

In the
United States Court of Appeals
For the Seventh Circuit

Nos. 21-2242, 21-2251, 21-2666

UNITED STATES OF AMERICA,

Plaintiff-Appellee,

v.

CEDRIC CHANU and JAMES VORLEY,

Defendants-Appellants.

Appeals from the United States District Court for the
Northern District of Illinois, Eastern Division.
No. 18-cr-00035 — **John J. Tharp, Jr., Judge.**

ARGUED MARCH 29, 2022 — DECIDED JULY 6, 2022

Before FLAUM, ST. EVE, and JACKSON-AKIWUMI, *Circuit Judges.*

FLAUM, *Circuit Judge.* This appeal presents several questions, including whether placing manual “spoofing” orders—here, precious metals orders that two traders, defendants-appellants James Vorley and Cedric Chanu, intended to withdraw before being filled—can amount to wire fraud. We address this question, as well as three issues stemming from the trial.

For the following reasons, we affirm the district court's judgment.

I. Background

A. Factual Background

Deutsche Bank—a global banking and financial services company—employed Chanu and Vorley as precious metals traders. Vorley traded precious metals futures contracts from May 2007 through March 2015 while based in London. Chanu was similarly a precious metals futures contract trader from March 2008 through May 2011 in London and from May 2011 through December 2013 in Singapore.

A futures contract is a legally binding agreement to buy or sell a particular product or financial instrument at an agreed-upon price on an agreed-upon date in the future. Futures contracts are traded on markets designated and regulated by the United States Commodity Futures Trading Commission (“CFTC”). One such commodities marketplace, the CME Group, Inc., consists of four exchanges—including the New York Mercantile Exchange, where palladium futures contracts trade, and the Commodity Exchange, Inc. (“COMEX”), where gold and silver futures contracts trade. CME Group exchanges use an electronic trading platform known as Globex to trade futures contracts from anywhere in the globe. During the time relevant to this appeal, the CME Group operated Globex using trading engines in Illinois.

Traders using Globex place “bids” to buy or “offers” to sell futures contracts at a specified price or level. Between 2008 and 2013, the Globex system permitted traders to obscure certain information about their trades. Instead of displaying *all*

orders resting on Globex, as the system does now, the “order book” at this time displayed only a subset of bids and offers—the “best ten bids and best ten price levels up and down.” Given this presentation, not all trade details were readily discernable from Globex; a trader could, for example, obscure the full size of his or her intended trade order by placing an “iceberg” order—which shows only a preset fraction of the total intended trade order—to mitigate market movement and detrimental price impacts. Illustrating this concept, if a trader intends to buy a thousand contracts, he or she may elect to show only one hundred at a time; once the first hundred contracts are filled, the next one hundred contracts become visible to other traders, until the full order quantity is filled.

Visible orders impact the market by conveying investors’ “intent to participate” in the market at a particular price; these orders also “communicat[e] something about the liquidity in the market.” Iceberg orders were a permissible way of minimizing market movement in light of the fact that larger buy orders correlated to larger price responses in the financial market.¹ In the words of the government’s expert, “if a buy order arrives, typically the price of the commodity will move

¹ The mitigating impact of “iceberg” orders was discussed at trial. For example, a trader explained that

If [a trader is] selling 100 lots or 100 contracts of gold, [the trader] would place an iceberg of one. So in the market ... other participants will only see one lot rather than the full hundred-lot size. And the purpose of that was because if [the trader] showed the full 100, the market would be able to see that there’s a fairly big sell order, and [the trader] might not get as good a price when ... trying to sell it.

higher. And the larger the buy order that is made visible to market participants, the larger ... the price response typically [will be] in the financial market.”

COMEX traders could also cancel an order, or the unfilled portion of an order, at any time before it was filled. But, generally speaking, the CME rules do not permit deception; consequently, traders are prohibited from placing orders that they *intend* to cancel before execution. Furthermore, traders at Deutsche Bank, including Chanu and Vorley, received training from Deutsche Bank’s compliance department in 2009 explaining that “market manipulation” was prohibited.² Deutsche Bank took the position that “[t]rading should never be designed to give a false or misleading impression as to the supply or demand” and “[t]rades should never be executed at abnormal or artificial levels.”

Turning to the conduct underpinning this criminal case, Chanu and Vorley placed orders for precious metals futures contracts on one side of the market that, at the time the orders were placed, they intended to cancel prior to execution. The government alleged that Chanu and Vorley placed such orders with the intent “to create and communicate false and misleading information regarding supply or demand (*i.e.*, orders they did not intend to execute) in order to deceive other traders” and entice them to react to the false and misleading

² The Deutsche Bank training materials noted that “[t]he definition of market manipulation varies from jurisdiction to jurisdiction, but for our purposes, it is any transaction or order to trade which gives or is likely to give a false or misleading impression as to the supply, demand for, or price of one or more investments. Dissemination of information by any means which gives or is likely to give a false or misleading impression.”

increase in supply or demand. As noted above, at all times relevant to this case, CME rules prohibited such conduct.

Specifically at issue was Chanu and Vorley's manual "spoofing" conduct, which involved placing "fake bids and offers" to "trick other market participants." Chanu and Vorley's trading colleague, David Liew, who testified against them at trial pursuant to a plea agreement, explained how manual spoofing worked: In an effort to buy something at the lowest possible price, that trader may use spoofing. Spoofing entails "plac[ing] orders opposite of [the] buy order ... [with the] intent to have those offers deceive other market participants into thinking that there was more selling than there actually was and so hoping to get a better price on [the] original order." In Liew's words, a spoofing trader tries "to signal that [certain] trades would go through, but [the trader's] intent is actually to cancel them shortly after." Liew testified that, if successful, employing this illusion "would help Deutsche Bank" while "hurt[ing] any other market participants."

Of note, there are times when a trader may "cancel an order for totally legitimate reasons." A client may change their wishes or breaking news may "cause[] [the trader] to think differently about whether a buy or sell was a good idea." Although, as Liew explained, Deutsche Bank had a rule "where there should be only one person active in the market," and that person would be referred to as the "book runner," there were times when Chanu and Vorley placed opposite orders (for example, a sell order placed to facilitate a buy order, and vice versa) in violation of this rule. The rule was intended to avoid "different people placing orders that might confuse each other." If, however, a trader is "the book runner and [the trader's] colleagues are aware that [they are] selling

something, and if [the trader] see[s] them buying ... and especially if they don't talk to [the trader] about a trade and they're just placing orders very quickly and cancelling, [the trader] has very good reason to believe that those orders placed by them were to assist [the book running trader] buying or selling rather than genuine intent."

The government also presented evidence of Chanu and Vorley's trading patterns and resultant "fill ratios" in an attempt to align their record with the description of spoofing. A "[f]ill ratio is the ratio of the quantity that is filled divided by the quantity that is submitted." Looking to Chanu and Vorley's relative fill ratios, "the fill ratio for the iceberg orders tend[ed] to be high, close to 90 percent, whereas the fill ratios of the visible orders tend[ed] to be quite lower, .2 percent."

The traders communicated amongst themselves via electronic chat. These included Vorley saying "UBS and this spo[o]fing is annoying me ... it['s] illegal for a start" and Chanu applauding another trader for tricking the algorithm.

Overall, although the trading mechanics are quite complex, the defendants' actual actions are not in dispute. The focus here is on the interaction between the defendants' actions and the conduct prohibited by relevant criminal statutes.

B. Statutory Background

Defendants were charged with conspiracy to commit wire fraud affecting a financial institution under 18 U.S.C. § 1343; on appeal, however, they argue any trading conduct akin to "manual spoofing" was not criminal prior to the Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, 124 Stat. 1376 (2010). Although the outcome of this

appeal turns solely on the wire fraud statute, a brief overview of both statutes helps situate the parties' arguments.

First, and of primary relevance, the federal wire fraud statute was enacted back in 1952. 18 U.S.C. § 1343. Applicable to fraud by wire, radio, or television, the statute states:

Whoever, having devised or intending to devise any scheme or artifice to defraud, or for obtaining money or property by means of false or fraudulent pretenses, representations, or promises, transmits or causes to be transmitted by means of wire, radio, or television communication in interstate or foreign commerce, any writings, signs, signals, pictures, or sounds for the purpose of executing such scheme or artifice, shall be fined under this title or imprisoned not more than 20 years, or both. If the violation ... affects a financial institution, such person shall be fined not more than \$1,000,000 or imprisoned not more than 30 years or both.

Id. Wire fraud affecting a financial institution has a 10-year statute of limitations. 18 U.S.C. § 3293(2) ("No person shall be prosecuted ... for a violation of ... [§] 1343, if the offense affects a financial institution ... unless the indictment is returned or the information is filed within 10 years after the commission of the offense."); 18 U.S.C. § 20 (defining financial institution). The wire fraud statute is expansive and is examined in detail below.

Second, and relevant only for context, the Dodd-Frank Act was enacted in 2010 to reform many facets of our financial regulatory system. Dodd-Frank included an amendment to

“prohibited transactions” under the Commodities Exchange Act, 7 U.S.C. § 6c(a)(5)(C), by defining spoofing and explicitly recognizing spoofing as a disruptive practice. The Dodd-Frank Act did not go into effect until 2011, Pub. L. No. 111-203, § 754, 124 Stat. 1376, 1754 (2010), and prosecution for prohibited conduct is time-barred after five years, 18 U.S.C. § 3282.

We turn now to the procedural history that sets the stage for the legal issues raised on appeal.

C. Procedural Background

In an indictment filed on July 24, 2018, the government charged Chanu and Vorley with conspiracy to commit wire fraud affecting a financial institution between 2009 and 2011 in violation of 18 U.S.C. § 1343.

The Speedy Trial Act applies to this prosecution. The Act’s protections are triggered when an indictment is filed or the defendant is arraigned, whichever occurs later. 18 U.S.C. § 3161(c)(1). Because the defendants raise a Speedy Trial Act challenge on appeal, we pay close attention to the timeline of proceedings below.

Vorley was arraigned on August 14, 2018; Chanu was arraigned on September 25, 2018. The government and defendants’ counsel agreed to defer the next status hearing until November 15, 2018. The district court noted that Speedy Trial Act time was excluded through November 15, 2018, to give counsel the opportunity to obtain and review discovery materials from the government and to consider what pretrial motions may be appropriate. The district court also entered a specific finding that “the ends of justice served by taking this action

outweigh the best interest of the public and the defendants in a speedy trial.”

On November 15, 2018, Chanu and Vorley filed their motion to dismiss the indictment in full, contending that the indictment failed to state an offense pursuant to Federal Rule of Criminal Procedure 12(b)(3)(B)(v). That same day, the district court entered an order stating that “[t]ime will be excluded through briefing and ruling on the defendants[’] motion to dismiss pursuant to 18 U.S.C. § 3161(h)(1)(D).”³

As relevant to this appeal, Chanu and Vorley’s motion to dismiss argued that the indictment failed to sufficiently allege wire fraud because it did not identify a “false statement.” They argued that the allegedly fraudulent orders (1) were not “false and misleading representations of supply and demand,” (2) that Chanu and Vorley did not, simply by placing an order, implicitly represent to the market that they intended for the order to be filled, and (3) that the government was improperly attempting to prosecute as wire fraud a non-fiduciary’s “failure to disclose.” Multiple amici, including the Bank Policy Institute, the U.S. Chamber of Commerce, the Securities Industry and Financial Markets Association, and the Futures Industry Association, filed briefs raising concerns that

³ 18 U.S.C. § 3161(h)(1)(D) provides:

The following periods of delay shall be excluded ... in computing the time within which the trial of any such offense must commence: ... Any period of delay resulting from other proceedings concerning the defendant, including but not limited to ... delay resulting from any pretrial motion, from the filing of the motion through the conclusion of the hearing on, or other prompt disposition of, such motion.

the government’s “sweeping” application of the wire fraud statute risks implicating “legitimate, non-fraudulent commercial conduct.”

In an extensive, 37-page order issued on October 21, 2019, (about six months after briefing was completed) the district court denied Chanu and Vorley’s motion to dismiss. The district court reasoned:

[D]efendants’ arguments come up short in two respects, one legal and one factual. As a question of law, the defendants’ argument that a wire fraud conviction requires proof of a false statement is inconsistent with both the history of the wire fraud statute and Circuit precedent. That the indictment alleges no affirmative misrepresentations by the defendants does not mean that the defendants could not have engaged in a scheme to defraud by means of implied misrepresentations. And whether the defendants’ Spoofing Orders carried with them any implied misrepresentations is the central fact question presented by the indictment.

As the district court summarized, “[i]n short: Wire fraud does not require proof of affirmative misstatements; implied misrepresentations will also suffice.”

Ten days later, on October 31, 2019, the district court held a status hearing where it explained “it would have been great if [the court] could have resolved it [the motion to dismiss] more quickly than [the court] did, but it was a substantial motion, and [the court] could understand the defendants not wanting to invest a ton of resources and money into

something while a—I’m trying not to cast aspersions on others, but, you know, this was no ordinary boilerplate motion to dismiss.” The district court further noted it would “continue to exclude time in view of the complexity of the case, the need to provide additional discovery and to ensure that the defendants have an adequate opportunity to prepare a defense.” The district court found that “the ends of justice in excluding time through [the next status hearing on] November 26 outweigh the public and the defendants’ interest in a speedy trial.”

The government filed a superseding indictment on November 26, 2019, which expanded the period of the charged conspiracy to 2008–2013. The government described two goals for this superseding indictment: first, to extend the alleged conspiracy period in response to comments made in defendants’ motion to dismiss, and second, to add substantive wire fraud counts to focus on specific trading sequences. Count 1 charged Vorley and Chanu with conspiracy to commit wire fraud affecting a financial institution. The remaining sixteen counts encompassed specific alleged incidents of wire fraud.

On January 16, 2020, the defense preserved its objection to the superseding indictment, but did not file another motion to dismiss. The district court confirmed on the record that it would deny a second motion to dismiss the superseding indictment for the reasons explained in its denial of the first motion to dismiss.

On May 20, 2020, Chanu and Vorley filed a motion to dismiss the superseding indictment with prejudice based on an alleged violation of the Speedy Trial Act stemming from “189 days of non-excludable time that elapsed while the

defendants' motion to dismiss was pending." This motion argued that no more than 30 days had been automatically excluded after the court took the motion under advisement, per 18 U.S.C. § 3161(h)(1)(H).⁴ The 189-day period is calculated by defendants from April 25 (thirty days after briefing concluded) to October 31, 2019 (the status hearing when the district court next excluded time under the Speedy Trial Act).

On July 21, 2020, the district court denied defendants' motion to dismiss based on the Speedy Trial Act. The district court noted that "[w]hile courts must make ends-of-justice findings to exclude time under § 3161(h)(7),⁵ those findings

⁴ 18 U.S.C. § 3161(h)(1)(H) provides:

The following periods of delay shall be excluded ... in computing the time within which the trial of any such offense must commence: ... Any period of delay resulting from other proceedings concerning the defendant, including but not limited to ... delay reasonably attributable to any period, not to exceed thirty days, during which any proceeding concerning the defendant is actually under advisement by the court.

⁵ 18 U.S.C. § 3161(h)(7) excludes from time computation

[a]ny period of delay resulting from a continuance granted by any judge on his own motion or at the request of the defendant or his counsel or at the request of the attorney for the Government, if the judge granted such continuance on the basis of his findings that the ends of justice served by taking such action outweigh the best interest of the public and the defendant in a speedy trial. No such period of delay resulting from a continuance granted by the court in accordance with this paragraph shall be excludable under this subsection *unless the court sets forth, in the record of the case, either orally or in writing, its reasons for finding that the ends of justice served by the*

do not have to be entered on the record at the time the continuance is granted.” The district court went on to explain in more detail:

Unfortunately, I did not articulate the ends-of-justice provision as the basis for excluding time going forward from November 15. Instead, I relied on the automatic exclusions of time for the briefing and consideration of pretrial motions. As a matter of administrative efficiency, where an automatic exclusion of time applies, I generally rely on that provision to exclude time rather than making an additional ends-of-justice finding that also provides a basis for excluding time. Eschewing redundancy paid no dividend here, however; a full articulation of my reasoning would have obviated this motion. I compounded the problem, moreover, by erroneously construing the automatic exclusions applicable to the briefing and consideration of motions to extend to the disposition of the motion, whereas § 3161(h)(1)(H) limits the automatic exclusion for consideration of a pretrial motion to 30 days (that is why I cited only § 3161(h)(1)(D) as the basis for exclusion and omitted reference to § 3161(h)(1)(H)). Having misconstrued the duration of the exclusion, I believed the automatic exclusion provided a sufficient basis to

granting of such continuance outweigh the best interests of the public and the defendant in a speedy trial.

18 U.S.C. § 3161(h)(7) (emphasis added) (formerly § 3161(h)(8)).

exclude time through the ruling on the motion to dismiss and that there was therefore no need to exclude time pursuant to § 3161(h)(7). That was a mistake, obviously, but not one that prejudiced the defendants. Had I not made that mistake (or had any party noted the Court’s error), I unquestionably would have remedied the error by including my determination that the defendants’ request to defer other pretrial motions warranted an ends-of-justice exclusion under § 3161(h)(7).

Even though the district court did not make an ends-of-justice finding on the record on November 15, 2018, the district court specifically did so on July 21, 2020. The district court also emphasized that a substantial period of delay had been “unavoidable” due to the restrictions on the court operations necessitated by the COVID-19 pandemic.

Chanu and Vorley’s trial was held in September 2020. Relevant to this appeal, the district court overruled the defendants’ objection to the admission of Vorley’s “spo[o]fing is ... illegal” chat. Although the defendants contended that the chat referred to a different kind of spoofing than the spoofing that formed the basis of the criminal indictment, the judge held that the meaning of the chat was a question of fact for the jury.

Furthermore, the district court rejected several of defendants’ requested modifications to the jury instructions focused on explaining the term “scheme to defraud” in the wire fraud statute. The district court also declined to give the defendants’ proposed “good faith” jury instruction, reasoning that the

intent required to prove wire fraud was incompatible with good faith.

The jury deliberated for four days and returned several deadlock notes before acquitting Chanu and Vorley on the conspiracy count. Vorley was convicted of three counts of wire fraud (Counts 2, 8, 10), and Chanu was found guilty of seven counts of wire fraud (Counts 3, 9, 11, 12, 14, 15, and 16). The district court denied defendants' motion for a judgment of acquittal and motion for a new trial, raising many of the same issues now before us on appeal. The district court sentenced Vorley and Chanu to one year and one day of imprisonment.

Chanu and Vorley now appeal.

II. Discussion

On appeal, Chanu and Vorley raise four issues: (1) whether "spoofing" of readily tradeable, at-risk orders that a trader is willing to honor if executed violates the wire fraud statute; (2) whether the district court correctly instructed the jury; (3) whether the district court abused its discretion in admitting Vorley's chat message stating that a competitor bank's "spo[o]fing is ... illegal"; and (4) whether this case should be dismissed under the Speedy Trial Act. We address each question in turn.

A. Manual Spoofing and the Wire Fraud Statute

The first issue on appeal is whether Chanu and Vorley's manual spoofing conduct violated the wire fraud statute. The defendants frame the "threshold legal issue" as whether spoofing was "already a crime under the general wire fraud statute"—a statute that significantly pre-dated the relevant

provision in Dodd-Frank prohibiting spoofing. *See* Pub. L. No. 111-203, § 747, 124 Stat. 1376, 1739 (2010); 7 U.S.C. § 6c(a)(5)(C). Chanu and Vorley are challenging the district court’s denial of their motion to dismiss the indictment for failure to state a claim as well as the legal sufficiency of the evidence to prove wire fraud.

We “review questions of law in a district court’s ruling on a motion to dismiss an indictment *de novo*.” *United States v. White*, 610 F.3d 956, 958 (7th Cir. 2010) (per curiam). An indictment must “(1) state[] the elements of the offense charged; (2) fairly inform[] the defendant of the nature of the charge so that he may prepare a defense; and (3) enable[] him to plead an acquittal or conviction as a bar against future prosecutions for the same offense.” *United States v. Miller*, 883 F.3d 998, 1002 (7th Cir. 2018). We also “review *de novo* the denial of a defendant’s motion for acquittal.” *United States v. Hernandez*, 952 F.3d 856, 859 (7th Cir. 2020). We will “uphold the verdict if any rational trier of fact could have found the essential elements of the crime beyond a reasonable doubt.” *United States v. Coscia*, 866 F.3d 782, 795 (7th Cir. 2017). “Given our deference to jury determinations on evidentiary matters, we rarely reverse a conviction for mail or wire fraud due to insufficient evidence.” *United States v. Weimert*, 819 F.3d 351, 354 (7th Cir. 2016).

The wire fraud statute, 18 U.S.C. § 1343, criminalizes the use of wire, radio, or television communications to effect “any scheme or artifice to defraud, or for obtaining money or property by means of false or fraudulent pretenses” To convict on wire fraud, the government must prove three elements: “(1) the defendant participated in a scheme to defraud; (2) the defendant intended to defraud; and (3) a use of an interstate

wire in furtherance of the fraudulent scheme." *United States v. Powell*, 576 F.3d 482, 490 (7th Cir. 2009). In clarifying the statutory term "scheme or artifice to defraud," the Supreme Court has held that materiality of falsehood is an element of the federal wire fraud statute. *See Neder v. United States*, 527 U.S. 1, 25 (1999).

Defendants contest the applicability of the wire fraud statute in this case, claiming that the government charged them with wire fraud "in order to retroactively criminalize manual spoofing that pre-dated the July 16, 2011 effective date of Dodd-Frank using the 10-year statute of limitations for wire fraud that affects a financial institution." By Chanu and Vorley's formulation, acceptance of the government's theory "would transform the federal wire fraud statute into an all-purpose law for criminalizing violations of exchange rules—or any trading tactics the government deems to be dishonest—because such violations or tactics could always be characterized as implied misrepresentations of good faith." To avoid this outcome, Chanu and Vorley raise two primary arguments. First, they contend that the wire fraud statute requires proof of an affirmative (rather than implied) misrepresentation. And second, even if an implied misrepresentation is enough, the defendants insist that *their* implied misrepresentations—*i.e.*, the implied misrepresentation that Chanu and Vorley wanted to fill, not cancel, their spoofing orders—could not be material.

To answer whether this manual spoofing conduct violated the wire fraud statute, we ask two questions: Was there a scheme to defraud by means of false representations or omissions, and were such false representations or omissions material? Answering both questions in the affirmative, we

conclude Chanu and Vorley's conduct was within the reach of the wire fraud statute.

1. *Scheme to Defraud by Means of False Representation or Omission*

In determining the scope of wire fraud, we begin with the statutory formulation of our first prong of inquiry: "scheme or artifice to defraud ... by means of false or fraudulent pretenses, representations, or promises." 18 U.S.C. § 1343. In *United States v. Coscia*, 866 F.3d 782, we previously considered whether spoofing amounts to a "scheme to defraud," although under a similar, but not identical, statute—the commodities fraud statute. Acknowledging the statutory differences at play, we separately analyze "scheme to defraud" and "by means of false representation."

Beginning with "scheme to defraud," the plain meaning of "scheme" is "[a] systemic plan; a connected or orderly arrangement, esp[ecially] of related concepts" and "[a]n artful plot or plan, usu[ally] to deceive others." *Scheme*, Black's Law Dictionary (11th ed. 2019). The plain meaning of "defraud" is "[t]o cause injury or loss to (a person or organization) by deceit; to trick (a person or organization) in order to get money." *Defraud*, Black's Law Dictionary (11th ed. 2019).

Turning to the specifics of the trading conduct in this case, our decision in *Coscia*, 866 F.3d 782, is on point. In *Coscia*, the government alleged that the defendant "commissioned and utilized a computer program designed to place small and large orders simultaneously on opposite sides of the commodities market in order to create illusory supply and demand and, consequently, to induce artificial market movement." 866 F.3d at 785. Noting that the defendant, Michael

Coscia, “engaged in ten weeks of trading during which he placed orders with the clear intent to cancel those orders prior to execution,” this Court concluded that the defendant intended to inflate and deflate the price of certain commodities and, thus, his conduct amounted to commodities fraud. *Id.* at 803.

Coscia establishes that placing orders on opposite sides of the commodities market with the intent to cancel amounts to a “deceitful” scheme, aiming “to manipulate the market for [the trader’s] own financial gain.” *Id.* at 797. Nonetheless, Chanu and Vorley attempt to distinguish *Coscia*. On its facts, they note Coscia used a computer algorithm to engage in high-frequency trading, *id.* at 786 (“a mechanism for making large volumes of trades in securities and commodities based on trading decisions effected in fractions of a second”), rather than the manual trades now before us. Because they were engaged in manual trading, Chanu and Vorley argue that their trades—unlike Coscia’s—were actually tradable due to the length of time they remained active prior to cancellation. Speed at which the spoofing occurred aside, however, we still rejected Coscia’s defense that he “placed real orders that were exactly that, orders that were tradeable,” *id.* at 790, 797—the same defense Chanu and Vorley now employ.

Chanu and Vorley also attempt to distinguish *Coscia* on statutory grounds. As noted, Coscia was not charged under the wire fraud statute now before us; instead, he was convicted of commodities fraud under 18 U.S.C. § 1348(1).⁶

⁶ Coscia was also convicted of violating the anti-spoofing provisions of the Commodity Exchange Act, 7 U.S.C. §§ 6c(a)(5)(C) and 13(a)(2). That conviction is not relevant for purposes of our analysis.

Under the wire fraud statute, “[a] scheme to defraud requires the making of a false statement or material misrepresentation, or the concealment of [a] material fact.” *Powell*, 576 F.3d at 490 (alteration in original) (citation and internal quotation marks omitted). Under the commodities fraud statute, by contrast, “[f]alse representations or material omissions are not required.” *Coscia*, 866 F.3d at 796. Defendants push for a clear distinction on those underlying statutory grounds. We note, however, that the commodities fraud statute, 18 U.S.C. § 1348, was modeled on the mail and wire fraud statutes—as evidenced by its text and legislative history. *Id.* at 799 & n.71 (“Several courts have recognized that because the text and legislative history of 18 U.S.C. § 1348 clearly establish that it was modeled on the mail and wire fraud statutes, an analysis of Section 1348 should be guided by the caselaw construing those statutes.” (citation and internal quotation marks omitted)); *see also United States v. Doherty*, 969 F.2d 425, 429 (7th Cir. 1992) (holding that “scheme to defraud” has a consistent meaning between 18 U.S.C. §§ 1341 [mail fraud], 1343 [wire fraud], and 1344 [bank fraud]). And the jury instructions we approved in *Coscia* were adapted from our pattern jury instructions for mail, wire, and carrier fraud. 866 F.3d at 799.

Today, we need not decide whether the phrase “scheme to defraud” bears a wholly identical meaning in both the commodities fraud and the wire fraud statutes. Given the common ground between these two statutes, it is enough that *Coscia* establishes that this pattern of trading conduct is deceitful and aligns with the plain meaning of “scheme to defraud.” Thus, the fact that *Coscia* was convicted of commodities fraud, and *Chanu* and *Vorley* were convicted of wire fraud, is a distinction without a meaningful difference, at least in this case.

Turning to the remaining statutory language, we analyze whether real, at-risk orders placed with the intent to cancel amount to “means of false or fraudulent pretenses, representations, or promises” as stated in 18 U.S.C. § 1343. At the outset, we note that “false representation” encompasses a range of conduct. Beyond affirmative misrepresentations a defendant knows to be false, the Supreme Court has explicitly held that a material *omission* can amount to wire fraud. *See Neder*, 527 U.S. at 24–25. Failure to give the whole story may also be fraud, especially when a defendant actively conceals information. *Powell*, 576 F.3d at 491. Finally, “[a] half truth, or what is usually the same thing [as] a misleading omission, is actionable as fraud … if it is intended to induce a false belief and resulting action to the advantage of the misleading and the disadvantage of the misled.” *United States v. Stephens*, 421 F.3d 503, 507 (7th Cir. 2005) (some alterations in original) (quoting *Emery v. Am. Gen. Fin.*, 71 F.3d 1343, 1346 (7th Cir. 1995)). An implied misrepresentation is simply an omission by another name.

Defendants argue that their readily tradeable bids and offers are not rendered “false” by their subjective intent to cancel. We agree that by simply placing an order, a trader is not certifying it will never be cancelled. Instead, the order placement signals a trader’s intent to buy or sell. By obscuring their intent to cancel, through an orchestrated approach, Chanu and Vorley advanced a quintessential “half-truth” or implied misrepresentation—the public perception of an intent to trade and a private intent to cancel in the hopes of financial gain. We remain unconvinced by defendants’ arguments to the contrary.

Thus, we find Chanu and Vorley's actions amounted to a scheme to defraud by means of false representations or omissions.

2. *Materiality*

We turn finally to the question of materiality. Defendants argue that even if their actions amounted to a misrepresentation or omission, those actions cannot be deemed material for the purposes of the wire fraud statute. Wire fraud "requires a *material* misrepresentation or omission." *Neder*, 527 U.S. at 22. In general, "a false statement is material if it has a natural tendency to influence, or [is] capable of influencing, the decision of the decisionmaking body to which it was addressed." *Id.* at 16.

The record clearly establishes that traders employing manual spoofing do so with the aim (and effect) of influencing other actors in the trading space. Defendants' former colleague Liew testified that the spoofing illusion "would help Deutsche Bank" while "hurt[ing] other market participants." Such action is neither customary nor relatively harmless. *See Weimert*, 819 F.3d at 357 (outlining the bounds of criminalizing deceptive misstatements or omissions about a buyer or seller's negotiating position). Thus, there is no question the traders' implied misrepresentations were material.

* * *

In summary, we conclude that the district court correctly denied defendants' motion to dismiss the indictment pursuant to Federal Rule of Criminal Procedure 12(b)(3)(B)(v) because manual spoofing of this kind falls under the wire fraud prohibition, and we further reject the defendants' contention

that the evidence was legally insufficient to prove wire fraud. We are not categorically “unsympathetic to the … commentary regarding the ‘expansive glosses’ on the mail and wire fraud statutes that have led to their liberal use by federal prosecutors,” *Weimert*, 819 F.3d at 371–72 (Flaum, J., dissenting), but the inquiry into the reach of the wire fraud statute remains fact-specific. Here, the facts indicate defendants’ conduct falls within the ambit of the wire fraud statute.

B. Jury Instructions Regarding Intent to Deceive and Good Faith

The second issue on appeal stems from the district court’s order denying the defendants’ request to modify its jury instructions explaining the term “scheme to defraud” and to issue a good-faith instruction.

“We review challenges to jury instructions *de novo*.” *Coscia*, 866 F.3d at 799. “Nevertheless, [t]he district court is afforded substantial discretion with respect to the precise wording of instructions so long as the final result, read as a whole, completely and correctly states the law.” *Id.* (quoting *United States v. Marr*, 760 F.3d 733, 743 (7th Cir. 2014)).

The district court instructed the jury that a “scheme to defraud” is “a scheme that is intended to deceive or cheat another and to obtain money or property of another by means of materially false or fraudulent pretenses, representations, or promises.” William J. Bauer Pattern Criminal Jury Instructions of the Seventh Circuit, 541 (2020 ed.). Chanu and Vorley sought three changes to the jury instructions: (1) the deletion of the word “deceive” from the instruction recounted above; (2) an additional instruction to the jury that “misrepresentations amounting only to a deceit do not meet a definition of a

scheme to defraud”; and (3) an additional “good faith” pattern instruction. We address each requested change in turn.

Little time needs to be spent discussing the first two issues relating to “deception.” Defendants argue that a “mere scheme to ‘deceive’ or ‘trick’ cannot support a wire fraud conviction without some accompanying intent to harm the victim of the scheme.” But, the jury instruction incorporates that logic: You need deception, and you need an intent to cause loss of money or property, *i.e.*, intent to harm. The provided instruction clearly delineates between “deceptive conduct that is fraudulent” and “deceptive conduct that is not fraudulent.” The defendants’ argument that the repeated use of “the disjunctive ‘deceive or cheat’ … convey[ed] to the jury that a scheme to ‘deceive’ was itself sufficient to convict” is cherry-picking the center of the instruction. But we will “reverse only if the instructions *as a whole* do not correctly inform the jury of the applicable law and the jury is misled,” *Marr*, 760 F.3d at 743 (emphasis added), so defendants’ argument is unconvincing.

Next, the district court decided to exclude the good faith instruction. The court below felt the “proposed good faith instruction was unnecessary and would potentially confuse the jury because what can be argued as good faith can also be argued as the absence of evidence of intent to defraud—a point the Seventh Circuit has made in several cases affirming the denial of a good faith instruction in fraud cases.” The district court explained that to warrant a good faith instruction, a trader “would have to believe that it was permissible for them to devise a scheme intended to obtain money or property from another by use of materially false or misleading information” and expressed skepticism that this could be done in

good faith. At trial, defense counsel responded that “[e]ven if it’s not logically possible, the jury is going to be talking about this in the jury room.”

The district court’s conclusion was based on our decisions in *United States v. Johnson*, 874 F.3d 990, 1002 (7th Cir. 2017) and *United States v. Lunn*, 860 F.3d 574, 579–80 (7th Cir. 2017). *Johnson* held specifically that “[a] good faith instruction is not required where lack of good faith is part of the charge.” 874 F.3d at 1002. The *Johnson* defendants were convicted of crimes, including wire fraud, that required the jury to find bad faith; they therefore were not entitled to an additional good faith instruction. *Id.* Similarly, in *Lunn*, this Court held that “an action taken in good faith is on the other side of an action taken knowingly” and thus “it is impossible to intend to deceive while simultaneously acting in good faith.” 860 F.3d at 580.

The defendants’ attempts to factually distinguish *Johnson* and *Lunn* are unconvincing. *Lunn* involved a conviction for bank fraud, and *Johnson* involved a conviction for wire fraud; “scheme to defraud” bears the same meaning between these two statutes. *Doherty*, 969 F.2d at 429. In both cases, the requested jury instruction (good faith) was the same. Given these constants, the rule is clear, and Chanu and Vorley cannot demonstrate that “the failure to include [the good faith] instruction … den[ied] the defendant[s] a fair trial.” *See United States v. Douglas*, 818 F.2d 1317, 1320–21 (7th Cir. 1987) (holding “that a defendant is entitled to an instruction on his or her theory of defense if: the defendant proposes a correct statement of the law; the defendant’s theory is supported by the evidence; the defendant’s theory of defense is not part of the charge; and the failure to include an instruction on the

defendant's theory of defense in the jury charge would deny the defendant a fair trial"). Today we address only the exclusion of a good faith instruction in the case before us. Given the substantial deference afforded to a district court in formulating the language of a jury instruction, this opinion should not be read to preclude the inclusion of such an instruction in a future case. *See United States v. Brandon*, 50 F.3d 464, 468 (7th Cir. 1995) (holding no error in giving the jury a good faith instruction for a defendant charged with four counts of wire fraud).

For these reasons, we hold there was no error in excluding the "good faith" instruction.

C. Admissibility of Electronic "Spoofing" Messages

The third issue on appeal relates to defendants' motion *in limine* asking the court to exclude certain electronic communications using the word "spoof."⁷ We look to whether this evidence was improperly admitted.

"All evidentiary questions begin with [Federal Rule of Evidence] 402, which contains the general principle that '[r]elevant evidence is admissible' and '[i]rrelevant evidence is not.'" *United States v. Gomez*, 763 F.3d 845, 853 (7th Cir. 2014) (en banc) (quoting Fed. R. Evid. 402). Evidence is relevant if it "is both probative (having 'any tendency to make a fact more or less probable than it would be without the evidence') and

⁷ Although there are other arguably relevant chats, the sole focus of the appellants' brief is on the "spo[o]fing ... is illegal" chat. Because any "[u]ndeveloped arguments are waived on appeal." *Vesey v. Envoy Air, Inc.*, 999 F.3d 456, 464 (7th Cir. 2021), we focus only on this single chat, rather than the series of chats identified by the government using search terms such as "spoof," "manipulate," and "help."

material (the fact must be ‘of consequence in determining the action’).” *Id.* (quoting Fed. R. Evid. 401). Even if evidence is admissible, however, it “may be excluded under Rule 403,” which “gives the district court discretion to exclude relevant evidence if its probative value is “substantially outweighed by a danger of ... unfair prejudice.” *Id.* at 856–57 (quoting Fed. R. Evid. 403). As a rule, “[w]e give special deference to a district court’s evidentiary rulings, and we reverse these rulings only if no reasonable person could take the judge’s view of the matter.” *United States v. Pulliam*, 973 F.3d 775, 782 (7th Cir. 2020) (citations and internal quotation marks omitted).

Prior to the start of trial, the government indicated it intended to offer electronic chat messages between precious metals traders. Chanu and Vorley moved *in limine* to preclude the admission of chat evidence under Federal Rules of Evidence 401 and 403. On appeal, they challenge only the admission of one chat, dated October 2, 2007. In it, Vorley wrote: “UBS and this spoofing [sic] is annoying me ... its [sic] illegal for a start.”

Defendants contend this chat does not relate to the same variety of spoofing at issue in this case, but instead refers to an agreement that the major banks had with each other where one bank could call another bank and ask for a two-way price to either buy or sell precious metals in preset amounts. Although this was a “gentlemen’s agreement,” banks would sometimes use the calls “to make [a trader] think that they were a buyer when they were really a seller[.]” This risked leaving the other banks feeling “duped” into giving a “bad” price.

The district court concluded that the meaning of the chat was an issue of fact for the jury. The district court stated:

If it's as clear as you say that this refers to another practice, then, No. 1, the jury should have no trouble understanding that point; and, No. 2, I think it[] ... may backfire on the government if it's that clear. But we're having a trial right now about whether the defendants engaged in illegal conduct, part of which there is some evidence is referred to as spoofing. It is a fact question as to whether that occurred or not, and a defendant using the term in a discussion about illegal conduct I think is a sufficient predicate to put the question before the jury.

Defendants characterize the chats as "irrelevant and prejudicial." By their formulation, had these electronic chats been excluded, they "would likely have been acquitted across the board." The government, by contrast, argues that even if the chats in question referred to a different variety of spoofing, the chats (1) showed Vorley knew a different variety of spoofing (over-the-counter market) was illegal, (2) showed Vorley's consciousness of guilt, and (3) cast doubt on Vorley's past statement to compliance officers (specifically the explanation that his use of "spoof" mainly referred to a game the traders played to decide who would get breakfast or coffee).

The district court correctly determined that the information in question was relevant for the reasons articulated by the government. *See Fed. R. Evid. 401; Gomez*, 763 F.3d at 853. Moreover, under the applicable deferential review standard, a reasonable person could agree that the chat passed muster under Rule 403, as well. Evidence will only be excluded under Rule 403 if its probative value "is substantially outweighed by the risk of unfair prejudice." *Gomez*, 763 F.3d at 860.

“Recognizing that ‘most relevant evidence is, by its very nature, prejudicial, we have emphasized that evidence must be unfairly prejudicial to require exclusion.’” *United States v. Boros*, 668 F.3d 901, 909 (7th Cir. 2012) (some internal quotation marks omitted) (quoting *United States v. Hanna*, 630 F.3d 505, 511 (7th Cir. 2010)). “Evidence poses a danger of ‘unfair prejudice’ if it has ‘an undue tendency to suggest decision on an improper basis, commonly, though not necessarily, an emotional one.’” *United States v. Rogers*, 587 F.3d 816, 822 (7th Cir. 2009) (quoting Fed. R. Evid. 403 advisory committee’s note on proposed rules). Because the defendants had ample opportunity to present evidence and argue to the jury that their interpretation of the chat was the correct one, the district court did not err when it held that the chat was not *unfairly* prejudicial.

D. Speedy Trial Act Challenge

The final issue on appeal is defendants’ challenge to the district court’s order denying defendants’ motion to dismiss based on an alleged violation of the Speedy Trial Act. “We review the district court’s legal interpretations of the [Speedy Trial] Act de novo, and its decisions to exclude time for an abuse of discretion.” *United States v. Parker*, 716 F.3d 999, 1005 (7th Cir. 2013) (alteration in original) (quoting *United States v. Wasson*, 679 F.3d 938, 943 (7th Cir. 2012)). “Absent legal error, we will reverse the district court’s decision to exclude time only where the defendant can show both an abuse of discretion and actual prejudice.” *United States v. Ramirez*, 788 F.3d 732, 735 (7th Cir. 2015).

The Speedy Trial Act of 1974 governs the timely commencement of a federal criminal trial after a defendant is charged or makes an initial appearance. The Act provides that

the trial of a defendant charged in an information or indictment with the commission of an offense shall commence within seventy days from the filing date (and making public) of the information or indictment, or from the date the defendant has appeared before a judicial officer of the court in which such charge is pending, whichever date last occurs.

18 U.S.C. § 3161(c)(1). Recognizing, however, “that criminal cases vary widely and that there are valid reasons for greater delay in particular cases[,] the Act includes a long and detailed list of periods of delay that are excluded in computing the time within which trial must start.” *Zedner v. United States*, 547 U.S. 489, 497 (2006). As relevant here, § 3161(h)(1)–(6) provides for certain automatic exclusions. *See Parker*, 716 F.3d at 1006 (“[P]eriods of delay excludable under § 3161(h)(1)–(6) may be *automatically* excluded if the specified conditions are present” (alteration in original) (citation omitted)). *But see Bloate v. United States*, 559 U.S. 196, 213–14 (2010) (holding that time granted to prepare pretrial motions in a criminal case is not automatically excludable for purposes of the Speedy Trial Act but instead requires case-specific, ends-of-justice findings). But, “[m]uch of the Act’s flexibility is furnished by [§ 3161(h)(7)], which governs ends-of-justice continuances” *Zedner*, 547 U.S. at 498. An exclusion under § 3161(h)(7) is not automatic but instead “requires specific findings.” *See Bloate*, 559 U.S. at 213. Section § 3161(h)(7) provides, in relevant part:

- (A) Any period of delay resulting from a continuance granted by any judge on his own motion or at the request of the defendant or his counsel

or at the request of the attorney for the Government, if the judge granted such continuance on the basis of his findings that the ends of justice served by taking such action outweigh the best interest of the public and the defendant in a speedy trial. No such period of delay resulting from a continuance granted by the court in accordance with this paragraph shall be excludable under this subsection unless the court sets forth, in the record of the case, either orally or in writing, its reasons for finding that the ends of justice served by the granting of such continuance outweigh the best interests of the public and the defendant in a speedy trial.

(B) The factors, among others, which a judge shall consider in determining whether to grant a continuance under subparagraph (A) of this paragraph in any case are as follows:

(i) Whether the failure to grant such a continuance in the proceeding would be likely to make a continuation of such proceeding impossible, or result in a miscarriage of justice.

(ii) Whether the case is so unusual or so complex, due to the number of defendants, the nature of the prosecution, or the existence of novel questions of fact or law, that it is unreasonable to expect adequate preparation for pretrial proceedings or for the trial itself within the time limits established by this section.

....

(iv) Whether the failure to grant such a continuance in a case which, taken as a whole, is not so unusual or so complex as to fall within clause (ii), would deny the defendant reasonable time to obtain counsel, would unreasonably deny the defendant or the Government continuity of counsel, or would deny counsel for the defendant or the attorney for the Government the reasonable time necessary for effective preparation, taking into account the exercise of due diligence.

(C) No continuance under subparagraph (A) of this paragraph shall be granted because of general congestion of the court's calendar, or lack of diligent preparation or failure to obtain available witnesses on the part of the attorney for the Government.

In summary, “[t]his provision permits a district court to grant a continuance and to exclude the resulting delay if the court, after considering certain factors, makes on-the-record findings that the ends of justice served by granting the continuance outweigh the public's and defendant's interests in a speedy trial.” *Zedner*, 547 U.S. at 498–99. In practice, “[t]his provision gives the district court discretion—within limits and subject to specific procedures—to accommodate limited delays for case-specific needs.” *Id.* at 499.

The parties take opposing positions on the question of whether § 3161(h)(7) requires an ends-of-justice finding on the record at the time of granting the continuance or whether a post-hoc explanation satisfies the on-the-record finding

requirement. Supreme Court and Seventh Circuit precedent provide a clear answer to this question.

In *Zedner*, the Supreme Court stated that “[a]lthough the Act is clear that the findings must be made, if only in the judge’s mind, before granting the continuance (the continuance can only be ‘granted … on the basis of [the court’s] findings’), the Act is ambiguous on precisely when those findings must be ‘se[t] forth, in the record of the case.’” 547 U.S. at 506–07 (some alterations in original). “However this ambiguity is resolved, at the very least the Act implies that those findings must be put on the record by the time a district court rules on a defendant’s motion to dismiss under § 3162(a)(2).” *Id.* at 507. “The best practice, of course, is for a district court to put its findings on the record at or near the time when it grants the continuance.” *Id.* at 507 n.7; *see also United States v. Adams*, 625 F.3d 371, 380 (7th Cir. 2010) (noting that the “prudent course” for ends-of-justice findings is for the district court to “put its rationale on the record well before [the defendant] s[eeks] dismissal of the indictment on speedy trial grounds”). Our decision in *United States v. Rollins*, 544 F.3d 820 (7th Cir. 2008), reaffirmed that “the district court is not required to make the ends of justice findings contemporaneously with its continuance order.” *Id.* at 830; *see also Adams*, 625 F.3d at 380 (“The fact that in one instance the court made that [ends of justice] finding (and stated the reasons for it) in retrospect rather than contemporaneously with its order granting the continuance is immaterial; the Supreme Court has indicated that this is permissible”).⁸

⁸ Defendants rely on *United States v. Janik*, 723 F.2d 537 (7th Cir. 1983) for the proposition that “retroactive continuances” are improper, as the “continuance itself must be granted *before* the period sought to be

To briefly summarize the timeline of the relevant proceedings in the alleged delay period, the defendants' filing of their motion to dismiss automatically tolled the speedy trial clock as of November 15, 2018, until there had been a hearing and all necessary submissions were before the court plus thirty days. *See 18 U.S.C. § 3161(h)(1)(D); United States v. Piasecki*, 969 F.2d 494, 500 (7th Cir. 1992) ("Once there has been a hearing and/or all necessary submissions are before the court so that the court has been deemed to have taken the matter under advisement, unless such a period is unreasonable, the court generally has up to thirty additional days of excludable delay to decide the motion"). In this case, briefing was concluded on March 26, 2019. The 30-day excluded period ran through April 25, 2019. Defendants count April 25, 2019, through the next status hearing on October 31, 2019 (where ends of justice findings were clearly made), as 189 days of non-excludable delay.

Although articulating the ends-of-justice finding and entering the continuance at the same time is "undoubtedly the 'best practice,' it is not the *only* permissible practice." *Wasson*,

excluded begins to run." *Id.* at 545. Not only does this case significantly pre-date the Supreme Court's decision in *Zedner*, but the highlighted language also addresses a case where the district judge entered no continuance at all, an issue not present in defendants' case. We agree that "[a] district judge cannot wipe out violations of the Speedy Trial Act after they have occurred by making the findings that would have justified granting an excludable-delay continuance before the delay occurred," *Janik*, 723 F.2d at 545, but in this case, the district court had granted a continuance on November 15, 2018, before the period to be excluded began to run. As the government points out, "although [the district court] cited the wrong basis for the continuance, the court unquestionably 'granted' the continuance before the excluded period."

679 F.3d at 946. “*Zedner* and its progeny support our interpretation that a court’s ends-of-justice findings need not be articulated contemporaneously on the record.” *Id.*; *see United States v. Hills*, 618 F.3d 619, 628 (7th Cir. 2010) (“As mentioned, § 3161(h)(7)(A) requires a court excluding time on ends-of-justice grounds to articulate its findings on the record. A court need not do so contemporaneously with the exclusion, but it must do so by the time it rules on a defendant’s motion to dismiss.” (citation omitted)).

The district court does not appear to have followed the “best practice” or the “prudent course” in relying on the wrong exclusionary hook on November 15, 2018; however, the court ultimately made on-the-record ends-of-justice findings by the time it ruled on the defendants’ motion to dismiss on July 21, 2020. There is no indication that the court was continuing the case on account of a “crowded calendar, a factor wholly impermissible for consideration in support of an ends of justice continuance,” *Ramirez*, 788 F.3d at 735; *see* 18 U.S.C. § 3161(h)(7)(C), and there is no indication that this was an unreasonable continuance given the litigants’ requests and the complexity of the case, *see, e.g.*, *United States v. Lattany*, 982 F.2d 866, 881 (3d Cir. 1992) (“We think [open-ended] continuances can be reconciled with the Speedy Trial Act provided they are not permitted to continue for an unreasonably long period of time.”). Instead, the district court stated that, had the underlying error been brought to its attention, it “unquestionably” would have given “a full articulation of [its] reasoning,” including that the defendants’ request to defer other pretrial motions warranted a § 3161(h)(7), ends-of-justice exclusion.

Finding no legal error in the district court setting forth, on the record, an ends-of-justice rationale for excluding time, we hold the district court did not abuse its discretion by excluding the time needed to resolve defendants' Rule 12(b)(3)(B)(v) motion in a written opinion.

III. Conclusion

For the reasons explained above, we AFFIRM the judgment of the district court.