



U.S. COMMODITY FUTURES TRADING COMMISSION

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In the Matter of

CHESTER M. GORSKI,

Respondent.

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CFTC Docket No. 93-5

INITIAL DECISION

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"[Expert] opinion has significance proportioned to the sources that sustain it."¹

Overview

This is a case that considers whether two dual traders engaged in various types of noncompetitive trading and, if so, whether one of the two should be sanctioned for their respective misdeeds. To be more exact, the Commodity Futures Trading Commission ("Commission") issued a complaint that charges Chester M. Gorski ("Gorski") with noncompetitive trading opposite of Lawrence J. Bilello ("Bilello"), a former respondent who settled with the Commission on the eve of trial. For the most part, the complaint alleges that Gorski entered into noncompetitive floor trades in order to help Bilello bucket customer orders, use customer orders to facilitate trades and pass money. Gorski denied the charges and the case eventually went to hearing.

As it turns out, this proceeding is as much about how the Division of Enforcement ("Division") prosecutes trade practice cases as it is about whether it succeeded here. Over the course of the hearing, as well as the prehearing development of this

¹ Petrogradsky Mejdunarodny Kommerchesky Bank v. National City Bank of N.Y., 170 N.E. 479, 483 (N.Y. 1930) (Cardozo, C.J.).

proceeding, the Division made deliberate, apparently policy-based choices as to what evidence to present and how that evidence would be presented. These choices substantially hindered the Division in this case.

Procedural Background

The present case has spent over six years on the Court's docket and the Commodity Futures Law Reporter already records much of what has occurred in that time.² Accordingly, a summary, rather than a detailed account, of the procedural background seems in order. On March 2, 1993, the Commission issued a seven-count complaint against Bilello, Gorski, Christopher Engel ("Engel"), Paul Marturano ("Marturano") and Ludwig Weingarten

² In re Bilello, [1996-1998 Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶27,345 (CFTC Apr. 23, 1998); In re Bilello, [1996-1998 Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶27,212 (CFTC Dec. 22, 1997); In re Bilello, [1996-1998 Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶27,159 (CFTC Oct. 10, 1997); In re Bilello, [1996-1998 Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶27,027 (CFTC Apr. 18, 1997); In re Bilello, [1996-1998 Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶26,927 (CFTC Dec. 5, 1996); In re Bilello, [1994-1996 Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶26,285 (CFTC Jan. 11, 1995); In re Bilello, [1994-1996 Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶22,244 (CFTC Oct. 25, 1994); In re Bilello, [1992-1994 Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶26,032 (CFTC Mar. 25, 1994); In re Bilello, [1992-1994 Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶25,791 (CFTC July 28, 1993).

("Weingarten").³ The Complaint charged the five with noncompetitive trading of Commodity Exchange, Incorporated ("COMEX") gold futures contracts, during the February 1988 through June 1989 time period, and creating and submitting false records.⁴

On the same day it issued the Complaint, the Commission accepted Marturano's offer of settlement.⁵ During the tortuous (and tortured) prehearing development of this case,⁶ the Commission also reached settlements with Engel,⁷ Weingarten⁸ and, shortly before the oral hearing, Bilello.⁹ In other words, by the day of the hearing, Gorski was the sole, remaining respondent.

³ Complaint and Notice of Hearing pursuant to Sections 6(c), 6(d), 8a(3) and 8a(4) of the Commodity Exchange Act, as amended, dated March 2, 1993 ("Complaint").

⁴ Complaint at 2-20.

⁵ In re Bilello, CFTC Docket No. 93-5, 1993 WL 63405 (CFTC Mar. 2, 1993).

⁶ See supra note 2.

⁷ In re Bilello, CFTC Docket No. 93-5, 1997 WL 199432 (CFTC Apr. 23, 1997).

⁸ In re Bilello, CFTC Docket No. 93-5, 1993 WL 316021 (CFTC Aug. 18, 1993).

⁹ In re Bilello, CFTC Docket No. 93-5, 1998 WL 381065 (CFTC July 2, 1998); In re Bilello, CFTC Docket No. 93-5, 1998 WL 347056 (CFTC June 26, 1998).

On July 6, 1998, the Court convened a four-day hearing in New York, New York.¹⁰ The Court heard witnesses testifying on behalf of the two remaining parties and received evidence that had not been submitted earlier.¹¹ Over the next several months, the parties filed their post-hearing briefs.¹² The parties having filed their briefs and there being no outstanding motions to resolve, the case is ready for decision.

The Charges at Issue

The evidentiary facts of this case are complex, the record is voluminous and some of the issues are undeniably arcane. However, the Division's theory of the case is fairly simple. It argues that Bilello engaged in a large number of illegal

¹⁰ Transcript of Oral Hearing, dated July 6-9, 1998 ("Tr.").

¹¹ Tr. at 208, 429, 605, 718.

¹² Division of Enforcement's Brief in Support of its Proposed Findings of Fact and Conclusions of Law, dated September 8, 1998 ("Division's Brief"); Division of Enforcement's Proposed Findings of Fact and Conclusions of Law, dated September 8, 1998 ("Division's Proposed Findings"); Memorandum of Law of Respondent Chester M. Gorski in Support of His Proposed Findings of Fact and Conclusions of Law, dated November 20, 1998 ("Gorski's Brief"); Proposed Findings of Fact and Conclusions of Law of Respondent Chester M. Gorski, dated November 20, 1998 ("Gorski's Proposed Findings"); Reply of Division of Enforcement to Respondent's Memorandum of Law in Support of His Proposed Findings of Fact and Conclusions of Law, dated December 22, 1998.

trades,¹³ and that Gorski helped Bilello by non-competitively trading with him and reporting the trades as though they were bona fide, competitive trades.¹⁴ While the case, boiled down to its ultimate facts, is simple, the government's theories for liability are numerous and duplicative.

First, the Division advanced three reasons why Gorski should be held secondarily liable for Appendix I trade sequences 44, 49 and 51.¹⁵ It claims that, by operation of Section 13a of the Commodity Exchange Act ("Act"),¹⁶ Gorski is responsible for violations of Section 4b(a) of the Act due to having aided and abetted: (1) Bilello's alleged fraud and cheating with regard to customer trading, violations of Section 4b(a)(i),¹⁷ (2)

¹³ The Complaint charged Bilello with: (1) bucketing customer orders, (2) using noncompetitive fills of customer orders to facilitate the purchase of other contracts, (3) engaging in simple noncompetitive trades that were not part of one of the schemes described above, and (4) submitting records reflecting these trades without disclosing their noncompetitive nature. Complaint at 4-6. The Division also alleged and, in a motion for summary disposition, successfully proved that Bilello violated subsections (A) and (B) of Section 4c(a), 7 U.S.C. §6c(a)(A)-(B), as well as Rule 1.38(a), 17 C.F.R. §1.38(a), by engaging in a series of noncompetitive, money-pass trades. Bilello, ¶26,927 at 44,506.

¹⁴ Division's Brief at 3-5.

¹⁵ Complaint, app. I.

¹⁶ 7 U.S.C. §13c (1998).

¹⁷ Complaint, ¶13, app. I; 7 U.S.C. §6b(a)(i).

Bilello's violations of Section 4b(a)(iii), resulting from his alleged deception with regard to customer orders,¹⁸ and (3) Bilello's alleged entry of false records in violation of Section 4b(a)(ii).¹⁹ With respect to trade sequences 44, 49 and 51 as well as Appendix I trade sequences 10, 11, 15-27, 29, 32-34, 36-37, 40, 42, 45-48, 52 and 54, and Appendix III trade sequence 4,²⁰ the Division alleges that Gorski directly: (1) violated Rule 1.38(a) by non-competitively executing trades,²¹ (2) violated Section 4c(a)(A) by engaging in fictitious sales²² and (3) violated Section 4c(a)(B) by reporting prices that were not bona fide.²³ The Division also claims that, with respect to 14 of those trade sequences, numbers 10, 15-18, 36-37, 40, 42, 45, 51-52, 54 and 4, Gorski entered into accommodation trades in violation of Section 4c(a)(A).²⁴ Finally, the Division proposes that trade sequences 34 and 48, in addition to being

¹⁸ Complaint, ¶19, app. I; 7 U.S.C. §6b(a)(iii).

¹⁹ Complaint, ¶16; 7 U.S.C. §6b(a)(ii).

²⁰ Complaint app. I, III.

²¹ Complaint, ¶25.

²² Complaint, ¶28.

²³ Complaint, ¶31.

²⁴ Complaint, ¶28.

noncompetitive trades and fictitious sales, constitute wash sales in violation of Section 4c(a) (A).²⁵

The Division's Evidentiary Burden

In order to establish violations of the Act and Commission regulations, the Division must prove each necessary element by a preponderance of the evidence. In other words, "[i]t must establish that 'the existence of [the necessary] factual elements is more probable than their nonexistence.'"²⁶ This means that the Division must not only surmount one potential, exculpatory theory of the case, it must overcome all plausible,

²⁵ Complaint, ¶28.

²⁶ In re Rousso, [1996-1998 Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶27,133 at 45,308 (CFTC Aug. 20, 1997) (quoting Lobb v. J.T. McKerr, [1987-1990 Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶24,568 at 36,443 (CFTC Dec. 14, 1989)). Accord Nissho-Iwai Co., Ltd. v. M/T Stolt Lion, 719 F.2d 34, 38 (2d Cir. 1983); Burch v. Reading Co., 240 F.2d 574, 579 (3d Cir. 1957), cert. denied, 353 U.S. 965 (1957); Edward W. Cleary, McCormick on Evidence §339 (3rd ed. 1984).

One of the interesting aspects of trade practice cases is that the Division may prove the existence of an illegal scheme to trade noncompetitively yet fail to prove, by a preponderance of the evidence, that certain traders implicated in trading were "knowing participant[s]." In re Buckwalter, [1990-1992 Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶24,995 at 37,685 (CFTC Jan. 25, 1991).

exculpatory theories in combination.²⁷ Otherwise, it has not demonstrated that the existence of a necessary ultimate fact is more probable than its nonexistence. Rather, the Division would prove only that the existence of ultimate facts is more probable than nonexistence when compared to each, but not necessarily all, plausible alternative versions of events, a substantially lesser standard.²⁸

What Constitutes Violations as Alleged

As noted above, the Complaint charged Gorski with aiding and abetting Bilello. Section 13(a) of the Act states, "Any person who . . . willfully aids, abets . . . or procures the commission of a violation of any of the provisions of this chapter, or any of the . . . regulations . . . issued pursuant to this chapter . . . may be held responsible for such violation as a principal."²⁹ In order to establish Gorski's liability

²⁷ But see In re Reddy, [1996-1998 Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶27,271 at 46,210 (CFTC Feb. 4, 1998).

²⁸ In other words, there may be circumstances under which the existence of an ultimate fact is more probable than any one theory for the fact's nonexistence but the existence of the fact is not more probable than its nonexistence under all plausible theories. See Webster v. Refco, Inc., [Current Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶27,578 at 47,695 n.303 (CFTC Feb. 1, 1999), which explains this with a concrete example.

²⁹ 7 U.S.C. §13c(a).

under Section 13(a), the Division must not only prove that Bilello violated Section 4b(a) of the Act,³⁰ it must also prove that Gorski: "(1) had knowledge of [Bilello's] intent to commit a violation of the Act; (2) had the intent to further the violation; and (3) committed some act in furtherance of the principal's objective."³¹ The Division claims that Gorski aided and abetted Bilello by engaging in noncompetitive trades with him and reporting the results as though they were competitive, bona fide trades.³² As discussed below, the Division's theories of primary liability include the same trades and the same activity. In addition, primary liability does not require a substantially different level of culpability. Moreover, if Gorski is found to have engaged in the noncompetitive trading and reporting of false prices, adding theories of vicarious liability would not change the nature of the activity charged and would, accordingly, have no effect on the sanctions to be

³⁰ See supra note 13.

³¹ Damato v. Hermanson, 153 F.3d 464, 473 (7th Cir. 1998). Accord In re Western Fin. Management, [1984-1986 Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶22,814 at 31,401 (CFTC Nov. 14, 1985); In re Lincolnwood Commodities Inc. of Cal., [1982-1984 Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶21,986 at 28,254-55 (CFTC Jan. 31, 1984); In re Richardson, [1980-1982 Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶21,145 at 24,644-46 (CFTC Jan. 27, 1981).

³² Division's Brief at 30-32.

awarded. Therefore, the Court has no need to consider the aiding and abetting charges and the discussion will focus on the theories of primary liability.³³

The Division chose not to refine its case as to how Gorski's alleged trading constituted primary violations of the law. They maintain that Gorski violated Section 4c(a)(A) on numerous occasions and under a number of theories.³⁴ Section 4c(a)(A) prohibits certain types of trading with regard to commodity contracts used for hedging, price discovery or trading in interstate commerce.³⁵ It prohibits "wash sales," "accommodation trades" and "fictitious sales."³⁶ In addition, it

³³ In re Interstate Sec. Corp., [1990-1992 Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶25,295 at 38,954-55 (CFTC June 1, 1992) ("[I]n determining sanctions our focus is on the overall nature of the wrongful conduct rather than the number of legal theories that Division can successfully . . . prove.").

³⁴ Division's Brief at 32-33, 35.

³⁵ 7 U.S.C. §6c(a).

³⁶ 7 U.S.C. §6c(a)(A). Fictitious sales are a "class of wrongful trading techniques." In re Three Eight Corp., [1992-1994 Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶25,749 at 40,444-45 (CFTC June 16, 1993). Generally, fictitious sales include transactions that appear to have been submitted to the open market while negating the market risk or price competition inherent in competitive trading. Id. The category also includes "trading schemes that evade the competition of the open market" but do not create that false impression of having been submitted to the open market. In re Collins, [1996-1998 Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶27,194 at 45,742-43 (CFTC Dec. 10, 1997).

(continued..)

prohibits trades that are "of the character of" wash sales, accommodation trades and fictitious sales.³⁷ In order to prove a violation of Section 4c(a)(A), the Division must do more than prove the existence of trading that is suspicious in terms of matching various aspects of some type of fictitious sales. It

(.continued)

Wash sales are a category of fictitious sales. Three Eight, ¶25,749 at 40,444-45. They are fictitious sales structured "to create a financial and position[al] nullity extraneous to the price discovery and risk-shifting functions of the futures markets." In re Bear Stearns & Co., [1990-1992 Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶24,994 at 37,663 (CFTC Jan. 25, 1991). A "wash" result, a nearly simultaneous purchase and sale at approximately the same price and the same number of identical contracts, may indicate a "wash sale." However, legitimate trading, especially scalping, may produce an identical outcome. Therefore, the Court remains mindful that the essential characteristic of wash sales, like all other fictitious sales, is "the absence of an intent to undertake a bona fide trading transaction." In re Gilchrist, [1990-1992 Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶24,993 at 37,653 n.23 (CFTC Jan. 25, 1991). This intentional creation of a trading nullity amounts to an illegal wash sale even if the facially independent purchase and sale were executed by open and competitive outcry. In re Glass, [1996-1998 Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶27,337 at 46,561-3 (CFTC Apr. 27, 1998).

"Accommodation trading is noncompetitive trading entered into by a trader to assist another with unlawful trading." Glass, ¶27,337 at 46,561-4. Similar to the other types of fictitious sales, an intent to avoid arms-length, bona fide trading distinguishes accommodation trading from lawful trading that produces the same positional and financial outcome. Glass, ¶27,337 at 46,561-4 (citing Sundheimer v. CFTC, 688 F.2d 150 (2d Cir. 1983)).

³⁷ 7 U.S.C. §6c(a)(A).

must also satisfy a scienter requirement in the sense that a specific intent, an intent to avoid the open market and its inherent risks, distinguishes all types of fictitious trading by definition.³⁸

The Division also charged Gorski with violating Rule 1.38(a)³⁹ and, given its theory of the case,⁴⁰ raised the question of whether it was necessary to allege violations of Section 4c(a)(A) or culpability for aiding and abetting.⁴¹ Section 1.38(a) provides,

³⁸ Rouso, ¶27,133 at 45,308; In re Buckwalter, ¶24,995 at 37,684-85 (CFTC Jan. 25, 1991); Bear Stearns, ¶24,994 at 37,665-66; see supra note 36.

³⁹ Division's Brief at 34-35.

⁴⁰ See Division's Brief at 4-24 (arguing that the evidence supports a finding that Gorski engaged in noncompetitive trading and making no allegation that Gorski traded by open outcry but with an illegal intent).

⁴¹ Cf. In re Global Link Miami Corp., [1996-1998 Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶ 27,391 at 46,795 (ALJ June 26, 1998) (commenting that trying to fit violative conduct under as many provisions of the Act as possible "may promote unnecessary complexity and careless drafting, but not the public interest"), rev'd on other grounds, [Current Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶27,699 (CFTC June 21, 1999).

As noted above, one can engage in wash sales and still comply with Rule 1.38(a). However, in this case, the Division alleges that any wash sales were non-competitively executed and that the only illicit purpose of the alleged wash sales was to facilitate Bilello's noncompetitive trading.

"All purchases and sales of any commodity for future delivery . . . on or subject to the rules of a contract market shall be executed openly and competitively by open outcry or posting of bids and offers by other equally open and competitive methods, in the trading pit or ring or similar place provided for by the contract market, during regular hours prescribed by the contract market for trading in such commodity" ⁴²

Although Rule 1.38(a) imposes affirmative obligations and does not contain references to fraud or willfulness in order to establish a violation of the rule, the Division must not only prove that Gorski failed to comply with its prescriptions, it must also prove that any failures were "knowing." ⁴³

In addition to charging Gorski with illegal trading, the Division claims that Gorski reported the results of that trading as though there were bona fide and, in doing so, violated Section 4c(a)(B). ⁴⁴ Section 4c(a)(B) prohibits trading that "is used to cause any price to be reported, registered, or recorded which is not a true and bona fide price." ⁴⁵ Bona fide prices are

⁴² 17 C.F.R. §1.38(a) (1998).

⁴³ Buckwalter, ¶24,995 at 37,685; Bear Stearns, ¶24,994 at 37,665.

⁴⁴ Division's Brief at 33-35.

⁴⁵ 7 U.S.C. §6c(a)(B).

only those prices that result from competitive trading.⁴⁶ Like the other provisions of section 4c(a) the Division must prove that Gorski "knowingly:" (1) engaged in noncompetitive trading and (2) reported the prices as though he had traded competitively.⁴⁷ There is no dispute that Gorski recorded and reported the prices for the trades in question. Accordingly, if the Division has proven that the trades were noncompetitive and that Gorski knew that they were noncompetitive, it will have established violations of Section 4c(a)(B) on the part of Gorski.

Despite the multiplicity of theories, this case boils down to two issues: (1) whether the Division proved, by a preponderance of the evidence, that Gorski engaged in noncompetitive trading and (2) whether it proved, by the same standard, that he did so knowingly. Before considering Gorski's explanations and rebuttal, the Court will determine whether the Division has met the burden of production, that is, whether it has established a prima facie case.⁴⁸ In support of its case, the Division presented expert testimony, evidence of admissions

⁴⁶ Glass, ¶27,337 at 46,561-4; In re Mayer, CFTC Docket No. 92-21, 1998 WL 80513, at *26 (CFTC Feb. 25, 1998).

⁴⁷ See Buckwalter, ¶24,995 at 37,685.

⁴⁸ In re Elliott, [1996-1998 Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶27,243 at 46,004 (CFTC Feb. 3, 1998).

and a great deal of circumstantial evidence.⁴⁹ The Court will examine these in turn.

Expert Testimony and Its Reliability

"[T]he trustworthiness of nonscientific expert testimony is every bit as suspect as the reliability of scientific evidence. If anything, there is less assurance of accuracy and truthfulness of nonscientific expert testimony."⁵⁰

Trade practice cases often turn on the existence and import of circumstantial evidence. The materiality of certain circumstances may not be self-evident, officially noticeable or flow reliably from an application of common sense. Accordingly, parties in trade practice cases regularly present expert testimony to provide a link between the circumstantial evidence and their theories' ultimate conclusions.⁵¹ This agency's courts, reflecting an inability to draw reliable inferences

⁴⁹ This general, unqualified description should not be taken as indicating the probity or reliability of the Division's evidence. These matters are described below.

⁵⁰ Edward J. Imwinkelried, The Next Step After Daubert: Developing A Similarly Epistemological Approach to Ensuring the Reliability of Nonscientific Expert Testimony, 15 Cardozo L. Rev. 2271, 2279 (1994).

⁵¹ See, e.g., Glass, ¶27,337 at 46,554; Reddy, ¶27,271 at 46,209; Rouso, ¶27,133 at 45,308; Buckwalter, ¶24,995 at 37,682-83.

without subject matter specialists,⁵² regularly admit expert testimony in trade practice cases.⁵³

Some of the Types of Expert Testimony

Experts assist the Court's fact finding, relating to alleged trade practice violations, in four ways. The first way they assist the Court is by testifying to facts such as the characteristics of the contracts at issue, an exchange's audit trail system and certain, patent exchange practices. Experts can also help the Court by translating the audit trail. This can be done by explaining the role of certain documents and what

⁵² Cf. Harried v. Air King Prods. Co., 183 F.2d 158, 164 (2d Cir. 1950).

The Commission follows the principles of Federal Rule of Evidence 702 with regard to the admissibility of expert testimony. In re Ashman, [1996-1998 Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶27,336 at 46,549 n.55 (CFTC Apr. 22, 1998). Rule 702 states that qualified experts may testify as to "scientific, technical, or other specialized knowledge" if it "will assist the trier of fact to understand the evidence or to determine a fact in issue." Fed. R. Evid. 702. Stated in the negative, when an expert would be of no help in sorting through the facts and fact finding, her testimony is not admissible. United States v. Felak, 831 F.2d 794, 797 (8th Cir. 1987); Fed. R. Evid. 702 advisory committee notes. In a bench trial, when the a court has sufficient knowledge of a matter, expert testimony would be of no help and, therefore, would not be admissible. In other words, admissibility under Rule 702 depends, in part, on a fact finder's ignorance. Id.

⁵³ See, e.g., Glass, ¶27,337 at 46,554; Reddy, ¶27,271 at 46,209; Rouso, ¶27,133 at 45,308; Buckwalter, ¶24,995 at 37,682-83.

those documents -- often written in abbreviations, code and shorthand -- communicate on their face. Thus, experts can efficiently provide background information and serve as a finding aid of sorts, relating circumstantial evidence to its precise place within the a party's theory of the case.

In these first two capacities, the testimony is largely undisputed. It often involves facts that are properly the subject of official notice if parties requested it and the Court were to conduct the necessary research. In addition, exchange-member fact witnesses are often experts themselves on these topics and have the capacity to rebut these types of testimony on their own terms.

The third type of testimony goes to whether the circumstances preclude a finding of liability or, affirmatively stated, whether a party's theory of the case is plausible in light of the evidence.⁵⁴ This type of testimony involves demonstrating how the evidence could fit together. When a case is rationally based and to the degree such testimony demonstrates a possibility, but not probability, of a theory, it is also not generally disputed. Similarly, exchange-member

⁵⁴ Of course, if the evidence goes to the point of possible illegal activity, but goes no farther, the Court cannot find in favor of the Division. Richardson v. Richardson-Merrell, Inc., 857 F.2d 823, 829 (D.C. Cir. 1988).

parties and fact witnesses can generally address the testimony on its own terms with authority. However, this type of testimony leaves open the question of the probability that a theory fits the facts.

The fourth type of typical expert testimony in trade practice cases is more problematic in a number of ways. It involves social-science-based or quasi-social-science-based opinions.⁵⁵ These opinions generally take the form of causal

⁵⁵ See David Faigman, To Have and Have Not: Assessing the Value of Social Science to the Law as Science and Policy, 38 Emory L. J. 1005, 1007-08 (1989). The Division might have been tempted to argue that, in trade practice cases, its experts are not providing social-science-based opinion. Such an argument would try to distinguish informal and intuitive inquiries from the formal methods of deliberate, empirical social science. It is to the Division's credit that it did not make such an argument. As will be discussed below, the Division's expert infers the existence of certain, social interactions from objective circumstances based on theories about how similarly-situated persons tend to act. Without trying to categorize it more precisely, this comfortably rests within the realm of social science.

As discussed below, the fact that the expert's methodology is primarily impressionistic or experientially-based merely raises the issue of whether it is reliable -- and, therefore, worthy of consideration -- or not. See Kumho Tire Co. v. Carmichael, 119 S. Ct. 1167, 1175-77 (1999) ("We must . . . disagree with the . . . holding that a trial judge may ask questions of the sort Daubert mentioned only where an expert 'relies on the application of scientific principles,' but not where an expert relies 'on skill- or experienced-based observation.'"). Accordingly, parties do not get to choose the level of scrutiny to which opinion testimony is subjected by their choice of experts nor can they manipulate the ultimate burden of establishing the reliability of such testimony in that manner.

(continued..)

inferences drawn from the audit trail and other circumstances.⁵⁶ In other words, this type of testimony goes to the ultimate issue by answering the question of whether violative conduct is the probable explanation of the circumstantial evidence.

This testimony is often controversial, at least among the parties to the proceeding. It often rests on foundations that are not self-evident and, in cases where parties are financially or otherwise unable to employ experts, opposing witnesses may not be able to address the testimony on its own terms.⁵⁷ Moreover, this type of testimony can rest on methods that are not demonstrated but are explained in general terms only or are clearly explained but involve inscrutable methods. Methodological opacity, whatever the source, raises the possibility that the Court will accept unworthy opinion

(..continued)

As will be apparent to any informed reader of this opinion, the Court relies heavily on case law that considers the admissibility of opinion testimony rather than an evaluation of the opinions' probity. While the relief differs, the inquiry is similar in so far as it touches on minimal standards of reliability.

⁵⁶ See, e.g., Elliott, ¶27,243 at 46,001-02.

⁵⁷ Carl B. Meyer, Science and Law: The Quest for the Neutral Expert Witness; A View from the Trenches, 12 J. Nat. Resources & Env'tl. L. 35, 54 (1997). Budget constraints sometimes prevent a party from presenting expert testimony. In less extreme cases, a party may be able to employ an expert but call on the expert to "testify beyond their specialty or competence." Id.

testimony as true. When the opinion rests, in any part, on information not contained in the record, this danger increases.⁵⁸

Expert Credibility

"When considering reliability, the trial court must focus on the soundness of the expert's methodology and not the correctness of his conclusions."⁵⁹

While the Court has the responsibility to determine an expert's credibility, the party presenting the opinion has the burden of persuading the Court on the issue.⁶⁰ Even the uncontradicted expert may not be sufficiently credible.⁶¹ The

⁵⁸ Experts can, of course, base their opinions on information not contained in the record. However, when their informational basis seems somehow inadequate, the inability to verify that data certainly undermines credibility. In other words, fairly liberal rules regarding inadmissibility do not mean that an opinion may go unscrutinized.

⁵⁹ Smelser v. Norfolk S. Ry. Co., 105 F.3d 299, 303 (6th Cir. 1997).

⁶⁰ See Maddy v. Vulcan Materials Co., 737 F. Supp. 1528, 1533 (D. Kan. 1990). Delmarva Power & Light, 1974 SEC LEXIS 3628, at *45; In re New England Elec. System, File No. 59-102, 1964 WL 7220, at *6 (SEC Mar. 19, 1964). In other words, a party that presents an expert must develop the record in such a manner as to eliminate substantial doubts as to the basis for the expert's opinion and demonstrate that important factors that might "substantially impair the credibility [of the opinion] and[, thereby,] preclude . . . [its] acceptance" are accounted for. Id. at *5-6.

⁶¹ Parrilla-Lopez v. United States, 841 F.2d 16, 19 (1st Cir. 1988).

credibility of an expert's opinion depends on factors that are relevant to the testimony of any witness, such as bias. In addition to generic credibility factors, the weight that a court grants to an opinion depends on the reliability of the methods by which an expert reached the opinion.⁶² When the underlying premises and inferences rest on discrepancies in the relative frequency of certain occurrences, reliability depends, in large part, on the quantitative techniques the expert employed. Finally, once opinions are shown to have been the result of substantially reliable methods, the Court must determine the applicability of the opinions to the case at hand.⁶³

An Expert's Connection to the Case and Methods May Support an Inference of Bias

The bias or interest of an expert undermines the reliability of the witness' opinions just as it undermines the credibility of any other testimony.⁶⁴ Bias may result from non-

⁶² Some commentators refer to this as the "internal validity of the research." Myron Roomkin & Roger I. Abrams, Using Behavioral Evidence in NLRB Regulation: A Proposal, 90 Harv. L. Rev. 1441, 1450 (1977).

⁶³ Id.

⁶⁴ Strickland v. Francis, 739 F.2d 1542, 1552 (11th Cir. 1984); Brock v. United States, 387 F.2d 254, 258 (5th Cir. 1967).

pecuniary as well as pecuniary interests in a proceeding.⁶⁵ Often, bias goes to a witness' propensity to misrepresent or shade facts during testimony. However, that is not the only effect. Bias may influence the manner in which witnesses process information. For instance, it can affect conscious decisions such as the choice of data.⁶⁶ However, bias can have subconscious effects as well in the form of a cognitive bias.⁶⁷ To the degree that testimony rests on interpretation as well as perception, the danger that a cognitive bias can affect testimony would seem to increase.

The Court's bias inquiry is two-pronged. First, the Court considers circumstances that may indicate the existence of a bias. In addition to the use of substandard methods that ease

⁶⁵ United States v. Dees, 34 F.3d 838, 844 (9th Cir. 1994).

⁶⁶ Perry v. United States, 755 F.2d 888, 892 (11th Cir. 1985).

⁶⁷ Board of Educ. of S. Sanpete Sch. Dist. v. Barton, 617 P.2d 347, 350 (Utah 1980); Edward J. Imwinkelried, Evidentiary Foundations 163 (1998). A cognitive bias creates a filter through which events become distorted because certain values become internalized or certain views become held even in the face of contrary facts. See Crampton v. Michigan Dep't of State, 235 N.W.2d 352, 356-57 (Mich. 1975); John R. Allison, Ideology, Prejudgment, and Process Values, 28 New Eng. L. Rev. 657, 699-01 (1994). Cf. United Steelworkers of America v. Marshall, 647 F.2d 1189, 1312-13 (D.C. Cir. 1981) (MacKinnon, J., dissenting).

the expert's path to the outcome a party desires,⁶⁸ such circumstances can include: (1) a history of testifying for parties on one side of type of conflict,⁶⁹ (2) an employment relationship with the party for whom the witness is testifying,⁷⁰

⁶⁸ Expert testimony that "has fallen below professional standards" can serve as a basis for concluding that the expert is merely "a shill" for the party that the expert's testimony was offered in support of. Mid-State Fertilizer, Co. v. Exchange Nat'l Bank, 877 F.2d 1333, 1340 (7th Cir. 1989).

⁶⁹ Gwathmey v. United States, 215 F.2d 148, 159 (5th Cir. 1954); Estate of Halas v. Commissioner, 94 T.C. 570, 577 (1990) ("[E]xperts may lose their usefulness and credibility when they merely become advocates for one side").

⁷⁰ Jeffrey Milstein, Inc. v. Greger, Lawlor, Roth, Inc., No. 94 CIV. 8003 (KTD), 1994 WL 698214, at *3 (S.D.N.Y. Dec. 13, 1994), aff'd, 58 F.3d 27 (2d Cir. 1998); United States v. George, 40 M.J. 540, 542 (A.C.M.R. 1994); Delmarva Power & Light, 1974 SEC LEXIS 3628, at *38, *43 n.52; Sullivan v. Rixey, 403 S.E.2d 346, 347 (Va. 1991); Mills v. Grotheer, 957 P.2d 540, 543 (Okla. 1998); Strain v. Heinssen, 434 N.W.2d 640, 642 (Iowa 1989); Barsema v. Susong, 751 P.2d 969, 971-74 (Ariz. 1988) (en banc); Sears v. Rutishauser, 466 N.E.2d 210, 212-13 (Ill. 1984); Barton, 617 P.2d at 350 ("[H]is employment bore directly on the all-important issue of his objectivity or bias"); John Henry Wigmore, Evidence in Trials at Common Law §2569 (1970) ("Wigmore on Evidence") §§761, 949; James Moody & LeEllen Coacher, A Primer on Methods of Impeachment, 45 A.F.L. Rev. 161, 192 (1998). When an expert testifies in support of her day-to-day employer, there is a substantial danger of bias. Because the witness looks to the employing party for pay and professional advancement, the danger is obvious. See Allison, supra note 67, at 700-01. The danger is greater in cases where the witness has, through the employment, developed expertise in an arcane field of developed skills that are heterogeneous. Under those circumstances, the alternative employment opportunities may be relatively unattractive and the loyalty to the employer correspondingly greater.

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(3) whether the expert is offering an evaluation of a case someone else assembled or whether the witness is testifying in support of a case that the witness helped assemble and recommended to be prosecuted.⁷¹

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As touched on briefly above, an employment relationship may also lead to a cognitive bias. Basically, "the very act of advocating a particular position increases the likelihood that proponents will themselves adopt that position." Deborah L. Rhode, Institutionalizing Ethics, 44 Case W. Res. L. Rev. 665, 686 (1994). In addition, staff tend to empathize with the organization, its goals and its views. Crampton, 235 N.W.2d at 357. Over time and with advancement, a staff member may "move toward an alter ego status with the organization." Allison, supra note 67, at 701. Once a belief is established or a decision made, "cognitive conservatism" becomes a filter through which people observe events. Rhode at 687.

⁷¹ United States v. Kenney, 911 F.2d 315, 320 (9th Cir. 1990). Cf. United States v. Dondich, 460 F. Supp. 849, 853 (N.D. Cal. 1978) ("[T]o the extent Zanides did have an interest in seeing the investigation produce a successful prosecution, it is unclear in what way he differs from any other zealous prosecutor."). On the surface, this may seem like an insignificant factor. However, a potential source of bias is an expert's pride in its own opinion. See People v. Zimmerman, 189 N.W.2d 259, 261 (Mich. 1971); Polley v. Cline's Ex'r, 93 S.W.2d 363, 371 (Ky. App. 1936). Cf. Hunt v. Methodist Hosp., 485 N.W.2d 737, 744 (Neb. 1992) (discussing "pride of opinion" in jurors). This reflects the fact that a trial is more than the presentation and weighing of facts and law. In a very real sense, it can appear to be a referendum on the investigation and case development, the decision to bring a case and those who were involved in such activities. An expert who was involved in developing the case and recommending the initiation of an enforcement proceeding is not only expressing an opinion in support of the Division. She is, in part, justifying her own, prior decisions that resulted in the substantial expenditure of public and private funds. Thus, there is an incentive to advocate an opinion for reasons distinct from the disinterested
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The second general prong of the Court's bias analysis involves the substance and manner of the expert's testimony. With respect to substance, the Court considers how the expert draws inferences and weighs probity.⁷² In particular, the Court

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application of expert knowledge to a particular set of facts. In contrast, an expert who was employed for the sole purpose of rendering an opinion would have less invested in the case and, being more detached, less of an incentive to favor one party regardless of the facts or knowledge.

Even when pride in the opinion is discounted, an expert who is involved in the assembly of a case may form beliefs as to the merits before all facts are assembled. When this occurs, there is a danger of "belief perseverance" or "selective perception." This phenomenon occurs when a person forms a "fairly definite theory or belief about something" and results in the person clinging to the belief "in the face of contradictory evidence." John R. Allison, Combinations of Decision-Making Functions, Ex Parte Communications, and Related Biasing Influences: A Process-Value Analysis, 1993 Utah L. Rev. 1135, 1138-39, 1165 (1993) ("[T]he investigator's very involvement in the process of collecting information may lead to the formation of relatively concrete beliefs that may be quite premature because they have not been adequately challenged or otherwise tested."). Accord Eyal Zamir, The Efficiency of Paternalism, 84 Va. L. Rev. 229, 268 (1998) ("People seek information that meshes with their beliefs and estimations and disregard subsequent or even prior conflicting information."). The cure for potential belief perseverance in an investigator/expert is simple, the employment of a methodology that rests on objective phenomena, rather than one that turns on gut reactions, and the self-imposition of methodological standards.

⁷² For example, an expert that exhibits the habit of assigning probative weight to only those facts that support the expert's theory would tend to exhibit bias. Likewise, an expert that gave weight to facts that support her theory, even though they might have alternative explanations, yet discounted contrary

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considers whether an expert consciously overlooks facts that might undermine her conclusions as well as how the expert accounts for facts that would weigh against her opinions.⁷³ As for the manner of testimony, the Court will consider general demeanor as it might relate to bias.

The Substantive Evaluation

While general credibility flaws, such as bias, can affect the weight that expert testimony receives, whether and how much the Court credits an expert's opinion will depend primarily on the opinion's substance.⁷⁴ Evaluating the substance of expert opinion is no easy task. Pitfalls are abound. There is an inherent danger that the Court could be distracted by -- or assign too much weight to -- factors such as: (1) an expert's professional affiliation or resume,⁷⁵ (2) the agreement of the

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facts, on the basis that they have alternative explanations, would also tend to reveal an underlying bias.

⁷³ See Perry, 755 F.2d at 892; O'Gara v. United States, 560 F. Supp. 786, 790 (E.D. Pa. 1983).

⁷⁴ Ashman, ¶27,336 at 46,549 n.55.

⁷⁵ Id. ("Even where a witness is . . . qualified, . . . the weight to be accorded to such a person's testimony will depend on what the expert says and what basis the expert has for saying it, and not solely on his or her credentials.").

opinion with the Court's suspicions or subjective beliefs,⁷⁶ or (3) the mere fact that other adjudicators have found the opinion reliable.⁷⁷ While consideration of these factors can provide

⁷⁶ Wigmore on Evidence §2569 ("It is . . . plainly accepted that the judge is not to use from the bench, under guise of judicial knowledge, that which he knows *only as an individual* observer outside of court." (emphasis in original)); United States v. Lewis, 833 F.2d 1380, 1385 (9th Cir. 1987); McCormick on Evidence §329 ("What a judge knows and what facts a judge may judicially notice are not identical data banks.").

This rule rests on recognition of the difference between subjective knowledge, or thinking that something is known, and factual validation. As Professor Arnold Zellner explained and cautioned,

"The subject matter discipline may be economics, history, physics, or the like, but the methods employed in analyzing and learning from data are basically the same. As [Harold] Jeffreys expresses the idea, 'there must be a uniform standard of the validity for all hypotheses, irrespective of the subject. Different laws may hold in different subjects, but they must be tested by the same criteria; otherwise we have no guarantee that our decisions will be those warranted by the data and not merely the result of inadequate analysis or believing what we want to believe.'"

Basic Issues of Econometrics 3-4 (1984) (emphasis added). See Zamir, supra note 70 at 268 (discussing cognitive biases such as "selective perception," the overestimation of the frequency of "outstanding events . . . [as opposed to] ordinary ones," "social pressure" and "wishful thinking").

⁷⁷ See Perry, 755 F.2d at 892 ("Despite appellant's protestations, the examination of a scientific study by a cadre of lawyers is not the same as its examination by others trained in the field of science or medicine."). This last point may not be self-evident. After all, it seems reasonable to think that,
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if some other authority has found an opinion reliably based, then it is probably so. This is what the Division seems to argue in its post-hearing brief. Division's Brief at 7. Despite the superficial appeal of such reasoning, it is flawed. Each case rests on its own facts, even with respect to witness reliability. See, e.g., In re Clark, [1996-1998 Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶27,370 at 46,693 n.12 (CFTC July 22, 1998) (finding that the determination of a witness' credibility in a statutory disqualification case did not preclude a different finding of credibility for the same witness in an exchange disciplinary proceeding involving substantially the same matter). Accordingly, expert testimony never becomes immune from probing scrutiny. In re Japanese Elec. Prods. Antitrust Litig., 723 F.2d 238, 278 (3d Cir. 1983), rev'd on other grounds sub nom, Matsushita Elec. Indus. Co. v. Zenith Radio Corp., 475 U.S. 574 (1980) ("[E]xpert opinion must be approached on an expert by expert, or even opinion by opinion basis."); In re "Agent Orange" Prod. Liability Litig., 611 F. Supp. 1223, 1244 (E.D.N.Y. 1985), aff'd, 818 F.2d 187 (2d Cir. 1987). Moreover, the facts of other cases are, in general, not judicially noticeable. Rickett v. Jones, 901 F.2d 1058, 1061 n.5 (11th Cir. 1990); M/V American Queen v. San Diego Marine Constr. Corp., 708 F.2d 1483, 1491 (9th Cir. 1983); Wilson v. Volkswagen of America, Inc., 561 F.2d 494, 510 n.38 (4th Cir. 1977). This rule not only binds tribunals, it makes sense.

A judicial fact-finding is the soul of compromise. There is no doubt that adversarial proceedings are searches for truth. However, the mechanism is imperfect in a number of respects. First, knowledge comes at a price. Mirjan Damaska, Truth in Adjudication, 49 Hastings L.J. 289, 301 (1998). In addition, unbounded fact finding would compromise other values such as preserving constitutional norms and confidences. Richard A. Posner, The Problems of Jurisprudence 207 (paperback ed. 1993). Thus, various aspects of a legal proceeding, such as rules of discovery and evidence, balance the truth-searching aspects with the costs involved. Id.; Damaska at 301; M. Neil Browne et al., The Epistemological Role of an Expert Witness and Toxic Torts, 36 Am. Bus. L.J. 1, 39 (1998). In addition, adjudications are bound by an evidentiary record (and, sometimes, noticeable facts), that is generally developed by self-interested parties, rather than all available facts that might inform the process. Cf. 5 U.S.C. §556(d); 17 C.F.R.

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some useful input,⁷⁸ they have an equal capacity to mislead. After all, they are, at best, imperfect proxies for determining how reliably an expert formed her conclusions.

In its evaluation of expert testimony, the Commission has apparently been of two minds.⁷⁹ In re Reddy illustrates the first line of reasoning. The case involved dueling experts, one of whom was Martha Kozlowski ("Kozlowski").⁸⁰ In Reddy, the

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§10.69. See, e.g., In re Clark, ¶27,370 at 46,693; Fager v. Nadell, [1996-1998 Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶27,351 at 46,598 (CFTC May 7, 1998); In re Elliott, [1996-1998 Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶27,243 at 46,000 (CFTC Feb. 3, 1998). The development of the record depends a great deal on the foresight, knowledge and skill of the advocates as well as that of the decisional tribunal. As a result, such a process must inevitably settle for a "realist view of the truth" that separates epistemological truth from justification as a basis for factual conclusions. Damaska at 295. To overlook this facet of the outcome of an adversarial, record-bound proceeding would risk piling imperfection upon imperfection until there exists a "received" wisdom that is based on nothing but its veneration. See Scott Brewer, Scientific Expert Testimony and Intellectual Due Process, 107 Yale L.J. 1535, 1562-65 (1998) ("Truly scientific results would seem not only to permit, but also to invite, if not require, fresh reexamination."); Robert H. Bork, The Antitrust Paradox 15-16 (1978).

⁷⁸ See Strickland v. Francis, 738 F.2d 1542, 1552 (11th Cir. 1984).

⁷⁹ The Court modifies this statement with "apparently" because only the Commission rationales expressed in its opinions are knowable to the Court.

⁸⁰ Reddy, ¶27,271 at 46,209-11.

Commission did not consider the premises upon which the experts based their opinions or the reliability of their methods in general.⁸¹ Instead, the Commission considered the relative plausibility of the experts' conclusions as part of a holistic inquiry into which party's theory of the case best fit the circumstantial evidence.⁸² While Reddy was in litigation, another line of reasoning was in the process of emerging.

⁸¹ Id.

⁸² Id. For example, in the portion of its discussion that touched on Kozlowski's opinions most directly, the Commission wrote,

"A comparison of the two experts' analyses reveals why, on this record, the Division's theories must prevail. The Division's view of the case . . . explains [the circumstantial evidence] plausibly and convincingly

Respondents, on the other hand, . . . ask too much, building inference upon inference to the point of implausibility."

Id. at 46,210-11. The Commission implicitly found that the Division presented a prima facie case and, after further discussion of the respondents' theories, concluded that "the Division's version of events regarding indirect bucket trades is 'more probable' than that offered by respondents." Id. at 46,211; See Rousso, ¶27,133 at 45,308 (discussing the Division's burden of proof). Later, in discussing the inferences supported by the audit trail case, the Commission noted "the Division, through Kozlowski, advanced plausible explanations for [two types] of trading card irregularit[ies]." Reddy, ¶27,271 at 46,212. Thus, the Commission never looked beneath the surface of the opinions and never considered the weight of the opinions independently. The Commission took the same approach, albeit with less explanation, in Rousso, ¶27,133 at 45,308-09.

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In 1994, the Commission considered a respondent's interlocutory motion relating to the Division's temporary possession of the respondents' rehabilitation experts' notes.⁸³ In explaining why this temporary possession did not prejudice the respondent, the Commission cited Daubert v. Merrell Dow Pharmaceuticals,⁸⁴ stating that the probity of the opinions would depend on the experts' "knowledge or the underlying premises of [their] opinion[s]," and found that the Division's access to the notes had no effect on the bases for the opinions.⁸⁵ A little over three years later, the Commission considered the weight to assign to the respondents' rehabilitation experts' opinions.⁸⁶ In its opinion and order, the Commission, again citing Daubert, considered whether the experts' opinions rested on sound

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This method of evaluation is certainly not improper. However, it raises the question of whether the experts' bottom-line opinions helped the Commission to any degree or whether the Commission's de novo review was based almost solely on its own expertise-based inferences.

⁸³ In re Ashman, [1994-1996 transfer Binder] Comm. Fut. L. Rep. (CCH) ¶26,287 at 42,441 (CFTC Dec. 22, 1994).

⁸⁴ 509 U.S. 579 (1993).

⁸⁵ Ashman, ¶26,287 at 42,441 & n.1.

⁸⁶ Ashman, ¶27,336 at 46,549.

"reasoning and methodology" and whether their assertions of fact were "credible and substantiated."⁸⁷

Ashman's approach is the basis of the Commission's latest guidance on the subject of expert credibility.⁸⁸ In addition, it reflects the latest Supreme Court approach to non-scientific testimony.⁸⁹ Moreover, there is no indication that the Commission intended to scrutinize expert testimony in ways that depend on whether the Division or a private party bears the burden of proof. Finally, Ashman avoids many of the dangers that arise from focussing on factors that are imperfect proxies for reliability rather than those factors that have a more direct relationship to the inherent credibility of an expert's conclusions. Accordingly, the Court chooses to follow Ashman's adoption of Daubert principles.⁹⁰

⁸⁷ Id. at 46,549-50 & n.55 ("Even where [an expert] is . . . qualified, the weight to be accorded to such person's testimony will depend on what the expert says and what basis the expert has for saying it").

⁸⁸ In re Zuccarelli, [Current Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶27,597 at 47,834 n.19 (CFTC Apr. 15, 1999).

⁸⁹ See Kumho Tire, 119 S. Ct. at 1175-77.

⁹⁰ See Ashman, ¶27,336 at 46,549 n. 55. The failure to develop and apply reliability standards, in the context of admissibility, has been described as "intolerable." Imwinkelried, supra note 50, at 2281. Such a failure would seem no less tolerable in the process of weighing opinion testimony.

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The Court's adoption of the Ashman principles means that the substantive merit of an expert's opinion will depend primarily on the expert's methods and underlying premises of the opinion rather than a superficial determination of relative plausibility.⁹¹ This inquiry can be divided into three

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The Court's discussion of reliability primarily contemplates the use of analytic methods in this and similar adjudications. Certain methodologies may be too unreliable for use in an litigation yet be otherwise useful. See Richardson, 857 F.2d at 830 (describing tests that do no more than indicate further testing is merited as "extremely limited" in "value"); Gier v. Educational Serv. Unit No. 16, 845 F. Supp. 1342, 1353 (D. Neb. 1994). To be more precise, certain manners of drawing inferences may be too speculative to use here but may be useful at the investigational stage, to weed out certain cases before more costly means can be used to draw inferences from data with greater certainty. In fact, certain low quality methods that simply raise substantiated, but not confirmed suspicions, would seem sufficient to justify the issuance of a complaint even if they would be of virtually no help in establishing liability. This is so because a complaint serves to raise, rather than answers, questions. Global Link Miami, ¶27,391 at 46,785 n.83 (stating that a "reason to believe" amounts to little more than an "unsubstantiated suspicion").

⁹¹ "It is well established that expert testimony must be based on reliable . . . principles." FDIC v. Suna Assocs., Inc., 80 F.3d 681, 686 (2d Cir. 1996) (applying Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579 (1993), to an expert's valuation of a foreclosed property); cf. Richardson, 857 F.2d at 829-33; In re Delmarva Power & Light Co., Admin Proc. File No. 3-3640, 1974 SEC LEXIS 3628, at *39-44 (SEC June 26, 1974). As an Eleventh Circuit panel explained,

"The proper inquiry regarding the reliability of the methodologies implemented by economic and statistical experts in [the context of an antitrust case] is not whether

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categories. The first category relates to general indicia of reliability. The second two relate to the expert's use of the methodology in the case at hand, namely: (1) the premises upon which the reasoning rests and (2) the analysis that links the premises to the conclusion.⁹² Failure to satisfy the Court as to

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other experts, faced with substantially similar facts have reached the same conclusions Instead, the proper inquiry is whether the techniques utilized by the experts are reliable in light of the factors (other than testability) identified in Daubert and in light of other factors bearing on the reliability of the methodologies."

City of Tuscaloosa v. Harcros Chemicals, Inc., 158 F.3d 548, 566 n.25 (11th Cir. 1998); Ohio v. Louis Trauth Dairy, Inc., 925 F. Supp. 1247, 1252 (S.D. Ohio 1996) (stating that, in order to determine if expert testimony on an economic issue meets the minimum reliability requirements for admissibility, "[t]he Court must decide if . . . the testimony is based upon valid economic, statistical or econometric methodologies and reasoning that can properly be applied to the facts of this case.").

⁹² "[T]he value of the opinion of an expert witness is dependent on and is no stronger than the facts upon which it is predicated, and it has no probative force unless the premises upon which it is based are shown to be true" W. Horace Williams Co. v. Serpas, 261 F.2d 857, 860 (5th Cir. 1959). Accord Compton v. Subaru of America, Inc., 82 F.3d 1513, 1518 (10th Cir. 1996) ("[W]eaknesses in the underpinnings of the opinion[] go to the weight . . . of the testimony." quoting Jones v. Otis Elevator Co., 861 F.2d 655, 663 (11th Cir. 1988)); McCulloch v. H.B. Fuller Co., 61 F.3d 1038, 1044 (2d Cir. 1995); Porter v. Whitehall Lab., Inc., 9 F.3d 607, 614 (7th Cir. 1993) ("If experts cannot tie their assessments of data to known scientific conclusions, based on research or studies, then there is no comparison for the jury to evaluate and the expert's

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any of these inquiries will generally result in a rejection of the opinion, regardless of the expert's credentials or the obvious appeal of the expert's opinions.⁹³

Before delving into the specifics of an expert's methodology, courts sometimes consider general questions deemed

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testimony is not helpful"); Mid-State Fertilizer, 877 F.2d at 1340 ("Judges should not be buffaloed by unreasoned expert opinions."); Strickland, 738 F.2d at 1552; Brock, 387 F.2d 258; Carter v. United States, 252 F.2d 608, 617 (D.C. Cir. 1957) ("The chief value of an expert's testimony . . . in all . . . fields . . . rests upon the material from which the opinion is fashioned and the reasoning by which he progresses from his material to his conclusion. . . . The ultimate inferences vel non of relationship, of cause and effect, are for the trier of facts."); Bohnert v. Maryland, 539 A.2d 657, 661 (Md. 1988) ("[A]n expert's judgment has no probative force unless there is a sufficient basis upon which to support [the] conclusions."); Petrogradsky Mejdunarodny Kommerchesky Bank v. National City Bank, 170 N.E. 479, 483 (N.Y. 1930); Wigmore on Evidence §680 ("It follows . . . that if the premises are ultimately rejected . . . the testimonial conclusion based on them must also be disregarded.").

As clearly implied above, it is not enough to consider whether an opinion is "well reasoned." Such an inquiry seems to only test the internal logic of the opinion and overlook the relationship between the reliability of an opinion and the validity of the point from which the reasoning begins, the underlying premises. Japanese Elec. Prods. Antitrust Litig., 723 F.2d at 278; "Agent Orange" Prod. Liability Litig., 611 F. Supp. at 1244; Faigman, supra note 55, at 1031. In other words, impeccable logic resting on an invalid basis produces spurious results.

⁹³ Cf. General Elec. Co. v. Joiner, 522 U.S. 136, 143 (1997) ("[N]othing in either Daubert or the Federal Rules of Evidence requires a district court to admit opinion evidence which is connected to existing data by the ipse dixit of the expert.").

to bear on an expert's reliability. These include asking whether an expert's methodology is a creature of litigation or whether it meets the rigor of analysis undertaken when litigation is not contemplated.⁹⁴ Thus, use of the methodology in academic research and commentary can bolster the Court's confidence in an opinion's reliability while a lack of proof that the method is used outside of an investigation/hearing context would undermine that confidence.⁹⁵ Use of litigation-

⁹⁴ Khan v. State Oil Co., 93 F.3d 1358, 1364 (7th Cir. 1996) (Posner, C.J.), ("As we have emphasized in cases involving scientific testimony -- and the principle applies to social sciences with the same force that it does to the natural sciences -- a scientist, however reputable, is not permitted to offer evidence that he has not generated by the methods he would use in his normal academic or professional work, which is to say in work undertaken without reference to or expectation of possible use in litigation."), rev'd on other grounds, 522 U.S. 3 (1997); Daubert v. Merrell Dow Pharmaceuticals, Inc., 43 F.3d 1311, 1318 (9th Cir. 1995); Jones v. United States, 933 F. Supp. 894, 897 (N.D. Cal. 1996).

Some courts have gone so far to hold that opinions based on methods that are only performed when litigation is contemplated are inadmissible on reliability grounds.

⁹⁵ As the Ninth Circuit explained in considering the minimal reliability of expert testimony,

"One very significant fact to be considered is whether the experts are proposing to testify about matters growing naturally and directly out of research they have conducted independent of the litigation, or whether they have developed their opinions expressly for purposes of testifying. . . . That an expert testifies based on research he has conducted independent of the litigation

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specific methods would bear on the question of bias as well as substantive reliability.⁹⁶ Accordingly, when an expert's opinion was reached within the context of litigation, courts consider

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provides important objective proof that the research comports with good science."

Daubert, 43 F.3d at 1317. It went on to pithily state that when an expert's methodology is found only in pleadings, exhibits and trial transcripts and case reports, "what is going on . . . is not science at all, but litigation." Id. at 1318; accord Tyus v. Urban Search Management, 102 F.2d 256, 263 (7th Cir. 1996) ("In all cases, . . . the court must ensure that it is dealing with an expert, not just a hired gun.").

The Court need not be so stringent given the possibility that certain methods may be applicable to fields that are so specialized that academic research and commentary simply does not venture into so narrow a niche. That does not mean that, in such a case, the Court is any less probing. Rather, it means that the Court must find an appropriately analogous field and use its methods as a touchstone. In trade practice cases, the Court will consider the methodology against the background of the social sciences. As noted above, this seems proper given that an expert opining as to the significance of certain events that occurred in a market is doing so based on principles -- or in the case of shoddy expert testimony, theories dressed up as principles -- of human interaction (albeit in a specialized context). Cf. Harcross Chemicals, 158 F.3d at 566 n.25 (discussing economic testimony); Louis Trauth Dairy, 925 F. Supp. at 1252 ("The Court must decide if the . . . testimony is based on valid economic, statistical or econometric methodologies that can be applied to the facts of this case.").

⁹⁶ Jones, 933 F. Supp. at 897.

whether the expert "point[s] to some objective source" and followed some reliable method.⁹⁷

Other general factors that may relate to an expert's methods include: (1) the testability of the methods, (2) whether the hypotheses underlying the opinion have been tested, (3) the general (i.e. non-litigation) acceptance of the methods, (4) the accuracy of the methods and (5) whether the methods include "the existence of standards controlling the technique's operation."⁹⁸ This list is not exhaustive and, depending on the issues and testimony involved, may be over inclusive.

Even if, as a general matter, an expert's methods of proceeding from premises to conclusions are reliable, the analysis must start from an acceptable basis.⁹⁹ That basis may arise from a number of sources including: empirical studies, academic literature,¹⁰⁰ and the application of logic to

⁹⁷ Cabrera v. Cordis Corp., 134 F.3d 1418, 1421 (9th Cir. 1998); Adams v. Indiana Bell Tel. Co., 2 F. Supp.2d 1077, 1102 (S.D. Ind. 1998); Estate of Mitchell v. Gencorp, Inc., 968 F. Supp. 592, 600 (D. Kan.. 1997); Reynard v. NEC Corp., 887 F. Supp. 1500, 1508 (M.D. Fla. 1995).

⁹⁸ Smelser, 105 F.3d at 303-04; Brown v. Southeastern Pennsylvania Transp. Auth. (In re Paoli R.R. Yard PCB Litig.), 35 F.3d 717, 758 (3d Cir. 1994).

⁹⁹ See supra note 92.

¹⁰⁰ If the literature merely sets out theories, it would not be a basis of "knowledge" in this context. Just as an expert's unverified hypothesis is an unreliable basis for opinion,
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tautologically certain or proven fact. While the sources of a potentially reliable major or minor premise are various, they are not unbounded nor do they escape scrutiny.¹⁰¹ In general, an expert's premise must rest on knowledge in order to meet even minimal reliability requirements.¹⁰² In the context of opinion testimony, "the word knowledge connotes more than subjective belief or unsupported speculation."¹⁰³ Thus, mere suppositions

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someone else's unverified hypothesis is also an unreliable basis regardless of the publication's or the author's prominence. See Schubert v. Nissan Motor Corp., 148 F.3d 25, (1st Cir. 1998) (finding that a "plausible" theory that lacked "an adequate factual foundation" was excludable on reliability grounds); Faigman, supra note 55, at 1015 ("A subjective view of reality, or hypothesis, attains objectivity through systematic testing or, stated another way, attempts to falsify it. Falsifiability and testability represents the line . . . between science and pseudoscience . . .").

In evaluating the factual basis for an expert opinion, except for those facts susceptible to notice, "[c]ourts have only those materials which the parties supply them." Schubert, 148 F.3d at 31.

¹⁰¹ Mims v. United States, 375 F.2d 135, 143 (5th Cir. 1967).

¹⁰² Brown, 35 F.3d at 742; In re Aluminum Phosphide Antitrust Litig., 893 F. Supp. 1497, 1506 (D. Kan. 1995) ("'[K]nowledge' means more than subjective belief or unsupported speculation and applies to any body of known facts or ideas inferred from such facts or accepted as truth on good grounds."); Faigman, supra note 55, at 1018 ("In the end, the legal relevance of social science depends on both its status and merit as science.").

¹⁰³ Sunna Assocs., 80 F.3d at 687. Accord Smelser, 205 F.3d at 305; McCulloch, 61 F.3d at 1044.

that amount to theories or hypotheses are not sufficiently reliable to credit as a basis for expert opinion.¹⁰⁴ In other

¹⁰⁴ Harrison v. United States, 708 F.2d 1023, 1027 (5th Cir. 1983) ("[C]onclusions based on dreams, intuitions, suspicion, conjecture, ESP, speculation, or faulty reasoning, even if true, are merely 'belief.' Absent a reasonable basis, these conclusions do not rise to the level of knowledge."); Kelly v. American Heyer-Schulte Corp., 957 F. Supp. 873, 879 (W.D. Tx. 1997); Cartwright v. Home Depot U.S.A., Inc., 936 F. Supp. 900, 906 n.8 (M.D. Fla. 1996); Cavallo v. Star Enter., 892 F. Supp. 756, 761 (E.D. Va. 1995) ("conjecture, hypothesis, 'subjective belief, or unsupported speculation' are impermissible bases for expert opinion and must be discarded"); Bonhert, 539 A.2d at 662; Faigman, supra note 55, at 1018-19, 1053 ("when first formulated, no theory can be considered more correct than any other . . . a theory's value depends on its success at having withstood attempts to falsify it.").

In other words, the expert that wishes to be taken as reliable cannot express the basis of his opinion so parsimoniously that the process, or any substantial part of the process, by which she constructed the factual underpinnings of the analysis and performed the analysis is portrayed as a "black box," into which evidence is crammed and from which an opinion as to causation magically appears. See Schubert, 148 F.3d at 32; Key v. Gillette Co., 104 F.R.D. 139, 140 (D. Mass 1985). In short, testimony that requires the Court to trust the expert, rather than setting out a methodology that shows why the Court may agree with the expert, rests on too delicate a basis to credit. For example, a district court set out the following summary of its evaluation of economic, expert testimony in an antitrust case.

"[The Expert's] methodology to determine the existence of a conspiracy is his subjective judgment. His subjective judgments, however, cannot be tested. His opinions about whether high losing bids are signals is based on looking at data and using his 'experience' and 'judgement.' He admits there is no statistical test to determine that a high losing bid is a

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words, the Court cannot place any substantial stock in untested impressions, intuitions, suspicions, beliefs, dreams, extra-sensory perception, speculation or the like.¹⁰⁵

Of course, even if an expert begins from established premises, the method by which the expert progresses from premise to conclusion can affect the opinion's reliability. Accordingly, the Court will consider issues such as an expert's use of logic and empirical techniques. Similarly, the Court will consider whether an expert considered potentially relevant

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signal. His statistical analysis is not impressive."

Harcros Chemicals, 877 F. Supp. at 1529. Accord Faigman, supra note 55 at 1020, 1027 ("The primary value of the scientific method is not that it eliminates a researcher's bias, only that it reveals the bias that does exist.").

¹⁰⁵ Harrison, 708 F.2d at 1027; See also Id. at 1052-53 ("There is no reason to assume that a social science theory not subjected to sufficient empirical test is more accurate than ad hoc theorizing by lay persons. Lay persons, as much as social scientists, theorize about the determinants of human behavior. In order to claim a special role in the legal process, social scientists must demonstrate the greater validity of their theories." (footnotes omitted)). To oversimplify, good social science produces knowledge from the observation of events in a three-step process. First, observations occur. Those observations form the basis of an induced theory. Then the theory is tested. Faigman, supra note 55, at 1018-20. If the theory withstands scrutiny, it rises to the level of knowledge. Until then, is it simply speculation. A failure to reliably establish an underlying, presumed fact, has been "considered critical in determining the lack of validity" of an expert analysis. Delmarva Power & Light, 1974 SEC LEXIS 3628, at *42.

facts and, if so, how. In addition, the Court may consider other facts that an expert's choice of methodology raises, based on factors too numerous to list here.

Issues Related to Inferences Based on Numerical Comparisons That Often Underlie Opinions in Trade Practice Cases

In trade practice cases, an expert's opinion will often rest on numerical discrepancies between two samples, a normative, baseline sample¹⁰⁶ and a sample arising from a party's activity. When this occurs, whether the expert is aware of it or not and whether the opinion rests on formal techniques or not, the witness has entered the field of statistics.¹⁰⁷ When this occurs, the Court will generally concern itself with six issues: (1) the manner in which the baseline sample was compiled, (2) the appropriateness of the baseline sample, (3) the manner in which a party's sample was compiled and quantified, (4) the manner in which the expert compared samples, (5) the results, and (6) whether and how the expert accounts for chance. The finer the numerical discrepancies that are said to

¹⁰⁶ See, e.g., DX-230 at 12-13. By normative, the Court does not mean ideal. Rather, the Court means some measure of actual conditions with which, in the absence of the complained of acts, expected party-specific behavior should correlate.

¹⁰⁷ See Athanasios Papoulis, Probability & Statistics 3-4, 9-12 (1990).

meaningful, the greater the Court's need to scrutinize this process.¹⁰⁸

The reliability of numerical comparisons depends in large part on accuracy.¹⁰⁹ It almost belabors the obvious to point out that accuracy depends on the method of data collection and compilation.¹¹⁰ When an opinion rests on quantitative studies or comparisons, proof that the data were collected and preserved in deliberate, systematic and documented studies that were verified, or are at least verifiable, and that result in specific numbers goes a long way to establishing reliability.¹¹¹ As wondrous as the human brain may be and as well as experience may teach certain things, people tend not to be good calculators (or spread sheets) over time, especially when the calculation is

¹⁰⁸ Anyone who has studied subjects such as mathematics, statistics or accounting, or anyone who has balanced a checkbook or completed income tax forms knows that even formal, deliberate computations may contain errors that substantially affect the final results.

¹⁰⁹ See EEOC v. Sears Roebuck & Co., 839 F.2d 302, 349 (7th Cir. 1988).

¹¹⁰ See Maddy, 737 F. Supp. at 1533 ("Expert opinion testimony must be grounded on reliable data, particularly in establishing causation in product liability and toxic tort actions."); In re Philadelphia Co., File No. 59-88, 1948 WL 818, at *17 (SEC June 1, 1948).

¹¹¹ See O'Connor v. Commonwealth Edison Co., 807 F. Supp. 1376, 1390 (C.D. Ill. 1992) ("An expert's opinion must also be verifiable or it is not expert at all.").

occurring in the back of the mind while other inquiries occupy the forefront.¹¹²

¹¹² Tim Kuran & Cass R. Sunstein, Availability Cascades and Risk Regulation, 51 Stan. L. Rev. 683, 703-707 (1999); Zamir, *supra* note 71, at 268. In Comparative Efficiency of Informal (Subjective, Impressionistic) and Formal (Mechanical, Algorithmic) Prediction Procedures: The Clinical-Statistical Controversy, 2 Psychol. Pub. Pol'y & L 293 (1996), Professors William M. Grove and Paul E. Meehl compared clinical-judgment-based, psychological predictions with mechanical, actuarial-based predictions and found the latter superior. Not only did regression analysis, mechanically applied, perform better than the clinicians' exercise of professional but subjective judgment, the mechanical approach beat clinicians when the clinicians provided the regression weights to be used in the mechanical approach. Grove & Meehan at 316. In other words, a computer applied the clinicians' expressed analytic framework better than they did. *Id.* In describing the clinician's inability to apply their own rules consistently, the authors touched on the mean human brain's accuracy as a calculator.

"The human brain is a relatively inefficient device for noticing, selecting, categorizing, recording, retaining, retrieving, and manipulating information for inferential purposes. Why should we be surprised at this? From a historical viewpoint, the superiority of formal, actuarially based procedures seem obvious, almost trivial. The dazzling achievements of Western post-Galilean science are attributable not to our having better brains than Aristotle or Aquinas, but to the scientific method of accumulating objective knowledge. A very few strict rules (e.g., don't fake data, avoid parallax in reading a dial) but mostly rough 'guidelines' about observing, sampling, recording, calculating, and so forth sufficed to create this amazing social machine for producing valid knowledge. Scientists record observations at the time [they are made] rather than rely on unaided memory. Precise instruments are

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In addition to how comparative statistics were compiled, the Court must concern itself with the question of whether the statistics are susceptible to meaningful comparisons.¹¹³ For

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substituted for the human eye, ear, nose, and fingertips whenever these latter are not reliable. Powerful formalisms (trigonometry, calculus, probability theory, matrix algebra) are used to move from one set of numerical values to another. . . .

Surely we all know that the human brain is poor at weighing and computing. When you check out at a supermarket, you don't eyeball the heap of purchases and say to the clerk, 'well it looks to me as if it's about \$17.00 worth; what do you think?' The clerk adds it up."

Id. at 316. Accord Imwinkelried, supra note 50, at 2285 (describing an experience-based frequency measure as a "crude approximation"); See Tyus, 102 F.2d at 263 ("Social scientists in particular may be able to show that commonly accepted explanations for behavior are, when studied more closely, inaccurate. These results sometimes fly in the face of conventional wisdom."); Faigman, supra note 55, at 1020 ("The testing of theories forms the battlefield of the scientific enterprise, and it is in the trenches that science maintains its principal advantages over common sense.").

¹¹³ See Ezold v. Wolf, Block Schor and Solis-Cohen, 983 F.2d 509, 543 (3rd Cir. 1993); Long v. City of Saginaw, 911 F.2d 1192, 1199 (6th Cir. 1990); Dobbs-Weinstein v. Vanderbilt Univ., 1 F. Supp.2d 783, 797 (M.D. Tenn. 1998) ("Without contextual analysis of the statistics themselves, the statistics' value in creating context in individual cases is substantially undermined.").

As one court succinctly put it, in a toxic tort case, it is necessary not only to rule in a particular possible cause but also to rule out other possible causes. National Bank of Commerce v. Dow Chem. Co., 965 F. Supp. 1490, 1520 (E.D. Ark.

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example, specific markets may differ in the relative number of trading patterns they produce based on the liquidity, relative number of floor traders, dual traders and locals and the concentration of these traders and brokers in the pit. The possible, differing conditions are a constant source of concern and, when the numerical discrepancies are not patently substantial, a source of greater concern.¹¹⁴

When variables other than those the expert relies upon may affect the outcome, the Court considers whether they have been taken into account.¹¹⁵ A failure to do this may not prevent an expert from demonstrating some numerical discrepancy. However,

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1996). After all, comparing an apple with a hubcap may elicit significant differences. However, none of these discrepancies will tell much about the nature of the hubcap compared to other hubcaps or the nature of apple compared to other apples.

¹¹⁴ Carrying the apple analogy further may illustrate the point. When fine distinctions are at issue, claiming a comparison between two apples, without more information may not amount to a prima facie showing of a reliable comparison. This is so because, the finer the distinction, the greater the importance of knowing what type of apples are involved. A ripe "red delicious" apple and a ripe "granny smith" apple would both be ripe apples. However, at the peak of ripeness, they differ in color, size, shape, density and taste. However, differences between them, without considerably more information, say little about how each relates to other apples of the same kind.

¹¹⁵ People Who Care v. Rockford Bd. of Educ., 111 F.3d 528, 537-38 (7th Cir. 1997); Berger v. Iron Workers Reinforced Rodmen Local 201, 843 F.2d 1395, 1420 (D.C. Cir. 1988). See Adams, 2 F. Supp.2d at 1099.

the failure prevents an expert from reliably attributing the discrepancy to any particular cause.¹¹⁶

When opinion rests on numerical discrepancies, the Court also considers whether the expert has accounted for chance.¹¹⁷ Because numerical discrepancies between outcomes that resulted in the record of a case and what is expected to occur under normal circumstances may result from nothing more than random variations around the relevant mean,¹¹⁸ there is always the danger that inferences based on such discrepancies rest on "independent judgment" rather than data.¹¹⁹ Courts, like scientists and social scientists, are so cognizant of this danger that they tend to give weight only to numerical

¹¹⁶ Id. ("The statistics offered by plaintiffs have only eliminated random chance as a possible explanation for the disparities.").

¹¹⁷ Dobbs-Weinstein, 1 F. Supp.2d at 803-04; See Wayne C. Curtis, Statistical Concepts for Attorneys 117-18 (1983).

¹¹⁸ Ottaviani v. SUNY at New Paltz, 875 F.2d 365, 371 (2d Cir. 1989).

¹¹⁹ Faigman, supra note 55, at 1036-37. See Ottaviani, 875 F.2d at 370-71. Cf. Palmer v. Shultz, 815 F.2d 84, 92 (D.C. Cir. 1987) ("The preliminary question for a court, then, is at what point is the disparity in selection rates . . . sufficiently large, or the probability that chance was the cause sufficiently low, for numbers alone to establish a legitimate inference of discrimination."); Zahorik v. Cornell Univ., 729 F.2d 85, 95 (2d Cir. 1984); Dobbs-Weinstein, 1 F. Supp.2d at 803-04.

discrepancies that are statistically significant.¹²⁰ In general, courts look for the application of a two-tailed test¹²¹ of an appropriate null hypothesis at the 0.05 level of significance.¹²² In other words, Courts generally refrain from drawing inferences of causality from discrepancies unless there is no more than a 0.05 probability that the discrepancy resulted from chance.¹²³

¹²⁰ Ottaviani, 875 F.2d at 371; Palmer, 815 F.2d at 92; Dobbs-Weinstein, 1 F. Supp.2d at 803-05.

¹²¹ Palmer, 815 F.2d at 94-96; EEOC v. Federal Reserve Bank of Richmond, 698 F.2d 633, 654-56 (4th Cir. 1983) (observing that a one-tailed test has been described as "data mining"); Manning v. School Bd. of Hillsborough County, No. 58-3554-CIV-T-17, 1998 WL 193453, at *63 (M.D. Fla. Oct. 26, 1998); Dobbs-Weinstein, 1 F. Supp.2d at 806-07 & n.36. See Curtis, supra note 117, at 120-22.

The terms "one-tailed" and "two-tailed" refer to the ends of a normal distribution or "bell-shape curve." Palmer, 815 F.2d at 92. The level of significance refers to the area under the ends (in the case of a two-tailed test) or end (in the case of a one-tailed test). When the distance from the mean is measured in terms of standard deviations, the correspondence between distance from the mean and relative area under the curve is the same for all normal distributions. Id. at 93; Curtis, supra note 117, at 73-76. The difference between a one-tailed and two tailed test is significant. In a two-tailed test at a 0.05 level of significance, a numerical discrepancy must be greater than 1.96 standard deviations to be considered statistically significant while, in a one-tailed test at the same level of significance, the discrepancy need only exceed 1.65 standard deviations. Palmer, 815 F.2d at 94.

¹²² Palmer, 815 F.2d at 96 n.9; Manning, 1998 WL 793453, at *63; Dobbs-Weinstein, 1 F. Supp.2d at 803-05; Faigman, supra note 55, at 1036-37.

¹²³ Ottaviani, 875 F.2d at 371; Sears Roebuck & Co., 839 F.2d at 323 n.20; Palmer, 815 F.2d at 92; Dobbs-Weinstein, 1 F. Supp.2d (continued..)

With these thoughts in mind, the Court now turns to the Division's expert case and the testimony of the Division's witness that relates to causation.¹²⁴

Martha Kozlowski

Of the Division's experts, Martha Kozlowski, offered the most comprehensive testimony in this case. She related specific exhibits to particular allegations of fact and testified in great detail as how the audit trail conformed with a theory of noncompetitive trading. Moreover, she was the only Division expert to venture an opinion as to whether Gorski engaged in noncompetitive trading as alleged in the Complaint.

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at 803-04. In other words, it is the probability of rejecting as false a null hypothesis that is true. Papoulis, supra note 107, at 322. This is referred to as "type-I error." Curtis, supra note 117, at 122-23.

¹²⁴ No one disputes that the circumstances of this case are logically consistent with the existence of noncompetitive trading. Moreover, Kozlowski's experience as an investigator would seem leave her well-suited to demonstrating how the violations could have occurred. Accordingly, the Court will proceed directly to the issues related to her ultimate opinions.

Who She Is and Her Background

Kozlowski is a "senior investigator" with the Division.¹²⁵ She has been an employee of the Division and its predecessor, the Compliance Branch of the Commodity Exchange Authority, for over 28 years.¹²⁶ In that time, she has risen from "staff investigator" to "Chief Regional Investigator" and eventually to "Assistant Branch Chief" of the Market Integrity Section of the Division's Chicago Regional office.¹²⁷ In 1983, Kozlowski was "assigned" to the Division's Washington, D.C. office and her current position.¹²⁸ In her service to the Division, she has conducted and supervised investigations of varying complexity.¹²⁹ She has also testified as an expert in a two other cases, as a "'tutorial' witness" in three cases, and as a fact witness in three cases.¹³⁰

¹²⁵ DX-230 at 3.

¹²⁶ DX-230 at 1.

¹²⁷ DX-230 at 1-2.

¹²⁸ DX-230 at 3.

¹²⁹ DX-230 at 1-2.

¹³⁰ DX-230 at 4.

Kozlowski's investigative work includes the nearly five-year investigation that led to this proceeding.¹³¹ In fact, she was "the person primarily responsible for conducting" it.¹³² In addition to investigating the case, she took part in recommending the issuance of a complaint by the Commission, helped prepare the Division's attorneys for trial and served as a Division representative at a prehearing conference.¹³³ Moreover, Kozlowski consulted with Division counsel throughout the oral hearing in this matter. In short, Kozlowski seems to have been as deeply involved in the prosecution of this case as any other Division employee and, given the turn-over of

¹³¹ DX-230 at 3. ("From May 1989 until early 1994, my primary responsibility was the investigation which led to the filing of this Complaint. . . . During the course of that investigation, I reviewed thousands of trading cards, and interviewed and took testimony of between 50 and 100 traders.").

¹³² Tr. at 92 (Kozlowski). Kozlowski provided the following explanation of her role in this case.

"During the course of that investigation[,] I subpoenaed documents from various individuals, I reviewed documents, I took investigative testimony, I was involved in . . . preparing the recommendation to the Commission that the complaint be filed. And since the complaint was filed, I . . . prepared my testimony and I had assisted counsel in preparing for trial."

Tr. at 92.

¹³³ See supra note 132. Transcript of Prehearing Conference, dated November 20, 1996 ("November 20 Transcript").

attorneys in this case, possibly the Division employee most involved.

Kozlowski graduated from Bowling Green State University in 1970, receiving a Bachelor of Arts in Business Administration.¹³⁴ In January 1990, she "participated" in a three-day class on floor trading at the Chicago Mercantile Exchange.¹³⁵ There is no indication that Kozlowski received any training in mathematics, statistics, econometrics or quantitative sociology.¹³⁶ Similarly, the record does not show that she studied any other courses related to compiling market data, and drawing inferences from the data or testing theories based on the observations of market phenomena or any other social phenomena.¹³⁷ Similarly, it is unclear as to whether her education included any economics or finance studies beyond -- or even at -- a rudimentary level.¹³⁸ Finally, there is no proof that she received any instruction in the implementation of the scientific method (as it relates to

¹³⁴ DX-230 at 1.

¹³⁵ DX-230 at 4.

¹³⁶ See DX-230 at 1-4.

¹³⁷ See DX-230 at 1-4.

¹³⁸ See DX-230 at 1-4. The Court strongly suspects that her business administration major included general, introductory classes in economics and finance but, on the basis of this record, cannot determine whether that is the case.

either science or social science) of proceeding from observation to what would be considered validated knowledge.¹³⁹

A Thumb-Nail Sketch of Kozlowski's Testimony

Kozlowski's analysis begins with the assertion of several facts. She states that certain patterns of trades occur in non-competitive trading and "are unlikely" to occur in competitive trading.¹⁴⁰ From that she reasons that if these trade patterns occur "repeatedly" then the cause was probably noncompetitive trading.¹⁴¹ She also draws a stronger inference that these patterns are not only indicia in a cumulative sense, but indicia of specific noncompetitive trades.¹⁴² Kozlowski buttresses her

¹³⁹ See DX-230 at 1-4.

In addition, she is not a handwriting expert, although she bases part of her opinion on hand writing analysis. Tr. at 188 (Kozlowski).

¹⁴⁰ DX-230 at 12.

¹⁴¹ Kozlowski sidles up to this conclusion. In her direct testimony, she first states that the "repeated[] existence of suspicious trade patterns is "evidence" of noncompetitive trading. DX-230 at 12-13. Later, she calls the patterns "strong evidence" of noncompetitive trading. DX-230 at 13. When pressed on that matter, she admitted that she considered the existence of suspicious patterns to be prima facie proof that the trades comprising those patterns were noncompetitive. Tr. at 272-73.

¹⁴² DX-230 at 13.

pattern-based opinions with inferences that she draws from certain audit trail "irregularities."

The obvious appeal of this testimony is that the factors upon which Kozlowski relies are consistent with her theories and the Division's case.¹⁴³ The obvious problem is that these indicia, individually and in combination, are not inconsistent with competitive trading.¹⁴⁴ In other words, the correctness of Kozlowski's opinions is not obvious. Accordingly, the Court must determine how Kozlowski made her choice. In other words, as discussed above, must scrutinize not only on the reasons she made her choices but also the bases for those reasons.¹⁴⁵

¹⁴³ Indeed, as discussed below, she assigns probity to a number of factors simply because they are not inconsistent with noncompetitive trading.

¹⁴⁴ Both Kozlowski and David Schneiderman testified, by affirmative testimony or negative implication, that competitive trading could produce the audit trail and patterns at issue. Tr. at 56, 235-36, 254; DX-230 at 12-13, 16, 18, 20. See Tr. at 245-46.

¹⁴⁵ The Court would betray the principles of Daubert if it were to determine whether Kozlowski's opinions were reasonable without examining the premises underlying her opinions. A conclusion resulting from geometric logic is no stronger than the premises from which the logic progresses.

Kozlowski's Opinions, as to Causation, Lack General Indicia of Reliability

As noted above, some general indicia of reliability include: (1) general acceptance, (2) proof of accuracy, (3) acceptance after scrutiny, and (4) the imposition of self-limiting standards. All are clearly absent in this case.¹⁴⁶ Kozlowski has not demonstrated that her method is a generally accepted method of drawing reliable inferences from market data. The only people, other than Division experts who subsequently testify, who seem to use similar methods are exchange compliance departments. However, the exchanges seem to use them as an investigative tool.¹⁴⁷ In other words, they use the method to raise substantiated suspicions by satisfying a relatively low standard of proof.¹⁴⁸ There is no evidence in the record indicating that the methods are used outside of Commission and exchange investigations, and Commission trade practice litigation. More to the point, there is no indication that academics, consultants or others who want to understand trading with some standard of reliability close to what this and other

¹⁴⁶ The record does not indicate whether some or all aspects of Kozlowski's opinion-producing methods are testable. Kozlowski and her peers lack any self-doubt because no tests have ever been performed to determine the reliability of their methods.

¹⁴⁷ Tr. at 56 (Schneiderman).

¹⁴⁸ See supra note 90.

courts demand, use such soft, standardless methods in reaching conclusions or testing ideas.¹⁴⁹

Kozlowski has not tested the accuracy of her underlying premises nor the validity of her methods.¹⁵⁰ Moreover, she was unable to point to any such test.¹⁵¹ She takes some comfort in the fact that, in combination with other evidence, the Commission has looked favorably upon the type of testimony that she and other Division "experts" have provided.¹⁵² However, there is no indication in Commission case law, and no other indication brought to the Court's attention, that her methods have been subjected to the Daubert-based analysis that Ashman seems to require.

Finally, Kozlowski's methods lack self-imposed standards or thresholds other than plausibility. She attempts to mask this deficiency by using the vague quasistatistics discussed below. However, these terms are so soft that once the circumstances are not inconsistent with the possibility that her impressions may

¹⁴⁹ There is no doubt that the hypothesis forming process is often soft and intuitive. However, as discussed above, what separates theory from reliable knowledge is testing. That, of course was not done here.

¹⁵⁰ Tr. at 252 (Kozlowski).

¹⁵¹ Tr. at 252 (Kozlowski).

¹⁵² Tr. at 245-46 (Kozlowski).

be correct, there is nothing in her methods that would tell her that she is either incorrect or that she simply does not have enough information to know whether she is incorrect. Thus, as a general matter, Kozlowski's methods give no general assurances of reliability. Closer inspection does nothing to change the picture.

The Factual Premises Underlying Her Analysis of Trading Patterns

As noted above, the linchpin of Kozlowski's analysis is the existence of certain patterns of trading. She begins with the observation that certain patterns of trades "are unlikely to occur" in competitive trading.¹⁵³ On that basis, she reasons that "repeated[]" occurrences of those patterns indicate noncompetitive trading.¹⁵⁴ As these quotes indicate, Kozlowski uses pseudostatistics. They also imply that Kozlowski is unacquainted with empirical methods. This lack of training shows elsewhere in her analysis.

In her direct testimony, she did not quantify the phrase "unlikely to occur" or the difference between "repeatedly" and

¹⁵³ DX-230 at 12.

¹⁵⁴ DX-230 at 12-13.

"unlikely to occur."¹⁵⁵ When questioned from the bench, she took a stab at it and, in doing so, drew a fairly fine distinction.¹⁵⁶ Even if this attempt at quantification was well-meaning and honest,¹⁵⁷ there are reasons to doubt its accuracy beyond the fact that she made no attempt to precisely quantify the relative occurrence of any phenomena in her 215-page declaration.¹⁵⁸

Kozlowski seems to have provided few numbers because she made no measurements that could produce them. She does not appear to have engaged in any deliberate gathering of general market data, she does she seems to have contemporaneously recorded her observations of competitive trading, she does not seem to have ever deliberately counted market phenomena nor does she appear to have ever computed any measurements of central tendency regarding competitive market phenomena. In short, any

¹⁵⁵ See DX-230 at 12-13.

¹⁵⁶ Tr. at 265 (Kozlowski) (testifying that a relative frequency of 0.01 would qualify as occurring "repeatedly").

¹⁵⁷ The Court makes no such findings here.

¹⁵⁸ See DX-230 at 215. The declaration was not only lengthy, it was the result of a fairly deliberate process. Assuming she drafted her direct testimony, Kozlowski went through at least three drafts before the Division submitted it to the Court. Bilello, ¶27,212 at 45,866 n.23 (referring to a "third Kozlowski draft statement"). In the vast majority of her declaration, Kozlowski spared little detail. As a result, if she had made a firm approximation of "unlikely" or "repeatedly," one would expect her to have described the terms more precisely than she did.

knowledge Kozlowski may have gained about competitive trading or trading in general seems as accidental as its basis was undocumented.¹⁵⁹

In addition to overlooking the value of deliberate data gathering, recording and measuring, Kozlowski has little regard for basic problems in comparing the relative frequency of outcomes. First, she seems to have ignored the possibility that markets may differ in ways that influence the number of suspicious patterns.¹⁶⁰ Most notably, she seems to have overlooked the distribution of dual traders. Kozlowski's classic patterns of indirect buckets or facilitation trades depend, by definition, on the existence of dual traders.¹⁶¹ There is no reason to assume that the distribution of dual traders is uniform across markets and within any particular pit. Thus, the market in which one trades and where one stands in the

¹⁵⁹ Of course, when called on to testify, she documented her general impressions. However, there is no documentation of the data -- if any -- that formed those impressions.

¹⁶⁰ Given her extended stay in the Division's Chicago office, there is reason to believe that her only exposure to COMEX trading, and COMEX gold trading in particular, was her involvement in the investigation that led to this and similar cases.

¹⁶¹ It is the dual trader who is in a position to trade against the customer order for his own account. The local does not have customer orders and the floor broker does not trade for his own account.

pit will influence how often suspicious patterns are generated even under perfectly legal conditions.

In addition, Kozlowski seems to have no regard for the potential distribution of outcomes. In other words, she looks for deviations from the norm. However, she seems to ignore the fact that random outcomes tend to be grouped around a mean and many observed outcomes may exceed the mean due to nothing more than chance.¹⁶² In this regard she was unlike her counterparts at the New York Mercantile Exchange.¹⁶³

As discussed above, the reliability of data counting and comparison rests largely on how it is done. In this case, the

¹⁶² This facet of comparing relative frequencies should have been obvious to her and would be obvious to anyone who ever flipped an evenly weighted coin. A simple Court experiment illustrates how chance might affect the outcomes of a fairly uniform activity. The Court flipped an ordinary United States Quarter 60 times. The Court expected that, based on an assumption that the coin was close to being evenly weighted, that the probability the coin coming up heads would be 0.5 and the probability of it coming up tails would also be 0.5. As it turned out, over the 60 flips, each side came up 30 times. However, in the first ten observations, heads came up nine times. Of the last 12 observations, tails was the result 10 times. Looking at the first ten observations or the last 12 observations, but not both, might raise a doubt as to how evenly the coin was weighted. Of course, more observations would seem to dispel much of the doubt. Moreover, observing the discrepancy, without more analysis, would not be an acceptable basis, using valid statistical techniques, of disproving the hypothesis that the actual relative frequencies equaled the Court's prior estimation.

¹⁶³ See Audit Trail Rule Enforcement Review of the Commodity Exchange, Inc., August 25, 1988 ("Audit Trail Review"), at 3.

stated quantitative basis for her testimony seems to rest on nothing more than intuition. In other words, she and her Division co-workers have not proven that the benchmarks she employed are anything more than subjective standards arrived at by a process that was informal, internal and, from the Court's point of view, impenetrable.¹⁶⁴ As a result, the Court cannot say that Kozlowski formed reliable and reliably precise impressions of the relative frequency with which certain patterns occur in competitive trading or trading in general. Likewise, the Court cannot trust that Kozlowski accurately found discrepancies with regard to the trading at issue here or that the discrepancies were of the level of significance that would support meaningful inferences.

¹⁶⁴ If her standards-forming process was more reliable, then this case serves as a lesson on the price of impenetrable descriptions. The Court cannot rule out the possibility that Kozlowski's descriptions of the basis for her opinions, rather than being an accurate and complete portrayal, resulted from a policy decision based on the notion that generalities precluded specific criticisms and, thus, made the opinion more defensible. The problem with such a notion is that, just as inscrutability masks specific flaws, it forces those who decide to credit the opinion, as described, to call on other facts evidenced in the record, find sources of noticeable facts or flout the principles underlying Kumho Tire. Where the record and sources of notable facts fail to bridge reliability gaps, acceptance of such an opinion rests on nothing more than fiat. To make such an arbitrary choice may lead (by chance or otherwise) to disposing of a case correctly in an epistemological sense. However, it would mock fundamental notions of jurisprudence as well as the Administrative Procedure Act.

The Bases for Kozlowski's Audit Trail Irregularity Analysis

Although it seems improbable, Kozlowski's use of certain types of audit trail irregularities rests on a less substantial basis than her pattern-based reasoning. Some of her premises, that certain irregularities indicate the existence of noncompetitive trading, rest on a combination of two factors: (1) her subjective beliefs and (2) the fact that her premises are not inconsistent with a theory of the illegal trading.¹⁶⁵ The importance of others are based on nothing more than agreement with the theory of the case and ipse dixit.¹⁶⁶ Finally, the importance of still other factors rest on their coincidence with the patterns discussed above and other "irregularities."¹⁶⁷

In support of this reasoning, Kozlowski points to no empirical demonstration, no deliberate study and no academic, factual authority for verification. Thus, lacking a reliable basis in fact, Kozlowski can only look to logic for support. Unfortunately, logic does not supply what facts could not. Kozlowski's reasoning, as to the logical basis for assigning importance to audit trail irregularities, can be summarized as

¹⁶⁵ See, e.g., DX-230 at 13-14 (discussing quantity changes).

¹⁶⁶ See, e.g., DX-230 at 20-21.

¹⁶⁷ See, e.g., DX-230 at 17-18.

follows. Noncompetitive trading may, and sometimes does, produce certain audit trail phenomena. Therefore, when the phenomena occur, noncompetitive trading was the likely cause. Similar reasoning, with regard to a lower standard of proof and in a less arcane context, illustrates the illogic of reasoning causation from observations of coincidence.

In State v. Maxfield,¹⁶⁸ an appellate court considered whether a photograph of marijuana provided probable cause to believe that the person who took the photographs had marijuana in his home. The police officer seeking the warrant testified that people who grow marijuana "frequently take pictures of it and store it at home."¹⁶⁹ Because people who grow marijuana photograph it and the defendant photographed marijuana, the police reasoned that there was probable cause to believe that the defendant grew marijuana.¹⁷⁰ The court addressed the practices of simply reversing the terms of observations to create a rationale when it stated, "That sort of reasoning is not merely flawed in an arcane, technical sense; it is at odds

¹⁶⁸ 896 P.2d 581, 582-84 (Or. Ct. App. 1995).

¹⁶⁹ Id. at 584.

¹⁷⁰ Id. This parallels Kozlowski's reasoning that people who engage in noncompetitive trading produce certain patterns and audit trails and, therefore, people who produce certain audit trails and patterns probably engaged in noncompetitive trading.

with common sense."¹⁷¹ Thus, Maxfield held that the photograph did not provide a probable cause basis for issuing a warrant to search for evidence of harvesting marijuana.¹⁷²

Much of Kozlowski's reasoning mirrors the reasoning discussed in Maxfield. It begins with an observation that noncompetitive trading is a cause, but not the only cause, of certain phenomena. It then reverses the terms of the argument to reach a conclusion -- and commit the logical fallacy akin to post hoc ergo propter hoc¹⁷³ -- that, if the phenomena occur, noncompetitive trading is the reason. This rationale is unconvincing for the same reason that the government failed in Maxwell, it is illogical.

However logically and reliably Kozlowski proceeded from her initial premises, the Court cannot find those premises reliably

¹⁷¹ Id.

¹⁷² Id.

¹⁷³ Post hoc ergo propter hoc is a classic logical fallacy of mistaking a sequence of events for a causal chain. The Latin is roughly translated to mean, "after this therefore on account of this." See Gainey v. Folkman, 114 F. Supp. 231, 237 (D. Ariz. 1953). Kozlowski's reasoning resembles this fallacy in the sense that she makes observations about coincidental and sequential occurrences in one context and, from those observations, proceeds directly to conclusions of causation.

That Kozlowski's theories do not follow logically from her observations does not mean they are incorrect. However, where logic fails, factual inquiry must provide the bridge between untested theory and knowledge. That has not occurred here.

formed. They have no basis in academic literature. They have no basis in any other deliberate study. They have no basis in logic. Instead, their only basis appears to be Kozlowski's gut feeling. Ashman's adoption of Daubert's principles requires the Court to consider the reliability of her methods. Kozlowski has not shown her methods to be trustworthy and, instead, the Division asks the Court to simply trust her intuition. The Court cannot follow Kozlowski's leaps of intuition with its own leap of faith. Indeed, even if the Court were to trust Kozlowski's methods at some abstract level, there would be other reasons to doubt them in this case.

Kozlowski's Testimony Appears to Have Been Biased

"I would go into a lawsuit with an objective uncommitted expert about as willingly as I would occupy a foxhole with a couple of noncombatant soldiers."¹⁷⁴

As noted above, bias has a greater potential to effect the testimony of an expert offering an opinion than a fact witness relating observations given the expert's role of interpretation. The more verifiable an expert's methodology, the better the Court can gauge how bias may have affected the resulting

¹⁷⁴ Peter W. Huber, Galileo's Revenge: Junk Science in the Courtroom 18 (paperback ed. 1993) (quoting a former President of the American Bar Association).

opinion. When an expert's methodology is opaque, the Court is unable to determine the effect of bias. Given this ignorance, concrete evidence of bias would prompt the Court, on prudential grounds, to potentially overreact. In this case, Kozlowski's analysis rested, in large part, on facts that are only documented by her unsupported assertion. Moreover, she described her analytic framework only in general (and unsatisfactory) terms. Thus, if there is concrete evidence of bias on her part, the Court will discount her testimony to a greater degree than if her testimony rested on analysis that was explained in detail and rested on well-documented or clearly established facts.

Of course, Kozlowski's status as a Division employee does not disqualify her from testifying in this case. That does not mean, however, that the Court must assume she is either unbiased or no more biased than the average expert witness. There are reasons to doubt that Kozlowski's testimony was unaffected by bias. The first is generic to her status as an expert in the employ of the prosecutor. The second is also circumstantial but not solely a result of her status. Rather it resulted from the manner in which her masters employed her in this case. A third arises not from her status but from her testimony. This evidence of bias does not substantially affect her credibility, as it relates to the ultimate facts, at this point. However,

that is only because her failure to employ reliable methodology rendered her "impeachment proof" on her testimony relating to probable causation.¹⁷⁵

*Kozlowski's Employment Relationship With the Division
and Pervasive Involvement in This Case Are Evidence of
Bias*

As discussed above, a witness's connection to a case is circumstantial evidence of bias. While the Court does not adopt this principle in the evaluation of witnesses, the doctrine of implied bias, and the reasoning upon which it rests, sheds light on the importance of Kozlowski's relationship to this case. One of the issues that courts of law concern themselves with is whether jurors are unbiased. In general, courts use voir dire examination to determine whether a juror is able to weigh evidence and participate in the deliberative process with an open mind.¹⁷⁶ However, they sometimes eschew fact finding in favor of a bright-line rule.

¹⁷⁵ Cf. Brooks v. American Broad. Cos., Inc., 932 F.2d 495, 501 (6th Cir. 1991) (describing a "libel proof" plaintiff as a person "hav[ing] so bad a reputation that they are not entitled to obtain redress for defamatory statements, even if their damages cannot be quantified and they receive only nominal damages").

¹⁷⁶ United States v. Cerrato-Reyes, No. 98-4082, 1999 WL 273427, at *5 (10 Cir. May 5, 1999).

In those "extreme and exceptional" circumstances, where "an average person in the position of the juror would be prejudiced," courts employ the doctrine of implied bias.¹⁷⁷ A finding of implied bias is a conclusive,¹⁷⁸ legal determination, based on an "objective evaluation," that a juror could not help but be biased under the circumstances.¹⁷⁹ Under this doctrine, even if the prospective juror believes he can be impartial and testifies to that fact truthfully and credibly, disqualification of that juror is mandatory.¹⁸⁰

A finding of implied bias rests on a connection between the juror and the parties or circumstances of the case.¹⁸¹ It "may be shown by showing that the juror is an actual employee of the prosecuting agency."¹⁸² Sufficient personal connections would also include participating in the investigation that led to the

¹⁷⁷ Cerrato-Reyes, 1999 WL 273427, at *5; United States v. Gaitan-Acevedo, 148 F.3d 577, 591 n.9 (6th Cir. 1998).

¹⁷⁸ Cerrato-Reyes, 1999 WL 273427, at *5.

¹⁷⁹ Id.

¹⁸⁰ Id.; Skaggs v. Otis Elevator Co., 164 F.3d 511, 517 (10th Cir. 1998). This rule rests on the fact that people are not always aware of biases they may harbor and that, when the danger of bias is extreme, it is better to err on the side of caution.

¹⁸¹ Id.

¹⁸² Cerrato-Reyes, 1999 WL 273427, at *5 (internal quotations omitted); Accord Skaggs, 164 F.3d at 517; Gaitan-Acevedo, 148 F.3d at 591 n.9.

legal proceeding.¹⁸³ It does not take much of an imagination to figure out how courts would react if the juror was both an employee of the prosecutor and took part in the investigation that preceded the case.

In this case, it would be difficult for Kozlowski to have a greater, personal connection to the proceeding. She is an employee of the Commission's prosecutorial arm and party to this case, the Division. She has depended on this prosecutorial office for job retention, professional advancement, pay grade increases, performance bonuses and non-pecuniary recognition of doing her job well. In addition, it is within the Division where her professional reputation is primarily formed and most relevant. Finally, it appears that her professional associations -- indeed her only apparent experience with regard to commodity futures trading -- are primarily with advocates who represent one side of enforcement-related disputes under the Act. Thus, there is reason to believe that she is beholden to a party to this proceeding and that her views would be similar to her supervisors and co-workers, attorneys that no one expects to have an unbiased view of trade practice cases.¹⁸⁴

¹⁸³ Roderick v. State, 705 S.W.2d 433, 438 (Ark. 1986); Lynn v. State, 543 So.2d 704, 706 (Ala. Crim. App. 1987).

¹⁸⁴ See supra note 71.

Kozlowski's connection to this case goes deeper than a decades-long employment relationship. As described above, she was involved in nearly every aspect of this case up to and including the oral hearing. Thus, while her employment with the Division and personal investment of time and prestige do not disqualify her from testifying or preclude a finding that she did so credibly as a per se rule, the Court would be extremely naive to overlook these factors in evaluating Kozlowski's testimony.

Kozlowski's Failure to Account for Facts That the Court Brought to Her Attention and That Undermine One of the Implied Assumptions Upon Which Her Opinions Rest is Strong Evidence of Bias

Expert's who overlook relevant facts lose credibility.¹⁸⁵ Kozlowski is such an expert. In her direct testimony, Kozlowski observes that COMEX rules require members to record times for their trades that are within one minute of the official time for the price that the member assigns to the trade.¹⁸⁶ Based on that observation, she asserts that, when a trader assigns a time to a particular trade that does not match the COMEX price change

¹⁸⁵ See Otis Elevator Co. v. Secretary of Labor, 921 F2d 1285, 1292 (D.C. Cir. 1990); Sheet Metal Workers Local of N.J. Welfare Fund v. Gallagher, Civ. A. No. 87-3020, 1990 WL 304319, at *1 (D.N.J. Jan. 17, 1990) (unpublished op.).

¹⁸⁶ DX-230 at 19.

register ("PCR") give or take one minute, that "offers further evidence that the trades were executed noncompetitively."¹⁸⁷

An implicit assumption must link Kozlowski's observation to her conclusion. After all, rules guide activity. They do not necessarily describe it. Thus, Kozlowski must assume that,

¹⁸⁷ DX-230 at 13. As she generally explained it,

"As discussed on page 10, Comex rules required that members record on their card the time of each trade to the nearest minute. In the 12 trade sequences in Appendix I, there was no print of the price at which the trade was executed during the minute one or both of the traders assigned to the trade, or the trade could not have occurred in the sequence in which the trader recorded the trade on his card because the PCR does not show that same price sequence. For example, if a trader sequentially recorded trades at prices of 387.10, 387.20, 387.00, 387.30, all of which occurred in the same minute, but the PCR shows that in that minute the only time a price of 387.00 was reported was prior to prints of 387.10 and 387.20, that would indicate that the trade that did not match the sequence of reported prices for that minute may have been executed noncompetitively."

DX-230 at 19 (emphasis added). Issues of the accuracy of the PCR aside, Kozlowski assumes that the hypothetical trader accurately assigned the time to his trades since the hypothetical does not address the question of whether prices 387.10 and 387.20 preceded price 387.00 in some other, nearby minute. Moreover, Kozlowski assigned importance to simple disagreements between times reported on the trading cards and either the PCR or the counter party's reported time. See, e.g., DX-230 at 30-31, 40, 127, 130, 132, 134, 135-36, 137-38, 149, 151-52, 169.

under ordinary circumstances, COMEX members cheerfully complied with the one-minute rule independent of any effort on the part of COMEX compliance officials to enforce it.¹⁸⁸ In the alternative, she may have assumed that COMEX enforced an absolute, one-minute standard and, as a result, had virtually eliminated non-compliance with the rule in ordinary and, presumably competitive, trading that occurred during the relevant period. As it turns out, neither assumption would have held given the actual characteristics of COMEX trading.

COMEX had a one-minute rule and evaluated members' compliance with it.¹⁸⁹ However, COMEX did not measure their compliance against a strict, one-minute standard. Instead, the exchange compared members to "the overall performance of all Exchange brokers."¹⁹⁰ In other words, members only had to adhere to the rule about as closely as their peers. Even those members

¹⁸⁸ COMEX required members to record the minute of execution for a transaction on the trading cards. Audit Trail Review at 3; DX-230 at 19. This Division of Trading and Markets report is not an exhibit in the record of this proceeding. However, the Court now takes official notice of the Audit Trail Review and its contents. See 10 C.F.R. §10.67(b)(1). Any party that wishes to establish the nonexistence, inaccuracy or untruthfulness of the Audit Trail Review must notify the Court, in writing, no later than 10 days after the date of this Initial Decision. See Id. Upon notification, the Court will institute appropriate fact-finding procedures.

¹⁸⁹ Audit Trail Review at 5-7.

¹⁹⁰ Id. at 7.

who had above-average deviations, from the PCR or counter-party times, did not automatically attract the attention of COMEX compliance officials.

As mentioned above, COMEX Compliance was looking for deviations from the norm.¹⁹¹ Reflecting an appreciation of probability and random distribution, when looking for deviations from the exchange mean, it only cited those members who were significantly more lackadaisical than their peers.¹⁹² When a member's noncompliance score was more than two standard deviations from the COMEX mean, the compliance department issued a letter of warning.¹⁹³ Three such letters triggered an investigation.¹⁹⁴

Because COMEX policy provided a buffer zone, noncompliance with the one-minute rule occurred on a regular basis. The Division of Trading and Markets evaluated a number of randomly

¹⁹¹ This was the central point of the Division of Trading and Markets' criticism, that COMEX was policing for compliance with the norm and not with its one-minute rule. Id. at 2. The report pointed out the obvious, when traders are evaluated against the average, the compliance program incites them to be average, regardless of how often average is not in compliance with the strict letter of the rule. Id. at 12.

¹⁹² Id. at 7-8.

¹⁹³ Id. at 7-9.

¹⁹⁴ Id.

selected trades over the 1987-1988 time period.¹⁹⁵ Approximately 13 percent of COMEX trades surveyed did not meet the one-minute rule.¹⁹⁶ In certain months, as many as 16 percent did not meet the standard.¹⁹⁷ Moreover, brokers who did not meet the rule's requirements often escaped notice, let alone sanction.¹⁹⁸ In one month for example, floor members who violated the one-minute rule on more than 25 percent of their trades did not deviate from the COMEX norm enough to rate a letter of warning.¹⁹⁹ Indeed, the Division of Trading and Markets analyzed a sample of the trades of a floor member who did not receive a letter of warning. Of the 231 trades examined, the member had recorded times for 34 percent of them that were ten minutes away from the time that the PCR assigned to the recorded price.²⁰⁰ It would

¹⁹⁵ Id. at 11.

¹⁹⁶ Id. at 11.

¹⁹⁷ Id.

¹⁹⁸ Id. at 13.

¹⁹⁹ The report describes one month in particular, October 1987. During that month, 68 brokers failed to meet the one-minute rule with regard to more than 25 percent of their trades. Id. However, the degree of noncompliance, on average, was less than two standard deviations from the COMEX mean. Id. As a result, none of these traders received a warning letter from the COMEX compliance department and October 1987 was not one of the peak months with respect to average noncompliance. Id. at 11, 13.

²⁰⁰ Id. at 13.

seem that, in ordinary trading on the COMEX floor, the one-minute rule was often honored in the breach. Thus, inferences based on occasional noncompliance with the one-minute rule would seem, in the context of COMEX trading during the relevant period, fairly insignificant.

The fact that Kozlowski assumed away relevant market phenomena undermines the Court's confidence in her opinions at two levels. First, Kozlowski's employment of an inaccurate assumption, in the place of observation as to general market phenomena, leaves the Court wondering whether she has employed any other inaccurate or untested assumptions to support her conclusions.²⁰¹ With regard to the particular facts of this case, Kozlowski's failure to account for the documented facts of COMEX trading raise a second, more troubling question.

Kozlowski was aware of the Audit Trail Review. As noted above, the Court convened a prehearing conference in New York on

²⁰¹ For example, when she described the importance of trading at larger than usual volumes, she declared, "Some traders are willing to trade larger quantities when markets become more active because they believe that the more liquid markets will provide them with an opportunity to get out of their positions before they incur large losses." DX-230 at 18. In her analyses, given the possibilities the above observation raised, one would expect her to have considered the market's activity in determining whether a trader's higher-than-usual volume was indicative of noncompetitive trading. Her analyses and opinions, however, as to the noncompetitive nature of the charged trades fail to weigh, or even consider, this exculpatory factor. Id.

November 20, 1996.²⁰² Kozlowski, along with the parties' counsel, attended.²⁰³ During the course of the conference, the Court specifically mentioned the Audit Trail Review, stated one of the report's findings and related the findings to the strength of certain audit trail inferences.²⁰⁴ Thus, Kozlowski became aware, if she was not already, that the report undermined part the factual basis of her analysis.²⁰⁵ Armed with this knowledge Kozlowski apparently did nothing.²⁰⁶

On the basis of this record, the Court cannot determine whether the willful disregard of facts that contradict her analysis indicates a bias arising from her association with the Division, a bias arising from the fact that a decision in favor the Division would vindicate her contributions to the case, or a bias arising from simple pride in her opinion. Regardless of

²⁰² November 20 Transcript.

²⁰³ Id. at 1-2.

²⁰⁴ Id. at 48.

²⁰⁵ Kozlowski had submitted the written declaration that comprised her direct testimony nearly two years before the conference at issue. DX-230 at 216. However, at the oral hearing, she was asked whether the declaration was still her testimony. Tr. at 90. She replied that it remained her testimony and provided no indication that she had considered the matter of the COMEX report. Tr. at 90.

²⁰⁶ She made no effort to disprove or refute it. Similarly, she made no attempt to apply the facts to her analysis and determine what effect they would have had.

the precise nature of the bias, it is a bias that favors the Division in this case and a bias that seems to have affected her analysis. Accordingly, even if Kozlowski's unorthodox methods had not discredited her opinions to the point of insignificance, her bias would have done so substantially.²⁰⁷

For the reasons set out above, the Court finds Kozlowski's opinions on the ultimate issues inherently unreliable.²⁰⁸ Therefore, it accords them no weight standing alone. Unless the Division was able to address the problems in methodology in Kozlowski's testimony, through the presentation of other evidence, it will be left to make its case based on inferences that the Court can draw from the circumstantial record, without the aid of experts, and the direct evidence it presented.

²⁰⁷ There is an alternative inference that is possible, but in the Court's opinion on the basis of the record and the obvious importance of the fact, less likely. It is possible that Kozlowski simply did not understand the relationship between the ordinary levels of compliance with a rule and the market-based inferences she wanted to draw from the fact of noncompliance. If this were the case, then Kozlowski's misstep would implicate her competence rather than her objectivity. Of course, even then, the Court's confidence in the reliability of her opinions would fall to the degree it would have been possible at that point.

²⁰⁸ By "opinions on the ultimate issues," the Court means Kozlowski's opinions on the issue of whether noncompetitive trading was the probable cause of the audit trail evidence and trade pattern evidence in the record.

The Division Provides Insufficient Evidence to Fill the Holes in
Kozlowski's Methodology

Even though the Court finds that Kozlowski's patently untrustworthy methods rendered her results incredible, that does not preclude the possibility that the Division could have rehabilitated them in a sense. In November of 1996, when the Court voiced concerns about the reliability of Kozlowski's methodology, it expressly invited the Division to address them.²⁰⁹ The Division responded to this invitation in two ways. First, it introduced the testimony of several experts.²¹⁰ In

²⁰⁹ November 20 Transcript at 45-57, 64.

²¹⁰ In addition to the witnesses discussed below, the Court heard the testimony of Michael Campanelli ("Campanelli"). DX-233; Tr. at 14 (Campanelli) With regard to trading practices, he based his statements on the COMEX rules and general inferences related to broker concerns rather than his recollected, first-hand observations of the COMEX gold pit. Tr. at 33 (Campanelli). Campanelli did not testify as to the inferential significance of audit trail phenomena or as to the ultimate issues in this case. In addition, he did not testify as to how often, on average, COMEX members complied with the audit trail-related rules in ordinary trading. Instead, his testimony centered on COMEX rules, the trade clearing system, the PCR and the method by which COMEX detected price changes. DX-232; Tr. at 30. His testimony added little to testimony addressed in greater detail, thus the Court will not describe it completely. One interesting point of his testimony involved the accuracy of the PCR.

Campanelli told the Court that the COMEX PCR information primarily came from "reporters." DX-232 at 6; Tr. at 29. His testimony indicated that, during the relevant period, the trader-to-reporter ratio in the COMEX gold futures pit was somewhere between 15 to 1 and 21 to 1. Tr. at 28-29. He testified that the PCR "accurately recorded" "most" price
(continued..)

addition, it introduced data that is related to a number of Gorski's trades that were not alleged to have occurred non-competitively.

Elizabeth Hossa

Elizabeth Hossa ("Hossa") was one the experts that the Division added in response to the Court's invitation. Hossa is a "Futures Trading Specialist" with the Division of Trading and Markets and is an expert with regard to the Commission's Exchange Data Base System ("EDBS").²¹¹ She testified as to how the EDBS data is compiled, stored and used.²¹² In short, her testimony went to the integrity of the data that Kozlowski used to identify suspicious patterns of trades.

(..continued)

changes but not all price changes, even when the market was "in a non-fast . . . situation." Tr. at 34-36, 41, 52. He also testified that the selling traders had an obligation to report prices not reflected on the PCR or erroneously reported prices, but that attempts to insert the changes or record cancellations were sometimes rebuffed. Tr. at 42-44, 50-51. As for the accuracy of the PCR, Mr. Campanelli was short on specifics and was only willing to testify that it was accurate during some majority of the time. See, e.g., Tr. at 32. Which, of course, leaves open the possibility that it was often inaccurate.

²¹¹ DX-234 at 1.

²¹² DX-234 at 2-3.

The Court is unsure why Hossa testified since it never voiced concern over whether the data Kozlowski used to perform her investigation was, in some way corrupted. Instead, the Court questioned whether Kozlowski's analytical methods were sufficiently trustworthy. It is possible that the Division misunderstood the Court's concerns. It is also possible that the Division presented her testimony as an exercise in misdirection. In any event, Hossa's testimony bolsters none of Kozlowski's credibility weaknesses nor does it, under any other evidentiary theory in this proceeding, have substantial probity.

David Schneiderman

The Division also presented the testimony of David Schneiderman ("Schneiderman"). Schneiderman is the Director of the Trade Practice Group in the COMEX Office of Compliance.²¹³ His "responsibilities include supervising investigations of potential COMEX violations."²¹⁴ His testimony often mirrored that of Kozlowski and, while he corroborated some of Kozlowski's testimony, Schneiderman did nothing to bolster the weaknesses of her analysis that directly addresses the ultimate facts. In fact, Schneiderman undermined Kozlowski's testimony.

²¹³ DX-232 at 1.

²¹⁴ Id. at 1.

Like Kozlowski, Schneiderman listed a number of circumstances that "may exist" in "prearranged or noncompetitive trading."²¹⁵ In addition, he explained how certain noncompetitive trades "could" and "may" occur.²¹⁶ However, he did not testify as to what set of circumstances would lead him

²¹⁵ Id. at 2. In addition to listing how indirect, noncompetitive trades create certain patterns, he testified,

"If a member engaged in prearranged trading, one or more of the following may exist: 1) trades are listed in conflicting sequence on the two Members' cards; 2) there are price, quantity, contract month or opposite Member changes with respect to the trades on one or both Members' cards; 3) the trades are written on the same line as another trade on the Member's trading card and were not part of a legitimate spread or cross trade; 4) the trader's position calculation, if he computed one, on his trading card does not include the trade; 5) the Members' clerk did not include the trade in his calculation of the total number of contracts bought and sold; 6) the trade on the Member's card is written in different color ink; 7) the trade on the Member's card is written in different handwriting; 8) the trade was submitted to the Exchange on a different brokerage form than other trades submitted to the Exchange that were listed on the same trading card; 9) there are inconsistencies in the sequencing of times on the branch order ticket, the floor ticket, the Member's trading cards and/or the price change register."

Id. at 2 (emphasis added).

²¹⁶ Id. at 1-3.

to conclude that the trading producing those circumstances was probably noncompetitive.²¹⁷ He also testified that "more than one" of the indicia of noncompetitive trading to which he referred may also occur in competitive trading.²¹⁸ Indeed, he indicated that when "one or more" of his indicia of noncompetitive trading are present, there might be "no reasonable basis to believe that it is noncompetitive."²¹⁹ Moreover, Schneiderman did not offer an opinion as to whether Gorski engaged in noncompetitive trading.²²⁰

The context in which Schneiderman employs techniques similar to Kozlowski illustrates their limited usefulness. He and his employees are not in the business of adjudicating whether noncompetitive trading occurred by a preponderance of the evidence (or any similar standard) nor do they perform scholarly research. Rather, as the COMEX group that issues complaints, they appear to investigate whether there is a "reasonable basis to believe" that noncompetitive trading

²¹⁷ Id. at 2. While Schneiderman testified that certain factors would be probative, he did not say how probative. Tr. at 77-78.

²¹⁸ Tr. at 56.

²¹⁹ Tr. at 56.

²²⁰ See Tr. at 74-79; DX-232 at 1-3.

occurred.²²¹ Thus, it seems that Schneiderman only endorses Kozlowski's methods as an investigation tool rather than a method to reliably make ultimate determinations.

Not only did Schneiderman fail to endorse Kozlowski's methodology as sufficiently reliable or otherwise demonstrate that they were so, he did not provide the factual basis that Kozlowski's testimony lacked. Schneiderman did not quantify how often suspicious patterns occur in competitive trading (in all commodity futures trading, COMEX trading, COMEX mineral trading or COMEX gold trading). He also failed to indicate how often competitive trading produced any of the other suspicious audit trail features. Basically, Schneiderman's testimony has the effect of corroborating Kozlowski's opinion that the circumstantial record does not preclude the possibility of noncompetitive trading. Thus, it adds little to the Division's expert case and provides no support where Kozlowski was weak.

Summary of Non-Charged Trades

Finally, in an effort to show that Kozlowski was not off-base, the Division offered a summary of certain Gorski trading.²²² It compiled statistics for trading that occurred on

²²¹ Tr. at 56

²²² DX-235.

days with regard to which the Commission did not charge Gorski with noncompetitive trading.²²³ These tables purport to tally occurrence of suspicious patterns and audit trail irregularities with respect to Gorski's trading.²²⁴ The Court will discuss the evidence in greater detail below and limit the present discussion as to how the information fills in Kozlowski's analytical gaps.

²²³ As a Division counsel explained,

"As we understood, you had asked us to show that the sort of trading pattern we found was not by chance.

You invited us on redirect -- you had stated in the pre-hearing conference you would allow us to go beyond the scope of cross to discuss, address the concerns that you had regarding the Division's methodology."

Tr. at 382.

²²⁴ They also reveal a curious phenomenon. Kozlowski prepared the table. Tr. at 377-80 (Kozlowski). With regard to certain audit trail irregularities, she became more certain as to their troubling nature as the data became aggregated. For example, based on an examination of Gorski's trading cards for July 25, 1988, Kozlowski claimed to have found two "quantity increases" and one "possible increase." DX-235 at 2Q. When it came time to tally the results in a summary, the "possible increase" became an "quantity increase[]." DX-235 at 2. The same occurred with respect to September 12, 1988, December 2, 1988, May 23, 1989 and other dates. DX-235 at 2N, 2R, 2T, 2V, 2W. There is no explanation as to how possible irregularities became actual irregularities other than the obvious, self-serving effect.

Whatever effect this evidence might have, it does not address the Court's concerns with regard to Kozlowski's method of analysis. Simply stated, DX-235 does not provide information as to how often the irregularities upon which Kozlowski relied occur in competitive futures trading, in general (on the COMEX, in mineral trading or in COMEX gold trading), nor does it indicate what levels of relative frequency of occurrences, beyond the norm, would be sufficient bases for reliable inferences.²²⁵ Finally, the table suggests that Gorski's trading

²²⁵ When the Court said as much, Kozlowski ventured the following reply,

"Just to respond to your concerns about our not having done any empirical studies, it would provide you with some help in trying to put this in some perspective, a problem of trying to do that, aside from the practical, the problem is that I think you are looking for comparisons to a baseline that doesn't exist.

We can take every trade that is executed and we can take -- I mean we have available to us every trade that has been executed for the last ten years.

The problem is you don't know if the trade was executed competitively or non-competitively, so you have nothing to go on."

Tr. at 386-87. Amazing. With respect to the factual foundation upon which her opinions rest, Kozlowski seems to say, "I don't know, no one else knows, therefore it must be unknowable, so don't worry and just trust me." Well, if the Court takes her at her word despite her apparent lack of training in finance,
(continued..)

opposite of Bilello differs from his other trading as a whole. However, it does not indicate whether his trading opposite of Bilello is unique among his trading nor does it indicate whether, on a trader-by-trader basis, Gorski's trading opposite of Bilello significantly exceeded the mean.²²⁶ The data simply does not address the Court's concerns although its presentation may say much about Kozlowski's "expertise" in quantitative analysis.

In sum, the Division has not presented any evidence that could fill in the basic gaps in the Kozlowski's opinion-forming process as it relates to the ultimate questions in this case. Accordingly, the Court cannot conclude that Kozlowski's testimony, unreliable standing alone, can be considered otherwise in light of a more-developed record. Kozlowski's unreliability and the Division's failure to somehow remedy it

(..continued)

statistics, economics and econometrics, the Court would have to conclude that the facts upon which she based the major premises of her opinions are unknowable. If they are unknowable, then Kozlowski's opinions are not ultimately based on knowledge. If her opinions are based on something less than knowledge, they are unworthy of credit. Thus, Kozlowski, in an attempt to bolster her credibility, achieved the opposite result.

²²⁶ This goes back to the concept of variation around a mean. The fact that trading opposite of Bilello exceeds the mean in certain respects does not indicate whether and to what degree it is an outlier. After all, the total, and corresponding mean, reveal little about the distribution.

leave the Division without any credited opinion evidence that reaches the ultimate issues of this proceeding. It also leaves the Court without the guidance of opinion evidence for drawing strong inferences from the data. This, of course, does not end the Court's inquiry. It simply means that the Division's case will depend on whatever permissible inferences the Court can draw from the Division's circumstantial evidence and the relative reliability of the Division's direct evidence testimony.

William Lenox Testified To Admissions But Did So Incredibly

The Division's most direct evidence of noncompetitive trading came from William Lenox ("Lenox"). Lenox is a former "senior trial attorney" with the Division.²²⁷ His duties included investigating and prosecuting trade practice cases, including this case against Gorski.²²⁸ He testified as to what occurred during an April 1993 meeting between himself, Kozlowski, Gorski and Gorski's counsel at the time, Gary D. Stumpp.²²⁹

²²⁷ Tr. at 562 (Lenox).

²²⁸ Tr. at 562, 651 (Lenox). In fact he was once the Division's attorney of record in this proceeding. Tr. at 562 (Lenox).

²²⁹ Tr. at 564-65 (Lenox).

Gorski's counsel initiated the meeting²³⁰ but the Division set most of the ground rules.²³¹ These conditions permitted the Division to use any statement Gorski might have made in subsequently trials.²³² However, as set out below, Division accepted conditions imposed by a third party. This agreement directly undermined the usefulness of any admissions that the Division may have elicited from Gorski.²³³

²³⁰ Tr. at 643 (Lenox).

²³¹ Tr. at 643-44, 653-54 (Lenox). First, the Division promised not to use Gorski's "Queen for a Day" statements in its case-in-chief. DX-236. In isolation, this promise might seem fairly protective. However, it provided cold comfort, at best, because the Division imposed the following, additional conditions.

"Notwithstanding [the promise not to use Gorski's statements in the Division's case-in-chief]: (a) the Division may use information derived directly or indirectly from the April 22, 1993 meeting for the purpose of obtaining leads to other evidence, which evidence may be used in any enforcement proceeding against Gorski by the Commission; (b) the Division may use statements made by Gorski at the April 22, 1993 meeting and all evidence obtained directly or indirectly therefrom for the purpose of cross-examination should Gorski testify, or to rebut any evidence offered by or on behalf of Gorski in connection with the trial of any enforcement proceeding against Gorski."

DX-236.

²³² Id.

²³³ See infra notes 242-43.

Gorski claims that, during the April 22nd meeting, he never admitted to noncompetitive trading.²³⁴ Lenox testified to the contrary.²³⁵ As always, the usefulness of Lenox's testimony will partially turn on a credibility determination. However, given the competing versions, even if Lenox's testimony meets minimal credibility requirements, it will also have to prevail in a comparative assessment.²³⁶

Lenox was either an extremely well-rehearsed witness or he possessed the elquence of a seasoned attorney because, when asked to describe the meeting, he provided the following, uninterrupted narrative.

"Mr. Gorski explained that he did, in fact, trade non-competitively with Mr. Bilello where Mr. Bilello asked him to.

He said that he pretty much would do what Larry asked him to do, because even though he was not technically a local, he was trading on behalf of the firm, that he was essentially trading as a local with

²³⁴ Tr. at 554-55 (Gorski).

²³⁵ Tr. at 567.

²³⁶ As the Court explained in Webster, ¶27,578 at 47,669 n. 46, the burdened party must demonstrate that, on issues where there is competing testimony, its witnesses are the more credible and, in the event that witnesses are deemed equally credible, the tie goes against the burdened party. The Division, of course, bears the burden of proof in this case relating to the claimed violations of the Act and regulations. Thus, when witnesses contradict each other, the Division must demonstrate the witness supporting its case is the more credible.

most of his income coming from the profit and loss and his own individual trades.

Mr. Bilello stood near him and was trading a lot of customer paper and it was important for locals to get along with people, and when asked he would do trades with Bilello.

We then went through a number of trades charged in the complaint.²³⁷ Mr. Gorski had no recollection about any individual trade, but confirmed that several things that we had seen as we went through -- I had brought his original trading cards with me and Ms. Kozlowski had brought Mr. Bilello's original trading cards that she had in Chicago with her.

We went through the audit record of the trades that were in the complaint and Mr. Gorski confirmed that some of the things we had seen as indications of non-competitive trades were, in fact, indications of non-competitive trades.

Quantity changes, scratch outs, trades that were not recorded at all or were recorded as claims in the back of the card or trades that varied from the way he ordinarily would record his trades, such as he usually kept a running log of his position, if the trade was not reflected in the log he agreed that was probably a sign of the trade having been non-competitively.

We went through a number of trades. I recall that one trade we looked at was one where Mr. Gorski had lost \$1,000.

When we went through and looked at all of the trading cards we saw Mr. Bilello's trading card, he had remembered that -- he remembered that particular trade.

He would do those sorts of trades because he thought that Bilello had customers that he had fills

²³⁷ As indicated here and discussed later in his testimony, Lenox testified that he and Kozlowski discussed some, but not all, of the trades that the Division alleges Gorski executed noncompetitively. Tr. at 683.

for and the important thing was that the customer order be filled.

When he realized that, in fact, in this case, there were not two customers involved, my recollection is that he was somewhat angry at Mr. Bilello at that point, that he had cost him \$1,000.

We went on and we basically were evaluating Mr. Gorski's credibility as a witness, which we were -- I was fairly happy with and we left.

The meeting ended that we would get back to our superiors in terms of the evaluation of the meeting, but that everyone thought at that point that we would probably settle the case and Mr. Gorski would appear as a witness for the Division.²³⁸

If this had been Lenox's only testimony on the matter, the Court would not have had too much difficulty in finding him credible. However, as is often the case, his testimony suffered on cross-examination. Much of this seems to have resulted from the circumstances of the "Queen for a Day" meeting and the passage of time.

Over five years passed between the meeting and Lenox's testimony as to what transpired. Under any circumstances, documents that reflected the admissions that Lenox testified to would have been important evidence against Gorski. Such documents, if reliable and corroborative, almost certainly would have made the Division's case. Even if there was no verbatim

²³⁸ Tr. at 566-69.

record of the interview, the passage of the years would have made other documents useful, such as contemporaneous notes, unless Lenox possessed extraordinary powers of recollection.²³⁹ Despite the virtues of documenting the meeting and the Division's awareness that trade practice cases regularly languish for years before they come to oral hearing,²⁴⁰ Lenox made no effort to record Gorski's statements or document his own impressions.²⁴¹ This was a conscious choice.

Prior to the April 22nd meeting, the Division entered into an agreement with the Department of Justice. As part of that agreement, the Division promised to refrain from documenting Gorski's statements, made during the "Queen for a Day" meeting, in any fashion.²⁴² Neither Lenox nor any current Division

²³⁹ See Brecht v. Abrahamson, 507 U.S. 619, 637 (1993); United States v. Marion, 404 U.S. 307, 321 (1971) ("Passage of time, whether before or after an arrest, may impair memories . . .").

²⁴⁰ When asked if it "would have been usual . . . for [an enforcement] case to take five or six years from initiation to the point where it was tried," Lenox replied, "[t]hat would not have been out of the range of enforcement proceedings." Tr. at 710.

²⁴¹ Tr. at 656 (Lenox).

²⁴² In a fit of spontaneous testimony, a Division counsel of record explained,

"If I may, at that period of time the Division of Enforcement was involved in a

(continued..)

representative explained the agreement's purpose. Thus, like the Division,²⁴³ the Court is left to speculate. It seems clear that this agreement was intended to make it more difficult for the Division to prove what occurred during the meeting.²⁴⁴ However, the Court cannot determine whether this effect was the end, in and of itself, or whether it was the means to some other end. In either case, the agreement had its intended and inevitable effect.

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joint investigation with the US Attorney's office in the Southern District of New York.

At the result of the US Attorney's office there were meetings where notes were not taken.

This investigation did not include anything about Mr. Bilello or Mr. Gorski, I might add."

Tr. at 655. A short time later, a second Division counsel of record added, "This was at the request of the US Attorney's office, and I presume that their reasons -- I can only speculate on their reasons." Tr. at 656.

²⁴³ See supra note 242.

²⁴⁴ It accomplished this in two ways. First, it precluded the Division from creating recorded statements. As a result, the Division could prove the existence of inculpatory statements by testimony only. In addition, as described below, the inability to document what occurred denied the Division witnesses tools with which to most accurately refresh their recollections of what occurred during the meeting.

The testimony of events may become distorted²⁴⁵ at each of the processes that lead from observation to testimony: perception (or acquisition), storage of information and recitation of stored information.²⁴⁶ During the retention phase, distortions may result from "the natural decay of memory over time" as well as "the transmutation of memory due to suggestion from external sources."²⁴⁷ In this case, time decay has unquestionably affected Lenox's memory and an external source may have also had an effect.

Lenox, as set out above, claims to remember some of what transpired during the meeting. However, he has also admits to

²⁴⁵ Questions of philosophy aside and for purposes of this discussion, distortion means a divergence between the event as it actually occurred and the event as described in subsequent testimony.

²⁴⁶ Stephan Landsman, Reforming Adversary Procedure: A Proposal Concerning the Psychology of Memory and the Testimony of Disinterested Witnesses, 45 U. Pitt. L. Rev. 547, 550 (1984).

²⁴⁷ Id. at 551. As two commentators explained,

"[T]he use of a writing to refresh recollection can . . . pose a danger to important policy interests. The power of suggestion embodied in a writing can create a false memory. The witness may be unable to distinguish such a false memory from that based on actual perceptions. When this occurs, refreshing recollection undermines, rather than promotes, accurate factfinding."

Charles Alan Wright & Victor James Gold, Federal Practice and Procedure §6182 (1993) (footnotes omitted).

memory lapses. For example, Gorski's counsel engaged Lenox in the following colloquy related to settlement discussions.

Counsel: "My question is did you discuss with specificity the length of the registration ban that you were talking about with respect to Mr. Gorski."²⁴⁸

Lenox: "I don't recall."

Counsel: "Do you recall whether there were discussions with specificity about the monetary fine Gorski would face?"²⁴⁹

.....

Lenox: "My recollection, and I don't have a specific recollection with specificity, that your questions are -- my recollection is that in Mr. Gorski's situation we are not talking about a particular amount of dollars but that we are talking that these sorts of restrictions that have applied to cooperating witnesses.

I don't recall the details."

Counsel: "You do not recall whether there was a monetary range that was discussed?"

Lenox: "No."

Counsel: You do not recall whether there was a range with respect to the floor broker ban?"

²⁴⁸ The Court notes that this question goes to whether a subject came up in the meeting not on how it was resolved or any details relating to that resolution.

²⁴⁹ This was followed by a Division attempt to shield Lenox from the question by objection. Tr. at 666. The Court overruled the objection. Tr. at 666.

Lenox: "I recall that we certainly discussed the kind of sanctions, I don't recall now what the range was."

Counsel: "I asked you about any 'Queen for a Day' meeting you would say [civil monetary penalties, floor broker bans and personal trading restrictions] are the three [types of sanctions] that you discussed and you can't remember any ranges, is that correct?"

Lenox: ". . . I don't recall today what the ranges were" ²⁵⁰

As it turns out, there was much Lenox did not recall from 1993. For example, he did not recall if the meeting was set up during one telephone call or a number of telephone calls.²⁵¹ He did not recall the name of another case in which he conducted a "Queen for a Day" meeting at about the same time.²⁵² Other facts have slipped from Lenox's memory as well.²⁵³ Not only has Lenox's recollection of the meeting's communications eroded, his ability to meaningfully interpret them has declined.²⁵⁴

²⁵⁰ Tr. at 666-67.

²⁵¹ Tr. at 644.

²⁵² Tr. at 644-45, 658. The best Lenox could do was describe it as a case that "involved a money pass." Tr. at 645. He then stated that his failure to remember more resulted from the passage of time. Tr. at 645-46.

²⁵³ See, e.g., Tr. at 648 ("I would have to think back . . . I'm not sure."); Tr. at 652, 662-63.

²⁵⁴ Lenox testified, "I am saying that my familiarity with trading was greater five years ago when I was involved in trade
(continued..)

Although Lenox's testimony was generally short on details, he did venture an account of one particular set of trades. As quoted above, Lenox described a sequence in which, based on an examination of trading cards, Gorski traded opposite of Bilello twice.²⁵⁵ In what would appear to have been an alleged indirect bucket or facilitation trade,²⁵⁶ Lenox claims that Bilello executed one transaction on behalf of a customer and one on his own account, and that Gorski lost \$1,000. He further testified that Gorski recalled the trades and, prior to examining Bilello's trading cards, believed that Bilello had not traded for his own account with respect to either of those trades and that the new discovery angered Gorski.²⁵⁷

This testimony sounds plausible and adds an emotional element. There is just one problem. Lenox's testimony indicates that the meeting covered only trades that the

(..continued)

practice cases and litigating trade practice cases than it is today." Tr. at 675. See Tr. at 679.

²⁵⁵ Tr. at 568.

²⁵⁶ Tr. at 568. It could not have been the alleged money pass attributed to trade sequence 34 since Bilello did not trade on behalf of a customer in that sequence. See DX-230 at 106-07. Similarly, trading on behalf of a customer would seem to play no role in a money pass.

²⁵⁷ Tr. at 568.

Complaint alleged to have occurred non-competitively²⁵⁸ and it does not charge Gorski with executing an indirect bucket or facilitation trade, for which Gorski's and Bilello's trading cards are available,²⁵⁹ in which Gorski suffered a \$1,000 loss. Thus, in one of the few times Lenox tried to testify as to a detail of the meeting's discussion, the documentary record contradicts him and, as a result, his credibility suffers.²⁶⁰

Lenox's admitted lack of recollection is as troubling as it is natural and his failed attempt to provide details more so. However, his efforts to refresh his memory raise credibility questions as well. As discussed above, Lenox could not rely on documents that reflect Gorski's actual statements. Thus, on at least two occasions, he referred to the Complaint, his notes

²⁵⁸ Tr. at 566, 682-83.

²⁵⁹ Lenox claims, quite naturally, that they learned of the accounts for which Bilello was trading by examining Bilello's cards. Tr. at 568.

²⁶⁰ As the Court has explained in earlier cases, a credibility inquiry is, in large part a search for consistency. The Court looks for consistency or its absence. To be more exact, the Court considers the internal consistency of a witness' testimony, the consistency of the testimony with earlier statements and the consistency of the testimony with those portions of the record that seem reliable. Udiskey v. Commodity Resource Corp., [Current Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶27,599 at 47,848 n.68 (CFTC Apr. 2, 1999). Inconsistencies, when not adequately explained, go to the witness' capacity to testify accurately or the truthfulness of the testimony. See United States v. Wong, 78 F.3d 73, (2d Cir. 1996).

"prepared prior to the 'Queen for a Day' meeting" and Gorski's testimony in an investigation-stage deposition in an attempt to "put [himself] back into the posture of April of 1993."²⁶¹ This practice raises the concrete possibility that, when he used

²⁶¹ Tr. at 646 (Lenox). The following colloquy illustrates Lenox's efforts to refresh his recollection.

Counsel: "Each of the times that you anticipated that you might testify, did you review [the Complaint, pre-meeting notes and Gorski's investigation deposition]?"

Lenox: "It seemed prudent to put myself back into the posture of April 1993."

Counsel: "Did those documents relate, in any way, to the substance of the meeting of April 22, 1993?"

Lenox: "My notes certainly did. They were my work product in preparation for the meeting.

My notes were based -- my preparation for the meeting was based in large part on going back and reviewing what Mr. Gorski said during the deposition.

So, when I saw the notes that I was looking at I went back to the deposition to see if that jogged any important recollection of what we did, whether we were discussing a particular trade."

Counsel: "You could have or maybe did use the complaint for the same purpose, is that correct?"

Lenox: "Yes."

Tr. at 650.

allegations, suspicions and, possibly, aspirations -- set out in his pre-meeting notes and the Complaint -- to refresh his memory, the resulting memory was augmented by allegations of facts that may simply not exist.²⁶²

Despite the lack of notes or other records as to what occurred -- as opposed to what he had expected or hoped would occur -- Lenox pronounced his recollection of the meeting to be "quite strong."²⁶³ Indeed, he was so sure of his grasp of the five-year-old events that he questioned whether contemporaneously recorded notes could have improved his recollection.²⁶⁴ This testimony was soon tested and that test revealed Lenox's lack of candor.²⁶⁵

²⁶² See supra note 247.

²⁶³ Tr. at 656.

²⁶⁴ Gorski's counsel asked, "Do you think that your recollection of what transpired at that meeting would be better or worse if you had notes to look back to?" Tr. at 656. Lenox replied, "My recollection of that meeting is quite strong. Whether notes would help me, I can't say." Tr. at 656-57.

²⁶⁵ The Court recognizes that Lenox's inconsistent statements, detailed below, may have resulted from something other than an attempt to mislead the Court on an issue directly related to his credibility. However, the Court is unaware of an explanation that is inherently more plausible. In addition, it is generally the Division's job to prove that inconsistencies in its witness' testimony have innocent, non-impeaching explanations. As the Court noted in a recent reparations case, the burden of proof extends to the issues of witness credibility. Webster, ¶27,578 at 47,669 n.46.

Gorski's counsel pressed Lenox on facts relating to the meeting and other events that occurred at the same time.²⁶⁶ Lenox faired poorly.²⁶⁷ This prompted Gorski's counsel to revisit Lenox's earlier estimate of his recollection. He asked, "If you had notes of this meeting and if there were a range of penalties that were discussed, you would be able to refresh your recollection and see what the penalties were, isn't that correct?"²⁶⁸ Lenox, given his admitted failures of memory, was boxed in and answered, "Yes."²⁶⁹ By providing this answer, Lenox admitted to, having already revealed, the falsity of his earlier statement. This was not Lenox's only instance of inconsistent testimony,²⁷⁰ just the most damning.

²⁶⁶ Tr. at 662-68.

²⁶⁷ Tr. at 662-68.

²⁶⁸ Tr. at 668.

²⁶⁹ Tr. at 668.

²⁷⁰ See infra note 272. Lenox's initial, inflated opinion of memory was not the only instance in which he testified as to knowledge and, when pressed, backed off. Gorski's counsel brought up the subject of seeking the fill of a "missed" order in the form of a hypothetical and asked him, "Mr. Bilello says 10 at 295.70 on a miss, do you know what that means?" Tr. at 678. Lenox answered "I think so." Tr. at 678. Counsel replied, "What do you think it means?" Tr. at 678. Lenox said, "That he -- well, all right. Then I change my answer and say no." Tr. at 678.

Although Lenox's testimony is subject to dispute, if he is not sufficiently credible, there is no need to engage in a comparative assessment.²⁷¹ As discussed above, Lenox had a poor grasp of the five-year-old events even if he were believed and there was reason not to believe him. He refreshed his memory in a way that may have created false yet believed memories, he tried to mislead the Court as to his capacity as a witness, he was evasive²⁷² and, finally, his demeanor on cross-examination

²⁷¹ Santana v. United States, 572 F.2d 331, 335 (1st Cir. 1977) ("Normally [the trial judge] is not compelled to accept a plaintiff's testimony even if uncontradicted. The plaintiff has the burden of proof and the judge may find that the testimony does not carry that burden.").

²⁷² Having elicited testimony that indicated the Division's awareness that years can pass between the occurrence of a "Queen for a Day" meeting and a subsequent hearing and in an effort to highlight the issue of Lenox's memory, Gorski's counsel asked, "wouldn't it have made particular sense, in holding meetings which you knew might result in testimony, to take notes or otherwise memorialize those meetings?" Tr. at 710. The obvious answer, especially to an attorney, is "Yes." Lenox tried to side step the answer by answering, "I was -- I think we have covered this. I was following Commission policy to take no notes." Tr. at 710. Finding this answer non-responsive -- and correctly so -- Gorski's counsel followed up with another no-brainer of a question. He asked, "As you sit here today, not governed by Commission policy, wouldn't it have made sense to have taken notes or otherwise memorialized that testimony?" Tr. at 710. Lenox replied, "I am not prepared to say." Tr. at 710. A Division objection cut off the questioning. Tr. at 710-11. However, it was revealing as far as it went. The responsive answers to the questions were obvious and beyond reasonable question by a seasoned attorney with trial experience. In short, the Court finds his responses evasive.

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only served to undermine his credibility further. Thus, even if the Court assumes there is no contrary testimony, Lenox does not satisfy minimal credibility requirements. For that reason, the Court need not perform a comparative assessment to conclude that Lenox's testimony deserves no weight. Given the failure of the Division to present reliable expert opinion on the ultimate facts, present reliable opinion as to the strength of certain

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The Court notes that the Division objected to the follow-up question, quoted above, and the Court sustained the objection. Tr. at 710-11. However, Lenox answered the question before the Court stated its ruling and the Division did not move to have the question and/or answer stricken from the record. Accordingly, both remain in evidence. State v. Barton, 441 S.E.2d 295, 301-02 (N.C. 1994); Oakes v. Peter Pan Bakers, Inc., 138 N.W.2d 93, 97 (Iowa 1965); 75 Am. Jur. Trial §471 (1991) ("An answer of a witness to an improper question, even where an objection to the question is sustained immediately after the witness answers, remains in the record unless the objection is followed by a motion to strike").

Lenox's testimony was inconsistent in other areas. See, e.g., Tr. at 665-66. For example, Gorski's counsel asked whether the Division "never discussed settlement terms at a 'Queen for a Day' meeting." Tr. at 663. Lenox created the impression that it never occurred by replying, "That is not the purpose of the 'Queen for a Day' meeting." Tr. at 663. At this point, given this answer and a previous answer, it appeared that settlement terms did never come up at these meetings. However, Gorski's counsel new better, pressed the issue and elicited testimony that Lenox discussed settlement terms with Gorski. Tr. at 663-64. Basically, Lenox's professional training and experience has apparently left him with a sense of where his testimony was strong and where it was vulnerable and he did his level best to avoid providing answers that undermined his story and the Division's case.

inferences and present reliable direct evidence, this case will turn on the circumstantial evidence and the inferences it supports.

The Circumstantial Evidence

It comes as no great surprise that the outcome of this proceeding might turn on the circumstantial evidence, alone. In trade practice cases, when illegal trading actually occurred, the existence of direct evidence often depends on a wrong-doer's confession and, in cases where there is no actual illegal conduct, there is no such evidence. As a result, "direct evidence of noncompetitive trading is rarely available."²⁷³ The Division has relied heavily on the circumstantial evidence in the past²⁷⁴ and such evidence, alone, may be sufficient to make its case here.²⁷⁵ Indeed, this Court has drawn strong inferences related to noncompetitive trading when presented with sufficiently robust circumstances.²⁷⁶ However, in evaluating proven circumstances, the Court must be careful to avoid

²⁷³ Elliott, ¶27,243 at 46,004.

²⁷⁴ See, e.g., Id.

²⁷⁵ Buckwalter, ¶24,995 at 37,684 n.34.

²⁷⁶ Bilello, ¶26,927 at 44,504.

crossing the line between drawing on any "expert knowledge" it might have accumulated (and that of agency experts with whom it confers) and resorting to "hypothetical conjectures."²⁷⁷

The circumstances in this case are suspicious. This is because they are consistent with the Division's theory of the case regarding Gorski and, to some degree, consistent with prior cases in which the Commission has found liability. However, the circumstantial evidence is also consistent with theories under which Gorski was not a knowing participant in noncompetitive trading. Accordingly, the Court must determine what inferences it can draw and the strength of those inferences.

Before proceeding further, three observations merit discussion. The first relates to the task at hand, generally. The second and third go to the Court's ability to perform the it. As noted above, reliable circumstantial evidence may be a sufficient basis for finding that illegal trading occurred. The trick is in "the identification of the dividing line between circumstantial evidence that is a reliable basis for factual inferences . . . and circumstantial evidence that is [too] ambiguous . . . [to be] a reliable basis for such inferences."²⁷⁸

²⁷⁷ NLRB v. Milk Drivers & Dairy Employees, Local 338, 531 F.2d 1162, 1165 (2d Cir. 1976).

²⁷⁸ Buckwalter, ¶24,995 at 37,684.

Not only is this task sometimes difficult,²⁷⁹ the result may impose market inefficiencies.²⁸⁰ Thus, the Commission has instructed that the inference-drawing process should be performed in a manner that strikes a balance between the "desire to identify and sanction traders who knowingly participate in illegal trade practice[s]" and an "appropriate concern for the effect . . . linedrawing may have on legitimate trading activity."²⁸¹

In trying to strike this balance, Court must consider its level of expertise in trade practice matters and the role of "common sense" in the inferential process here. One of the rationales for administrative agencies, and the compromise of the separation of functions doctrine that administrative adjudication necessarily entails, is the ability of an administrative tribunal to bring specialized knowledge to bear

²⁷⁹ Id.

²⁸⁰ As the Commission stated, "[w]e recognize that the lines we draw in the trade practice area could easily chill legitimate economic behavior that supports the risk shifting and price discovery function of the markets we seek to protect." Id.

²⁸¹ Id. (citing Matsushita Elec. Industrial Co. v. Zenith Radio Corp., 475 U.S. 574, 594 (1986); Monsanto Co. v. Spray-Rite Serv. Corp., 465 U.S. 752, 762-64 (1984)).

in the decision making process.²⁸² Expertise, however, does not come with a title. It comes from learning. This learning may occur from extralegal training or from experience related to presiding over cases.²⁸³ Thus, the ability of the Court to apply any unique "expertise" in fact finding depends, in large part, on the cases that have come before the Court in the past, what was demonstrated in those cases, how it was demonstrated and how powerfully it was demonstrated.²⁸⁴

²⁸² Harold H. Bruff, Specialized Courts in Administrative Law 43 Admin. L. Rev. 329, 330 (1991); Roomkin & Abrams, supra note 62 at 1446.

²⁸³ Id. at 330.

²⁸⁴ As a pair of commentators put it, in discussing the National Labor Relations Board's ability to make behavioral generalizations,

"The Board can legitimately base its behavioral premises on common sense, [Radio Officers' Union v. NLRB, 324 U.S. 793, 804 (1945),] as long as it does not draw 'hypothetical conjectures remote from the realities of industrial experience.' [NLRB v. Local 50, American Bakery & Confectionery Workers, 339 F.2d 324, 329 (2d Cir. 1964), cert. denied, 382 U.S. 827 (1965).] However, with this administrative freedom comes an obligation on the part of the Board to support the behavioral underpinnings of national labor policy with the best evidentiary base available."

Roomkin & Abrams, supra note 62 at 1446.

This Court lacks substantial experience in adjudicating the merits of trade practice cases. Thus, the probability of the existence of certain, causal relationships²⁸⁵ have not been demonstrated before the Court. In addition, the Division has pointed to no extra legal source of knowledge for the Court to draw upon nor has the Court found one. Only the case law of other tribunals provides guidance. However, that guidance is fact-specific and often provided in summary form. Moreover, there is no indication that the relationships, upon which the necessary inferences would have to be established, were ever demonstrated, rather than merely asserted, in any meaningful sense.²⁸⁶ Thus, in considering which inferences to draw, the Court may have little more to go on than common sense.

²⁸⁵ By causal relationships, the Court means the relationship between certain trading outcomes and audit trail features, and competitive or noncompetitive trading.

²⁸⁶ Kozlowski's opinion rests on the same inferences that the Division would have the Court draw from the circumstantial record. Kozlowski was not able to point to any outside source, other than judicial findings, in support of those inferences. Tr. at 252, 386-87. This, of course, is not the level of verification to which the Court would accord the greatest weight. Cf. Perry, 755 F.2d at 892; Posner, supra note 77, at 210 stating that "the tendency of litigated cases to turn on difficult factual questions, when combined with the difficulties that fact finders, especially in the American legal system, have in answering such questions, may make judicial opinions a mine of misinformation [E]specially in cases where there is no published dissent, judicial opinions exemplify 'winners' history.'"

Common sense has its place in adjudications and reasonably efficient fact finding would be impossible without it. However, common sense should not be applied without an appreciation of its limits.²⁸⁷ Advances in science and the social sciences have repeatedly demonstrated the inaccuracy of common sense.²⁸⁸ In

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Whenever a case is litigated to this point, the Court must make certain determinations. This necessity invites the gut-level assumption that, if the Court is required to reach a conclusion, then it must somehow be able to resolve the issue either way on the basis of knowledge as currently developed. This is the siren's song. That view indulges pride but overlooks logic. There is nothing in the proposition that the Court must resolve issues that is inconsistent with the conclusion that, as to certain circumstances, knowledge may not have progressed to the point that issues can actually resolved in favor of parties on both sides. When a party simply cannot prove an essential fact, the law accounts for this through the burden of proof. When a fact must be proved but proof is currently impossible, the burden of proof resolves the issue. Burnet v. Houston, 283 U.S. 223, 228 (1931); Coca-Cola Bottling Co. v. Wood, 123 S.W.2d 514, 516 (Ark. 1939) ("The verdict was possible only by permitting surmise and conjecture to supply facts incapable of proof. This was error."); Posner, supra note 77, at 204. This does not mean that fact-finding procedures cruelly raise a party's hopes or waste resources when the state of the art is insufficient. Rather, procedures can be adopted with an eye to the development of knowledge and their availability can incite the knowledge-gathering efforts necessary to succeed in those procedures.

²⁸⁷ See Richardson, 857 F.2d at 833.

²⁸⁸ See United States v. Hall, 165 F.3d 1095, 1118 (7th Cir. 1999) (Easterbrook, J., concurring) ("Properly conducted social science research often shows that commonly held beliefs are in error. . . . A major conclusion of the social sciences is that many beliefs based on personal experience are mistaken.").

other words, common sense, when applied to uncommon situations, may be nonsense.²⁸⁹ Even when there is some form of specialized

²⁸⁹ Gambrell v. Burleson, 165 S.E.2d 622, 626 (S.C. 1969) ("[A] layman of average intelligence, from his own knowledge and experience, could have no well-grounded knowledge that the collision aggravated the preexisting cancer."). See Patricia M. Wald, The Rhetoric or Results and the Results of Rhetoric: Judicial Writings, 62 U. Chi. L. Rev. 1371, 1390 n.33 (1995); Judith Shklar, Comment, Giving Injustice Its Due, 83 Yale L.J. 1135, 1141 (1989).

A historical example might illustrate the power of "common sense" to mislead. Throughout much of this century, litigants sought compensation when they received a traumatic injury and subsequently developed cancer in the area of the injury, based on the theory that the trauma caused or aggravated the cancer. See, e.g., Valente v. Bourne Mills, 75 A.2d 191, 192-93 (R.I. 1950); Emma v. A.D. Juilliard & Co., 63 A.2d 786, 789 (R.I. 1949); Gaetz v. City of Melrose, 193 N.W. 691, 692 (Minn. 1923); Canon Reliance Coal Co. v. Industrial Comm'n of Colo., 211 P.2d 868, 869 (Colo. 1923). Plaintiffs presented experts who testified that the trauma was or could have been the cause and defendants presented experts who testified that it had not been proven that trauma causes cancer. Emma, 63 A.2d at 789; Gaetz, 193 N.W. at 692. Courts deemed the medical opinions to be "theories" and recognized that "[c]ancer is as yet a comparatively unknown disease" and that medical knowledge had not yet reached the point of confirming or rejecting the theory. White v. Valley Land Co., 322 P.2d 707, 710-11 (N.M. 1958); Winchester Milling Corp. v. Sencindiver, 138 S.E.2d 479, 480-81 (Va. 1927); Canon Reliance Coal, 211 P.2d at 869 ("The testimony may be unreliable. The whole subject is shrouded more or less in mystery, and . . . the true cause of such a cancer may tomorrow be established as entirely separate and apart from such an inquiry.").

Given the division of opinion and lack of scientific proof, the courts relied, in large part, on the "common sense" inference that when a healthy person receives a traumatic injury and, shortly thereafter, the person discovers that they have cancer, the injury caused or aggravated the cancer and took comfort from case law that reached the same conclusion. White, 322 P.2d at 711; Sencindiver, 138 S.E.2d at 481; Austin v. Red
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Wing Sewer Pipe Co., 204 N.W. 323 (Minn. 1925). Cf. Gaetz, 193 N.W. at 692. They sometimes went so far to state that, applying a "common sense" approach, "[t]he lay mind . . . can reach no other conclusion than . . . the cancer was either caused by the injury or was aggravated by it." Sencindiver, 138 S.E. at 481. Accord Valente, 75 A.2d at 194. Other courts, when reviewing this reliance, simply found the conclusions justified under deferential standards of review and lower-than-scientific standards of proof. See, e.g., National Dairy Prods. Corp. v. Durham, 154 S.E.2d 751, 753 (Ga. App. 1967); Emma, 63 A.2d at 789. Thus, despite a consensus that the medical community lacked knowledge of a causal connection and despite the fact that cancer's etiology and the cellular-level workings of the body rested outside of common experience, courts applied common sense, but not logic, to infer that coincidence indicated probable causation. White, 322 P.2d at 711; Sencindiver, 138 S.E.2d at 481.

Not all courts went down this path. The Mississippi Supreme Court summarized the problem with the above reasoning when it wrote,

"Taking the medical testimony in this case in the strongest light in which it could be reasonably interpreted on behalf of the plaintiff, this testimony is that as a possibility a skin cancer could be caused by an injury such as here happened, but as a probability the physicians were in agreement that there was or is no such a probability.

And the medical testimony is conclusive on both judge and jury in this case. That testimony is undisputed that after long and anxious years of research the exact cause of cancer remains unknown -- there is no dependably known origin to which it can definitely traced or ascribed. If, then, the cause be unknown to all those who have devoted their lives to a study of the subject, it is wholly beyond the range of the common experience and observation of judges and jurors, and in such a case

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medical testimony when undisputed, as here, must be accepted and acted upon in the same manner as is other undisputed evidence; otherwise the jury would be allowed to resort to and act upon nothing else than the proposition post hoc ergo propter hoc, which, as already mentioned, this Court has long ago rejected as unsound, whether as evidence or as argument."

Kramer Serv., Inc. v. Wilkins, 186 So. 625, (Miss. 1939). Accord Stordahl v. Rush Implement Co., 417 P.2d 95, 99 (Mont. 1966); Insurance Co. of North America v. Myers, 411 S.W.2d 710, 713-14 (Tx. 1966). This criticism of the argument that it rejected would work just as well as a criticism of those courts that found the argument convincing. In short, courts such as those that wrote Sencindiver, Gaetz, Austin and the like resolved an issue that rested in an uncommon field. They did so by combining a factual possibility, that was generally recognized as an unproven theory, with a sequence of events that conformed to the possibility. However, in order to reach the conclusions they arrived at, those courts had neither knowledge, logic or reliably instructive experience. In other words, they constructed a bridge of speculation between the little they actually knew and the conclusion that seemed right, at a gut level. As is often the case when common sense is applied to the uncommon or unknown -- and becomes a rationale for a factually infirm opinion -- they got it wrong and their verdicts have become characterized as "scandalous." Clifton T. Hutchinson & Danny S. Ashby, Daubert v. Merrell Dow Pharmaceuticals, Inc.: Redefining the Bases for Admissibility of Expert Scientific Testimony, 15 Cardozo L. Rev. 1875, 1880-81 (1994). Accord Samuel R. Gross, Expert Evidence, 1991 Wis. L. Rev. 1113, 1184 (1991) ("By 1960, medical doctors did not seriously dispute that a single blow could not cause a malignant tumor, and yet this theory still received respectful hearings in court.").

"common sense" that any person who is sufficiently immersed in the field could wield, there is reason to doubt whether a jurist would know it or even be able to recognize it.²⁹⁰

²⁹⁰ Although this is a specialized tribunal, any specific "expertise" that the Court brings to a case results primarily from experience. The Court's primary exposure to the commodity futures markets results from presiding over the cases that come before it. Court cases provide a certain perspective. However, there is a danger that litigation-based impressions do not accurately reflect the trading as it normally occurs. Chief Judge Posner summed up the efficacy of presiding over litigation as an educational tool when he wrote, "One of the distinctive features of judges as policy makers . . . is that they obtain much of their knowledge of how the world works from materials that are systematically unreliable sources of information." Posner, *supra* note 77 at 211. An analogy to a court of general jurisdiction might illustrate the point.

An observer of the cases that come before just about any state trial court of general jurisdiction would see cases and hear evidence that touch on a great many aspects of everyday life. However, it is difficult to dispute that if such court proceedings provided virtually all of one's exposure to the human interaction, the resulting impressions would likely be skewed (and, quite likely, depressing). This would be so because court cases involve events that are exceptional in that lead to litigation whereas many of life's unexceptional events do not lead to litigation and, therefore, courts rarely hear evidence that describes them in meaningful detail.

In a sense, even specialized tribunals are like the hypothetical observer. Litigation informs their perceptions of certain facets of the world and tends to focus on extraordinary circumstances based on self-interested descriptions. For example, the evidentiary focus in this case are those trades that the Division found to be most damning and did not include trades that Kozlowski believed to have occurred non-competitively because the circumstances seemed insufficiently compelling. Tr. at 263-65 (Kozlowski). Thus, litigation tends to focus on the notorious and overlooks unexceptional floor trading practices, except for possibly the broadest, unsubstantiated pronouncements. This tendency would seem to

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Similarly, in arcane fields such as floor trading, common sense is an unreliable tool. As noted above, the admission of opinion testimony often indicates that the fact finder is not qualified to resolve all factual issues without the aid of an outside expert.²⁹¹ With these facts in mind, the Court turns to the circumstantial record of this case.

The Division has presented evidence that shows the following: (1) Gorski engaged in a number of trades with Bilello that fit the pattern of indirect buckets and facilitation trades;²⁹² (2) on a number of occasions, Gorski and Bilello assigned times to their trades that did not agree with the PCR and/or did not agree with each other;²⁹³ (3) in certain

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raise the possibility that trade practice litigation presents a distorted picture of trading. In short, if there is a common sense of floor trading, the Court's knowledge of it may be accidental at best and, given the manner in which these cases have been litigated, any sense of trade-practice knowledge should not escape self-scrutiny.

²⁹¹ See supra note 52.

²⁹² See, e.g., DX-10-55.

²⁹³ See DX-230 at 66 (citing DX-15-15 and DX 13-37, and erroneously referring, in what appears to be a typographical error of transposing prices, to DX-0015-0053). For example, in trade sequence 10, Gorski sold 12 contracts to Bilello at a price of 442.60. DX-10-25; DX-10-55. Both traders assigned the trade a time of 1:06. DX-10-25; DX-10-55. 442.60 was within the range of prices traded during that minute. DX-0010-0070-71. However, the closest time for which the PCR recorded the price
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trades, Gorski and Bilello made changes to their initial notations of price or quantity;²⁹⁴ (3) certain trades were written in an allegedly different hand writing;²⁹⁵ (5) Gorski sometimes did not include trades in his position calculation;²⁹⁶ and/or (6) some of the charged trades seemed to be unusually large.²⁹⁷

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was 1:08:13. DX-0010-0071. In other words, Bilello and Gorski may have been as much as two minutes and 13 seconds off or as little as one minute and 14 seconds off from the official time.

²⁹⁴ See, e.g., DX-10-25; DX-10-55; DX-15-37.

²⁹⁵ See, e.g., DX-11-91; DX-16-59. By different handwriting, the Division meant the writing of someone other than Gorski or Gorski at a different time. DX-230 at 53. Of course, like Kozlowski, the Court is not expert at handwriting analysis.

²⁹⁶ See, e.g., DX-10-55.

²⁹⁷ See DX-230 at 66 (citing DX-15-37).

The Division also pointed to motivation for Bilello to trade non-competitively and Gorski to accommodate that trading. DX-230 at 21-27. These motives were present here. However, in the pit, such motives are ubiquitous and ever present. To the degree that certain motives are contradicted, but not eliminated, by the circumstantial record, the Division can try to explain them away with a theories that remains plausible but becomes increasingly rich. For example, if a dual trader is charged with an indirect bucket but does not fill the customer's orders at the reported price that would have accorded the dual trader the greatest profit had an indirect bucket occurred, the Division simply explains that the dual trader was primarily trying to avoid market risk and, by assigning the customer a slightly lower price than was possible, reduced the probability of detection. Such a theory would be plausible. Indeed, in the case of a dual trader, the motive to avoid market risk can never

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As the Court noted briefly above, these circumstances are consistent with the Division's case. Do they raise substantial

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be discounted on the basis of circumstantial evidence. That is the danger.

When certain motives are generic, ever present and pervasive, the occurrence of innocent, random events might be viewed as responses to those motives. In such cases, the joint probability of the motive and event coinciding in competitive trading is not substantially less than the probability of the event, alone. Overlooking this fact creates the danger of placing too much importance on the coincidence of the two.

When drawing inferences based, in part, on motive, Buckwalter's prescribed balancing would seem to compel the rule that when there is no independent evidence that a party actually reacted to a motive and that the allegedly meaningful circumstances may occur as a matter of chance, the importance of the coincidence of the circumstances with the motive to act illegally depends on the specificity of the motive. The more case-specific the motive, the more importance its existence and the less case specific, the less important.

With regard to the trades at issue and with regard to Gorski's trading with Bilello, the Division points only to motives that are generic to their status as a dual trader who primarily traded as a local and a dual trader who traded for himself and customers. As to Bilello, the Division points to his alleged motive to: (1) obtain a better price and (2) trade ahead of customers. CX-230 at 21-25. With respect to Gorski, the Division posits that Gorski was motivated by a desire to gain Bilello's recognition. Id. at 26-27. The only evidence of any possible motive was the traders' statuses and the trading outcomes. Thus, to say that the existence of a motive adds to the circumstances when the only evidence of the motives are the circumstances is to engage in circular reasoning of a sort. Accordingly, the Court assigns little weight to the fact that the circumstances conform to theories in which Bilello and Gorski responded to the motives that all similarly situated traders face every day in virtually every trade.

suspicious of illegal trading? Yes. Do they prove that, more likely than not, that Gorski traded non-competitively and did so knowingly?²⁹⁸ Possibly. Can the Court reach that conclusion, bound by its own knowledge of competitive trading and the record as the developed by the parties, and reach that conclusion in a manner that does not involve too much speculation? No.²⁹⁹

Basically, the Court cannot make the inferences, necessary to find violative conduct on Gorski's part, with the requisite certainty. This is a case where credible direct evidence or reliable, substantiated opinion may have tipped the balance. Because the Division failed to make a prima facie case and Gorski did not make it for the Division, the Court has no need to proceed further³⁰⁰ or discuss those findings that might rest on Gorski's evidence.

²⁹⁸ The Court notes that these questions are distinct, in a practical as well as theoretical sense, from the question of whether Bilello executed knowingly noncompetitive trades opposite of Gorski's account.

²⁹⁹ Of course, this does not mean that the Commission, with its greater experience in these matters and its exponentially greater resources, may not reach a different conclusion should the Division appeal this Initial Decision.

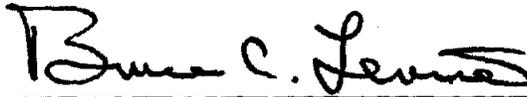
³⁰⁰ Accordingly, the Court has no need to make those findings that would rest on Gorski's evidence. This includes findings related to the credibility of Gorski's witnesses including those findings based on the Court's first-hand observations of those witnesses' demeanor on the stand.

Conclusion

For the reasons set out above, the Court FINDS that the Division failed to provide sufficient evidence to establish that Gorski knowingly engaged in noncompetitive trading. Accordingly, the Court DISMISSES the Complaint with prejudice.³⁰¹

IT IS SO ORDERED.

On this 23rd day of August, 1999



Bruce C. Levine
Administrative Law Judge

³⁰¹ Under 17 C.F.R. §§10.12, 10.102 and 10.105, any party may appeal this Initial Decision to the Commission by serving upon all parties and filing with the Proceedings Clerk a notice of appeal within 15 days of the date of the Initial Decision. If the party does not properly perfect an appeal -- and the Commission does not place the case on its own docket for review -- the Initial Decision shall become the final decision of the Commission, without further order by the Commission, within 30 days after service of the Initial Decision.