Id.* at 168-169.

At trial, a total of four witnesses that were "Mango Market users"—Brian Smith, Tyler Shipe, John Casey, and Oliver Tonkin—testified and each of them was fully reimbursed in no more than two weeks at negligible effort or expense to the users. The relevant trial testimony is set forth below:

Smith: (Tr. 111-12)

- Q. At that point in time, could you access the funds that you had on Mango Markets?
- A. I could not.
- Q. Approximately how long were you unable to access your funds on Mango Markets?
- A. Roughly one to two weeks.
- Q. Did there come a time when you were reimbursed for your funds?
- A. Yes.
- Q. Who decided to reimburse you for your funds?
- A. There were several votes put up to the DAO.
- Q. And when you say "the DAO," what do you mean?
- A. The community that voted on these proposals in the native token.
- Q. How much did the Mango DAO pay to make users whole?
- A. Approximately \$42 million.

³⁶ The Commentary to § 2B1.1 was changed after *Abiodun* to include within the definition of "victim" individuals whose means of identification was used unlawfully in case involving means of identification. Commentary Note 4(E). That amendment does not change the holding in *Abiodun* as applied to the instant case.

Shipe: (Tr. 392-93)

Q. After this proposal was passed, what happened next with respect to the Mango's

DAO's actions?

A. Then there were proposals to figure out how to reimburse the users of Mango Markets.

Q. Where were those proposals made?

A. On the same Mango DAO website.

Q. Who ultimately made the decision to reimburse Mango Markets' users?

A. The Mango DAO.

Q. How much did the Mango DAO provide in funds to make users whole?

A. Approximately \$40 million.

Casey: (Tr. 823)

Q. Now it says here you can't withdraw it at that moment. You were ultimately able to

withdraw your cryptocurrency; right?

A. After a DAO vote was passed.

Q. What was the DAO vote?

A. The DAO vote was to give money back so that they can refund the people who couldn't withdraw.

Q. And you got refunded; right?

A. I did.

Tonkin: (Tr. 839-40)

Q. And, Mr. Tonkin, did you eventually receive your funds back?

A. I did.

Q. How long was it?

A. I think about two weeks.

Q. Who provided those funds to you?

A. So it was a mixture. So it was partly from the Mango own treasury but it was also from funds which had been provided by the individual responsible for the event who again, had returned some funds to the Dow in order to facilitate a repayment or invest the funds.

Additionally, there is no evidence that any of the witnesses or any other individual suffered an adverse effect that can be measured in monetary terms as a result of. Eisenberg's actions.

The government's first response to this objection is that as part of receiving reimbursements, Mango Markets users "needed to accede to defendant's demand that they 'waive any potential claims' against him," which the government states is "an adverse effect, and it can be measured in monetary terms." Ex. F, Gov. Let. at 5 (citing Tr. 388). Initially, the very testimony cited by the government demonstrates that it is wrong as a factual matter. Tyler Shipe testified that he declined to vote for the proposal but was still eligible for reimbursement. Tr. 392-93. John Casey similarly testified that he did not vote for the proposal but still got his funds back. Tr. 823-24. Other users, like Oliver Tonkin, who did not own or could not access their MNGO and therefore could not vote on the proposal were nevertheless made whole. Tr. 839-40. Moreover, no one actually gave up any right to pursue civil or criminal actions against Eisenberg; the promises given were illusory. Indeed, this very case demonstrates that fact on the criminal side. And Mango Labs has sued Eisenberg in a civil case that is currently pending in this courthouse. *See* 23 Civ. 655.

Furthermore, even if users had given up the right to sue Eisenberg, that cannot be said to be an adverse effect measurable in monetary terms because each user was made whole and therefore had no damages to pursue. The government's claim to the contrary appears to be the government's belief that the promise not to pursue litigation was worth \$67 million because that is supposedly what Eisenberg paid for it. This claim is mistaken both as a matter of law and as a matter of fact. Initially, the legal question is whether the right to litigate had monetary value to the alleged victims—*i.e.*, the Mango Markets users—not to Eisenberg. The entire analysis is focused on whether the alleged victim has suffered in some way. *See United States v. Yagar*, 404 F.3d 967 (6th Cir. 2005) (noting that key factor is whether a potential victim "suffered [an] adverse effect as a practical matter from [the defendant's] conduct"). If a hypothetical victim lost a right that was worthless to them, the analysis of whether they have been adversely affected cannot hinge on the fact that the right they lost was of value to someone else.

Moreover, the government's bald assertion that the only reason Eisenberg gave any funds back is because he wanted to secure a commitment not to face legal action is demonstrably false. In his initial proposal to repay significant funds, which was made the night of the trades and before his identify was disclosed, Eisenberg stated that users should "be made whole." GX-1003. In an email on the morning of October 12, just hours after the trades, Eisenberg again stated that his goal was "making users whole" and that any of his profits should be "paid out of the insurance fund as per the protocol design." Mango agreed that their wish was to "make depositors whole" and to "avoid litigation and everyone can move on." GX-909. Had Eisenberg simply wished to keep all the money, he could have made the trades from abroad and not waited to leave the country until afterwards, and/or not made a proposal before anyone knew he was responsible.

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The government's second argument that the Mango users were victims is that "the Mango DAO treasury belonged to the holders of MNGO tokens" so any loss to the DAO was also a loss to each and every Mango user. The government has offered neither evidence nor any explanation for its belief that each Mango user owned the funds in the Mango treasury. This claim is akin to saying that every stockholder in a company owns the company itself. In such a scenario, any crime affecting a company (whether public or private) with more than ten shareholders would make this enhancement applicable. This is clearly not the way that the law has been applied, and the government's position, for which it offers no authority, would be a radical rewriting of the law.

d. Sophisticated Means Enhancement as to 12 CR 10, Paragraph 71 of the PSR

In Paragraph 69 of the PSR, 2 levels were added because the offense involved "sophisticated means" as contemplated in U.S.S.G. § 2B1.1(b)(10)(C) due to the allegation that "Eisenberg used multiple accounts opened under fraudulent identities to avoid detection." This statement is not factually accurate for the reasons discussed above. Moreover, even if the allegation was correct, that specified conduct is not sufficient to warrant a sophisticated means enhancement. Eisenberg does not object to inclusion of the remainder of the paragraph regarding trading across cryptocurrency platforms.

CONCLUSION

While Eisenberg stands convicted of two serious crimes, the Guidelines range for both calls for a sentence for Avi that is substantially greater than is necessary in this case. This unbalanced result is the result of the much-discussed flaws inherent in the Guidelines applicable to both the Crypto Charges and the CP Count. Regarding the Crypto Charges, district courts in this circuit and all over the country have routinely handed down sentences far below the

Guidelines in cryptocurrency and market manipulation cases, accepting as mitigation, among other things, the unclear regulatory environment of the crypto industry and the dearth of unsophisticated victims typically in market manipulation. These factors are prominent here, where Avi paid back two-thirds of what he had withdrawn almost immediately, ensuring no individual would be harmed even though he (and others) believed his conduct was legal. Moreover, he has segregated millions in additional funds to ensure full restitution. Regarding the CP Charge, Avi's Guidelines range has ballooned in the manner criticized by *Dorvee*, which recognized that enhancements for things like using a computer serve no legitimate sentencing purpose. Moreover, Avi is committed, including with the help of therapy, to ensuring that he never again breaks the law. As his father writes, "I am confident that he has learned a painful lesson from this experience and will never break the law again. For all these reasons and all of the reasons discussed above, a sentence well below the applicable guidelines range is sufficient, but not greater than necessary, to satisfy the sentencing goals set forth in 18 U.S.C. § 3553.

Dated: March 27, 2025 New York, New York Respectfully submitted,

SANFORD TALKIN NOAM GREENSPAN Talkin, Muccigrosso & Roberts, LLP 40 Exchange Place, 18th Floor New York, New York 10005 (212) 482-0007

BRIAN KLEIN ASHLEY MARTABANO RILEY SMITH Waymaker LLP 515 S. Flower Street, Suite 3500 Los Angeles, California 90071