UNITED STATES OF AMERICA
Before the
COMMODITY FUTURES TRADING COMMISSION

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| In the Matter of: | : | |
| | : | CFTC Docket No. 96-3 |
| R&W TECHNICAL SERVICES, LTD., | : | |
| and GREGORY M. REAGAN | : | OPINION AND ORDER |

In March 1999, the Commission held that respondents R&W Technical Services, Ltd. ("R&W") and Gregory M. Reagan ("Reagan") violated Sections 4b and 4o of the Commodity Exchange Act ("Act") by fraudulently inducing customers to purchase software used to guide commodity trading. *In re R&W Technical Services, Ltd.* [1998-1999 Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶ 27,582 (CFTC March 16, 1999) ("*R&W I*"). In particular, the Commission found that the Division of Enforcement ("Division") proved that respondents knowingly misled customers into believing both that respondents were actively using the software to profitably trade commodity contracts and that profits cited in advertisements were earned through actual rather than simulated trading. In effect, respondents' customers purchased partially tested software that was theoretically successful with the false understanding that it was fully tested and successful in a real-time setting.[1]

Given the nature and gravity of respondents' misconduct, the Commission imposed a cease and desist order and concluded that a civil money penalty should be imposed to deter

[1] None of the respondents were registered with the Commission. R&W was a Texas limited liability company jointly owned by respondent Reagan and Marshall L. Worsham ("Worsham"). Worsham was a respondent at the outset of this proceeding but was dismissed after he died in September 1996. Worsham provided R&W's initial capital and was responsible for finances and administration. Reagan developed the software that R&W sold and was responsible for technical support and sales.

future violations. It reasoned that a $2.375 million penalty was appropriate because this was R&W's estimated gross revenue from the sale of its software. *Id.* at 47,749.[2]

While the case was before the Commission on appeal, respondents sought leave to reopen the record so they could introduce new evidence, including testimony by 177 purchasers of R&W's software.[3] According to the motion, these R&W customers were prepared to testify both that they were satisfied with R&W's software and that it performed "at least as well as advertised." The Commission denied the motion to reopen the record, because respondents did not establish that there were reasonable grounds for failing to adduce the evidence at the hearing. *R&W I*, ¶ 27,582 at 47,737.[4]

After the Commission issued its final decision, respondents mounted a wide-ranging challenge in a petition for review in the United States Court of Appeals for the Fifth Circuit. The court rejected respondents' liability challenges. In particular, the court affirmed the

[2] The Commission calculated the civil money penalty under the portion of Section 6(c) of the Act authorizing imposition of a civil money penalty of "triple the monetary gain to [respondent]" from each proven violation. The Administrative Law Judge ("ALJ") who presided over the hearing in this matter had determined that $2.375 million was a reliable estimate of R&W's gross revenue from the proven wrongdoing. The ALJ then trebled this amount to impose a civil money penalty of $7.125 million. The Commission adopted the ALJ's calculation of gross revenue, but concluded that trebling this amount was not appropriate in the absence of evidence that customers' use of the software led to trading losses. *Id.*

[3] Respondents' motion also sought to introduce the testimony of Steven Corley ("Corley") and James R. Thompson ("Thompson"). The motion indicated that Corley's testimony would confirm respondent Reagan's testimony about the development of R&W's software and that Thompson would testify as an expert regarding the efficacy and results of using R&W's software. In lieu of testimony, the motion requested the Commission to consider sworn written statements reflecting the testimony.

Respondents' motion was a reaction to the ALJ's discussion of the efficacy of R&W's software in the Initial Decision. For example, in discussing the "efficient market capital model" the ALJ remarked that "*any* marketer's claim of increased profitability or reduced risk through the use of [trading systems was] likely to be fraudulent." *In re R&W Technical Services, Ltd*., [1996-1998 Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶ 27,193 at 45,727 n. 75 (Initial Decision Dec. 1, 1997) ("I.D."). The ALJ was particularly critical of the type of technical trading theory underlying R&W's software, and specifically held that "the very notion that a speculator could significantly benefit from R&W's [software was] highly implausible, since it is inconsistent with widely accepted notions of how markets work." *Id.* at 45,726 n. 67. The Commission held that the efficacy of R&W's software was irrelevant to respondents' liability and indicated that the ALJ's remarks on efficacy were "dicta." *R&W I* at 47,736-37 n. 36.

[4] The Commission found that the respondents' failure to introduce the evidence was a tactical decision. *Id.*

Commission's conclusion that respondents violated Section 4b of the Act by portraying hypothetical trading results as real and falsely claiming that R&W's sales proceeds were plowed back into real trades based on R&W's software. *R&W Technical Services v. CFTC*, 205 F.3d 165 (5th Cir.), *cert denied*, 121 S. Ct. 54 (2000) ("*R&W II*").

The court found further, however, that the Commission's failure to reopen the record fatally undermined its analysis of the appropriate civil money penalty. In particular, the court focused on what it described as "testimony that demonstrated widespread customer satisfaction" with R&W's software. *Id.* at 176. It held that, because Commission precedent showed that this type of mitigating evidence was material to determining the appropriate civil money penalty, and the ALJ misled respondents as to the admissibility of such evidence, the Commission abused its discretion by refusing to consider it. *Id.* at 177.[5]

The court also found that, aside from the improper exclusion of this evidence, the penalty was unreasonably excessive. *Id.* In this respect, the court found that the Commission erred by equating gain with gross revenue, and held that when a penalty's goal is deterrence rather than restitution, "the proper measure of gain to [respondents] is net profits, not gross revenues." *Id.* at 178. The court also emphasized that the Commission had "never imposed a penalty this large on any individual and has never imposed a penalty of even the same order of magnitude absent demonstrated harm to others." *Id.* It held that, "[e]ven if sanctions need not be precisely uniform, they must be rational, and neither inflation nor expressed policy changes can explain the magnitude of the penalty in this case." *Id.*[6]

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[5] In this regard, the court emphasized that the ALJ had imposed a civil money penalty of over $7 million based on a finding that no trading system could provide a trader with any significant market advantage. *Id*.

[6] The court singled-out the lack of demonstrated losses as a significant factor and noted that, "[e]ven the Commission's witness, whose testimony demonstrated that the system did not perform as well in practice as in

(footnote continued)

In remanding to the Commission, the court included specific instructions regarding the process for re-determining the appropriate civil money penalty:

> [O]n remand a new assessment of the penalty should begin with the [respondents'] net profits, which then should be adjusted lower based upon any mitigating evidence the [respondents] present with regard to customer satisfaction.

*Id.*

## DISCUSSION

Given the court's instructions, a remand for additional proceedings is clearly warranted. Our obligation to conduct the remand proceeding in accordance with the court's instructions is clear, but we recognize that questions about the meaning of the instructions are likely to arise due to the brevity of the court's remarks and the complex circumstances affecting the choice of sanctions in this case. Consequently, we offer several remarks to guide the ALJ and the parties in developing the record on remand.

As noted above, the court highlighted two specific errors in the Commission's approach to determining an appropriate civil money penalty in this case.[7] First, it held that the Commission should have permitted respondents to present customer testimony allegedly showing widespread satisfaction with R&W's software. Second, it held that the Commission should have measured respondents' gain by reference to net profits rather than gross revenues.[8]

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theory, earned a $60,000 profit in one year using [R&W's software] and stated that no other system worked better." *Id*.

[7] The court did not expressly affirm the Commission's imposition of a cease and desist order on respondents. In reversing, however, the court referred only to the Commission's civil money penalty. *R&W II*, 205 F.3d at 168. Consequently, we interpret the court's decision as limiting the remand proceeding to issues related to the civil money penalty.

[8] As noted above, the Commission calculated its civil money penalty under the portion of Section 6(c) of the Act authorizing imposition of a civil money penalty of "triple the monetary gain to [respondent]" from each proven

(footnote continued)

*CUSTOMER TESTIMONY ON SATISFACTION*

In regard to the first error, we note that the court limited its focus to "testimony that demonstrated widespread customer satisfaction with [respondents'] product." *Id.* at 176. Because the proffered testimony of Steven Corley and James R. Thompson did not directly address customer satisfaction, it does not fall within the scope of the court's holding. Moreover, because the court referred to testimony rather than affidavits, we do not interpret its holding to require any relaxation in the conditions imposed in Commission Rule 10.67(f).[9] Consequently, on remand, absent agreement by the parties, the ALJ shall limit this element of the supplementary hearing to testimony offered by individuals who have purchased the R&W software at issue in this proceeding.

In its instructions, the court referred to the testimony's subject matter generically as "customer satisfaction." As noted above, the written customer statements that respondents submitted on appeal before the Commission consisted of general claims that the customers were "satisfied" with R&W's software. In accordance with the court's instructions, the ALJ shall permit respondents to present this type of generic testimony from purchasers of the R&W software at issue.

We would not, however, normally accord significant weight to such testimony because generic references to satisfaction are so inherently ambiguous. In our view, the more pertinent

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violation. We view the court's equating of respondent's "gain" with "net profits" in the context of this specific Congressional language. For example, we view its instruction that we begin the assessment on remand with "net profits" as requiring us to apply the triple the monetary gain approach. Consequently, on remand, the court's mandate prohibits us from assessing civil money penalties under Section 6(c)'s alternative test -- $100,000 for each proven violation.

[9] Commission Rule 10.67(f) only permits the introduction of affidavits into evidence if "the evidence is otherwise admissible and the parties agree that affidavits may be used." This limitation is consistent with the right to "cross-examine witnesses" conferred by Commission Rule 10.66(b).

point is how fully informed purchasers valued their level of satisfaction.[10] For example, if customers were sufficiently satisfied that, even after learning of respondents' deception, they would value R&W's software at or near their purchase price of approximately $2,500,[11] then respondents could reasonably claim that the profits arising out of their sales to these customers were not a product of their deceptive conduct and that their deception did not harm those satisfied customers.[12]

In this regard, we note the ALJ's reliance on academic studies as a basis for finding that software such as R&W's could not provide a trader with a significant economic advantage. I.D., ¶27,193 at 45,727 and n. 75. While we believe that academic studies can play a useful adjudicatory role in some cases, we believe that the proper focus in this case should be on how a fully informed purchaser of R&W's software would have valued the software, not on how academic experts agree such a purchaser should have valued the software. In particular, customer testimony should not be deemed incredible or unreliable simply because it conflicts with the valuation approach favored by academics.[13]

*DETERMINING NET PROFITS*

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[10] In this regard, we note that the written customer statements submitted by respondents do not establish that the person signing the statement was aware of the specific nature of respondents' deception.

[11] Such customers may exist if, as stated in many of the written customer statements submitted by respondents, R&W's software "perform[ed] at least as well as advertised."

[12] Similarly, some fully informed customers might have been willing to purchase R&W's software for somewhat less than $2,500 but somewhat more than nothing. Other fully informed customers, however, might have opted to purchase competing software. In the latter circumstance, all profits derived from sales to such customers would be a product of respondents' deception.

[13] While the Fifth Circuit's opinion is open to interpretation, we view the court's directive to consider the efficacy of the software and customer satisfaction as mandating that the issue of efficacy be informed by subjective evidence of customer satisfaction. In other words, no matter what the empirical studies may indicate with respect to efficacy, for purposes of determining whether the penalty should be reduced in this matter, the ALJ must consider subjective evidence of customer satisfaction. As discussed above, the weight to be given such evidence will depend on how fully the respondents are able to develop the record on this issue, subject of course to rebuttal by the Division.

As noted above, the Commission based its calculation of respondents' civil money penalty on a rough calculation of R&W's gross revenues from the sale of its software. The court's instructions on remand require us to begin with respondents' "net profits." The court did not comment, however, on the different steps involved in moving from one calculation method to another.

The difference between gross revenues and net profits is some type of deduction for expenses. In this regard, the court cited to a decision of a United States District Court in *Commodity Futures Trading Commission v. AVCO Financial Corp.*, No. 97 CIV. 3119, 1998 WL 524901 (S.D.N.Y. Aug. 21, 1998), *aff'd in relevant part sub nom. Commodity Futures Trading Commission v. Vartuli,* 228 F. 3d 94, 112-13 (2d Cir. 2000) ("*AVCO*"). The district court reduced the amount of disgorgement ordered from $4,148,572 to $701,534, and in doing so noted that AVCO Financial Corp. had expenses from the sale of its software, including advertising, rent, utilities, telephone systems and postage.

We do not believe that the court intended that we slavishly follow the approach adopted by the district court in *AVCO*. The *AVCO* case involved disgorgement, and as the Second Circuit noted in affirming the district court's award, in the context of disgorgement, the trial judge is accorded "wide latitude" in both determining whether to order disgorgement and in calculating the amount of ill-gotten gains. *AVCO*, 228 F.3d at 113 (citation omitted). Indeed, while courts are in agreement that disgorgement, like civil money penalties, may not be used punitively, *SEC v. First City Fin. Corp.*, 890 F.2d 1215, 1231 (D.C. Cir. 1989), district courts frequently permit the deduction of certain expenses such as brokerage commissions or other transaction costs, while refusing to permit the deduction of other classes of expenses, such as overhead. *Compare*

*Litton Indus., Inc. v. Lehman Bros. Kuhn Loeb, Inc.*, 734 F. Supp 1071, 1077 (S.D.N.Y. 1990), *with SEC v. World Gambling Corp.,* 555 F. Supp 930, 934-35 (S.D.N.Y. 1983).

The Commission, of course, has not been granted the equitable powers that underlie a district court's authority to order disgorgement. Consequently, care must be taken in applying precedent developed in the context of disgorgement to Commission enforcement proceedings. Nevertheless, the parties and the ALJ should refer to this precedent in developing their positions on the expenses that should be deducted in determining net profits.[14] In applying the principles drawn from the disgorgement area, the parties and the ALJ should keep in mind the important distinction between sanctions that are punitive and sanctions that are remedial. *See generally, In re Ashman*, [1992-1994 Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶ 25,816 at 40,667-68 (CFTC Aug. 13, 1993).

Although the court did not directly criticize the Commission's reliance on a broadly reliable estimate in determining the gross revenue arising from the sale of R&W's software, it seems unlikely that it expected the Commission to derive net profits by deducting actual expenses from a hypothetical amount of gross revenue. We are cognizant that Congress did not further define its reference to "gain" in describing Section 6(c)'s treble the monetary gain approach to determining the maximum allowable civil money penalty. Having considered the court's opinion and upon review of the language of the statute, we hold that the Division's burden of proof under the "gain" approach to calculating civil money penalties is to establish net profits with reasonable precision based on actual revenue and expenses. *Cf. Dir., Office of Workers' Compensation Programs, Dep't of Labor v. Greenwich Collieries,* 512 U.S. 267, 276

[14] For example, we can anticipate arguments regarding whether particular expenses are directly linked to the violations committed, specifically, deceptive sales practices and whether such a direct link is necessary before an expense may be disregarded.

(holding that the burden of proof under the Administrative Procedure Act for the proponent of a rule or order means the burden of persuasion, not merely the burden of production.).[15]

Accordingly, on remand, the ALJ shall provide the Division with a fair opportunity to develop the record on respondents' net profit, including both the actual gross revenue derived from the sale of R&W's software and its legitimate expenses. As we have observed in a similar context, the Division's ability to fulfill its burden is complicated by the fact that respondents are likely to control much of the information material to determining net profits and are unlikely to be eager to share the information with the Division. *In re Nikkhah*, [1999-2000 Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶ 28,275 (CFTC Sept. 26, 2000) (discussing proof of respondent's net worth). Consequently, the ALJ shall grant the Division reasonable time to seek discovery pursuant to Commission Rule 10.42(e) and 10.44(b) through (f),[16] to subpoena witnesses to appear at a supplemental oral hearing on the material issues of fact, and, if necessary, to retain experts to review and analyze the information obtained through discovery and to testify at the supplemental hearing. The ALJ shall draw appropriate adverse inferences against respondents who fail to comply with their discovery obligations or to either appear or testify at the supplemental hearing after receiving a request from the Division. *Cf. In re Citadel Trading Co.*

[15] Our precedent recognizing the value of rough estimates of gain and loss arose in the context of Section 6(c)'s $100,000 per violation alternative. Traditionally, we have used rough but reliable estimates of gain and loss as bases for assessing the overall gravity of a respondent's wrongdoing. *See, e.g., In re Grossfeld,* [1996-1998 Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶ 26,921 at 44,467 (CFTC Dec. 10, 1996), *aff'd sub nom. Grossfeld v. CFTC*, 137 F.3d 1300 (11th Cir. 1998). In determining gravity, the weight accorded rough estimates of gain and loss can be varied depending on the relative strength of the evidence underlying the estimate, and then weighed along with other general factors established on the record. Even under this alternative, however, the Commission may not impose civil money penalties based on unreliable inferences regarding the gains and losses caused by respondents' conduct. *See Miller v. CFTC*, 197 F. 3d 1227 (9th Cir. 1999).

While we have previously cited to this precedent in the context of applying the "gain" approach to calculating civil money penalties, we are now persuaded that the statutory language underlying this alternative requires proof with reasonable precision. Otherwise, we cannot ensure that the penalty imposed does not exceed the statutory limit.

[16] For these purposes, we waive the requirements of Commission Rule 10.44(a) (1) through (3) and (b)(3).

*of Chicago, Ltd.*, [1986-1987 Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶ 23,082 at 32,189 (CFTC May 12, 1986) (In appropriate circumstances, a presiding officer may draw an adverse inference from respondent's refusal to testify.)

In directing the Commission to begin with net profits, the court did not distinguish between the two respondents remaining in this case. While the type of joint civil money penalty we initially imposed may be appropriate in circumstances establishing a basis for disregarding the corporate form and effectively merging the identities of a business and its owner,[17] the record here does not establish circumstances where we can reasonably infer that R&W's "gain" from its wrongdoing was the same as respondent Reagan's "gain." Indeed, based on the current record, it seems likely that R&W's gain was divided in some manner between Reagan and Worsham.

We cannot resolve these questions on the current record. To ensure a complete record, however, the ALJ shall determine net profit for each respondent individually. Put simply, respondent Reagan shall not be deemed to have derived gain from R&W that actually flowed to his deceased partner.

Finally, our precedent recognizes that under both of Section 6(c)'s alternative approaches to calculating the maximum permissible civil money penalty, our goal of effective deterrence sometimes requires a civil money penalty in excess of the net profit a respondent derived from his wrongdoing. *See, e.g., Grossfeld,* ¶ 26,921 at 44,469. In the circumstances of this case, fundamental principles of jurisprudence, which mandate our strict compliance with the Fifth Circuit's instructions, prohibit us from imposing such a premium.[18] *See, e.g., In re Zucccarelli,*

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[17] For example, in *AVCO*, *supra*, the district court imposed a joint disgorgement award on AVCO Financial Corp. and its sole owner, Anthony Vartuli.

(footnote continued)

Comm. Fut. L. Rep. ¶ 28,637 at 52,432 n.7 (CFTC Sept. 7, 2001) ("[a]n inferior court has no power or authority to deviate from the mandate issued by an appellate court") (quoting *Briggs v. Pennsylvania R.R.*., 334 U.S. 304, 306 (1948)). Such compliance, however, is not intended either to undermine Commission precedent or to suggest that future civil money penalties will be limited to a level sufficient to disgorge respondent's net profit.

**CONCLUSION**

We vacate the previously imposed civil money penalty and remand to the ALJ for further proceedings consistent with this decision.

IT IS SO ORDERED.

By the Commission (Chairman NEWSOME, and Commissioners HOLUM and LUKKEN) (Commissioner BROWN-HRUSKA, concurring in part and dissenting in part)

Catherine D. Dixon
Assistant Secretary to the Commission
Commodity Futures Trading Commission

Dated: August 6, 2003

[18] As described earlier, the court's instructions preclude the Commission from trebling the gain earned by each respondent. After determining each respondent's net profit, the Commission is obliged to adjust any resulting penalty "lower," if appropriate, based upon respondents' mitigating evidence.

**Opinion of Commissioner Sharon Brown-Hruska, Concurring in Part and Dissenting in Part**

In adopting the recommendation of the Division of Enforcement to levy a fine based upon three times the revenues that R&W obtained from customers purchasing their software, Administrative Law Judge Bruce Levine acted in accordance with the principles of deterrence theory that are embedded in both our statute and our legal precedent.[1] Perhaps because this

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[1] The economic model of deterrence traces its roots to Jeremy Bentham's utilitarian view that offenders will not commit crimes if they cannot expect to gain from them. Jeremy Bentham, An Introduction to the Principles of Morals and Legislation (H.L.A. Hart & J.H. Burns eds. 1982) (1802). More recently, Nobel laureate Gary Becker formalized the concept that monetary penalties should be based upon a multiplier principle to reflect probability of detection and conviction. Gary S. Becker, *Crime and Punishment: An Economic Approach,* 76 J. Pol. Econ. 169 (1968). This approach rests on the theory that a penalty should equal the offender's expected gain plus a premium "to ensure that the potential offender will not be indifferent to violations of the law." Emmett H. Miller III, *Federal Sentencing Guidelines For Organizational Defendants*, 46 Vand. L. Rev. 197, 204 (1993). Therefore, the "total monetary sanction should be set such that the expected penalty cost outweighs the expected gain from the offense." *Id.*

More specifically, the deterrence model employs the notion of *expected* results and uses a *multiplier* to calculate a monetary penalty--two concepts that are analytically intertwined. Since expectation involves some uncertainty about the likelihood of an outcome, economic approaches to determining the expected gain from wrongful activity incorporate probabilities to account for this problem. A. Mitchell Polinsky & Steven Shavell, *The Optimal Tradeoff Between The Probability and Magnitude of Fines,* 69 Am. Econ. Rev. 880 (1979). Expected gains are obtained by introducing a multiple that encompasses the relevant probabilities to the wrongdoer's actual gains. *See* George J. Stigler, *The Optimum Enforcement of the Laws*, 78 J. Pol. Econ. 526, 531, 533 (1970) (arguing that gains must be multiplied by probability of detection such that "[e]xpected penalties [must] increase with expected gains"); Paul H. Rubin & Robert Zwirb, *The Economics of Civil RICO*, 20 U.C. Davis L. Rev. 883, 900 (1987) ("penalties must be a multiple of [respondent's] gains . . . in order to ensure that crime does not pay in an expected sense").

The Commodity Exchange Act largely conforms to this economic approach as does Commission precedent. Section 6(c) of the Act, for example, authorizes monetary penalties of "triple the [respondent's] monetary gain" for each violation of the Act, while the Commission's reasoning in *GNP Commodities* appears to fully embrace economic principles based explicitly on deterrence theory:

> [P]otential violators will be discouraged from illegal conduct if they know they are unlikely to profit from it. Thus, in any individual case, our focus turns initially to the gain realized by the particular wrongdoers from their conduct . . . .
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> . . . The exemplary purpose of the penalty will be served only if its amount reflects a premium to offset the benefit of engaging in . . . undetected violations.

(footnote continued)

approach to calculating penalties is based so explicitly upon economic principles, however, it has never been fully embraced by the legal community.[2] Thus, even before this matter reached the United States Court of Appeals for the Fifth Circuit, the Commission struck down the application of a multiplier in calculating R&W's fine, which had the effect of reducing the penalty by two-thirds.[3]

Even this action, however, failed to satisfy a panel of judges of the Fifth Circuit, which held that the penalty was still unreasonably excessive. The court faulted us for 1) failing to consider evidence of customer satisfaction with respondents' software, and 2) for measuring the gains on the basis of the gross revenues that respondents generated. Its remand order, which occurred more than three years ago, included instructions that likely will have the effect of reducing the penalty further. In particular, the court instructed us to base any penalty that we might impose upon respondents' "net profits," and to adjust this figure lower to account for demonstrated customer satisfaction. While acknowledging that we must comply with the court's mandate, I am nonetheless concerned that the Commission seems to be interpreting those instructions in a manner that will impair our ability to impose meaningful sanctions.

**Efficacy of R&W's Software--Subjective vs. Objective Evidence**

Although the court expressed displeasure with our refusal to hear subjective evidence of customer satisfaction, it did not preclude us from considering other types of evidence. The court simply said that customer testimony should have been heard for its relevance to the issue of efficacy. That criticism, however, should not be taken as a license to exclude more objective evidence that may also shed light on the efficacy of such trading systems. The court's mandate

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*In re GNP Commodities, Inc.*, [1990-1992 Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶ 25,360 at 39,222-23 (CFTC Aug. 11, 1992). *See also A Study of CFTC and Futures Self-Regulatory Organization Penalties*, [1994-1996 Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶ 26,264 at 42,211 (CFTC Nov. 1994) ("Penalties Study") ("A penalty intended to deter or influence economic behavior should, at a minimum, be designed to remove the economic benefit of the illegal activity, taking into account the documented benefit and the likelihood of escaping detection") (quoting Recommendation of the Administrative Conference of the United States).

In more recent cases, however, it appears that the economic approach has been abandoned, de-emphasizing deterrence *sub silentio*. *See In re Nikkhah,* [1999-2000 Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶ 28,129 at 49,892 (CFTC May 12, 2000) (downplaying formula articulated in *GNP* for calculating penalties).

[2] *See* Frank H. Easterbrook & Daniel R. Fischel, *Optimal Damages in Securities Cases,* 52 U. Chi. L. Rev. 611, 629 (1985) (noting that "[e]conomists have taken to this method more readily than lawyers and courts").

[3] The Commission took this action notwithstanding the fact that Congress added the multiplier provision in 1992 in an effort to "stiffen[] penalties for violations of the Act." S. Rep. No. 102-22, at 13 (1992), *reprinted in* 1992 U.S.C.C.A.N. 3103, 3115.

is inclusionary, not exclusionary, and does not compel us to ignore the findings of experts and academicians.

Our instructions to the administrative law judge, however, appear to take the court's criticism too much to heart. Thus, the Commission's command to the ALJ to limit his focus on remand to how customers value R&W's software, and "not on how academic experts agree such a purchaser should have valued the software," is problematic not only because it represents an unwarranted restriction upon the presiding officer's discretion, but also because it reflects an unconstructive attitude regarding the value of evidence based upon academic and empirical studies.

In my view, a regulator worthy of *Chevron*-type deference should not endeavor to sacrifice the objectivity and weight of a more academic approach to the issues. Yet that is the impression conveyed when the written opinion instructs the ALJ that evidence of customer satisfaction shall not be deemed "incredible or unreliable simply because it conflicts with the valuation approach favored by academics, " or that such evidence must be respected "no matter what the empirical studies may indicate with respect to efficacy."

The Commission appears uncomfortable with permitting an ALJ to rely upon academic findings and scholarly literature for some of his findings.[4] This discomfort is unfortunate in light of the important role that academic studies often play in underpinning groundbreaking legal principles.[5] It is especially ironic given that the Commission's deterrence-based approach to assessing sanctions reflects the teachings of the law-and-economics literature on penalties.[6] Further, Judge Levine's argument that no trading system can provide a trader with any

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[4] Echoing the Fifth Circuit's assertion, the Commission erroneously claims that the ALJ relied upon academic studies for "finding" that trading systems like R&W's cannot give traders an economic edge. On the contrary, Judge Levine's analysis of the "efficient capital market theory" and its implications for the efficacy of respondent's software that appeared in footnote 75 of his initial decision was simply "dicta,"and therefore, not the basis for any finding with respect to either liability or sanctions. Had Judge Levine in fact made such a formal "finding," he would have been obliged to provide respondents with an opportunity to refute it. *See* Administrative Procedure Act § 556(e), 5 U.S.C. § 556(e).

[5] For example, the Supreme Court struck down state laws restricting the advertising of pharmaceutical prices, in part, on the basis of studies on the economic effects of such laws. *See Virginia State Board of Pharmacy v. Virginia Citizens Consumer Council, Inc*., 425 U.S. 748 (1976).

[6] The Commission's Penalties Study, which was conducted at the request of Congress, acknowledged that "the academic literature suggests that sanctions for violations in regulated industries be based primarily upon the goal of deterrence." *A Study of CFTC and Futures Self-Regulatory Organization Penalties,* [1994-1996 Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶ 26,264 at 42,209 (CFTC Nov. 1994) (footnote omitted). Similarly, the use of a multiplier to the calculation of fines is based upon the body of economics literature on optimal penalties. *See* note 1, *supra.*

significant market advantage is based on the modern economic theory of efficient capital markets, a theory that was adopted by the Supreme Court in 1988.[7]

We need not endorse by adjudication this line of reasoning, but I do not agree that the application of the efficient capital market theory has no bearing to the issue here.[8] That theory, which posits that no investor can consistently outperform the market regardless of the amount of research or work undertaken beforehand, has obvious implications for the issue here--whether R&W's software works as advertised. Moreover, the theory itself is based upon the assumption that market prices reflect all public information, which is, as Easterbrook and Fischel point out, "the fundamental assumption of securities law."[9] As mentioned above, the Supreme Court relied upon that very assumption in ruling that an investor's reliance upon any publicly available information may be *presumed* in securities fraud cases. In doing so, the Court explicitly took judicial notice of:

> Recent empirical studies [that] have tended to confirm Congress' premise that the market price of shares traded on well-developed markets reflects all publicly available information and, hence, any material misrepresentations.

*Basic, Inc. v. Levinson*, 485 U.S. at 246 (footnote omitted).[10]

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[7] *Basic, Inc. v. Levinson*, 485 U.S. 224 (1988) (adopting a "fraud-on-the market theory" of reliance in SEC Rule 10b-5 fraud cases).

[8] For example, there are versions of the efficient capital market hypothesis ranging from "strong" to "weak," and reasonable disagreements about its scope.

[9] Easterbrook & Fischel, 52 U. Chi. L. Rev. at 629. Regarding the efficient capital market theory, Judge Easterbrook and Professor Fischel observe:

> One sometimes hears the objection that this method assumes that the market is "efficient" in the sense that "the price always accurately represents the real value of the security," while the person raising the objection knows that the price is not always right. The objection misses the point, because the method does not assume or depend on a belief that the price is always right. The method rests on three more modest beliefs: (1) that prices change quickly in response to new information; (2) that the quick change is "unbiased"' (that is, it does not systematically overshoot or undershoot the change that ultimately will be deemed merited on the basis of more leisurely contemplation of the new information); and (3) that the degree to which the price reflects the underlying economic reality does not change substantially during short periods. . . . The data collected by economists over the last twenty years quite strongly support these three modest claims, the only ones essential to the method.

52 U.Chi. L. Rev. at 628-29 (footnote omitted).

[10] The Supreme Court adopted the fraud-on-the-market approach to damages, according to Judge Frank Easterbrook, precisely "because capital markets efficiently establish prices that embed available information." *Weilgos v. Commonwealth Edison Co.,* 892 F.2d 509, 510 (7th Cir. 1989).

As with the judiciary, we are authorized to take official notice of relevant expert or academic evidence as long as proper notice and an opportunity to respond is provided respondents. *See* Administrative Procedure Act § 556(e). Doing so only creates a presumption that is subject to rebuttal.[11] Nothing prevents us from taking notice of the very same studies that the Supreme Court noticed in *Basic*, provided respondents have an opportunity to rebut the presumption.

On remand, we may find that customer testimony is inconclusive, especially if the hearing turns into a battle between witnesses with conflicting views regarding the efficacy of R&W's software. Given the usual challenges associated with customer testimony--obtaining a representative sample of customers, dealing with faulty witness memories (given the age of this matter), and inaccurate attribution for investment performance--we may also encounter a record that is insufficiently reliable to make any determinative findings. Clearly, the views of expert witnesses or the findings of academic studies have value in understanding the issue of efficacy.[12] Certainly, they should be available to the Division to rebut the showing of respondents if circumstances warrant, and to the ALJ to consider and weigh. Accordingly, I would not tie the ALJ's hands on remand by limiting the scope of evidence on efficacy to subjective customer testimony. To adopt such a view would be inconsistent with our duty as an expert administrative agency to consider the best evidence on this issue.

**Measuring Respondent's Gains**

Measuring a respondent's ill-gotten gains by net profits as the court insists, rather than by gross revenues, is problematic since such a measure is based upon disgorgement principles that have little in common with those relating to penalties.[13] The problem with disgorgement from an

[11] *See Basic v. Levinson,* 485 U.S. at 245 (fraud-on-the-market theory is but a rebuttable presumption of reliance). Thus, even if we were to adopt the view, based upon academic studies, that such trading software could not work as claimed, this notion would merely constitute a presumption that respondents could rebut with evidence demonstrating that their system was efficacious.

[12] For example, suppose respondents had advertised a stock market futures trading system that was guided by the "Super Bowl Indicator," which forecasts rising stock markets whenever the NFC team wins, and down markets whenever the AFC team wins. Given that this indicator has successfully predicted the direction of the market 80 percent of the time, respondents would no doubt be able to produce a number of satisfied customers who could vouch for their system. *See* Nils Pratley, *Yields say it's time to buy, but don't you believe it*, Sunday Times--London, 2003 WL 8385635 (Jan. 26, 2003) ("Strange as it sounds, the Superbowl Indicator has been a reliable guide to stock-market performance"). Under the majority's logic, such testimony would trump any contrary academic explanation.

[13] Citing *CFTC v. AVCO Financial Corp.*, No. 97 CIV 3119, 1998 WL 524901 (S.D.N.Y. Aug. 21, 1998), the Fifth Circuit in *R&W* stated that "[w]hen a penalty is designed for deterrence and not restitution, however, the proper measure of gain to the defendant is net profits, not gross revenues." *R&W Technical Services, Ltd. v. CFTC,* 205 F.3d at 165, 178 (5th Cir. 2000) (footnote omitted). It then went on to characterize the $701,534 judgment in that case as a "penalty." *Id.* at 178 n.71. In fact, the "penalty" in that case simply required the defendants to *disgorge* profits, a sanction that is closer to restitution than it is to penalties. This appears to have been the understanding of the district court in that case, which

(footnote continued)

enforcement perspective is that it "merely requires the return of wrongfully obtained profits . . . . [but] does not result in any actual economic penalty or act as a financial disincentive to engaging in [financial] fraud."[14] Indeed, it is well recognized that under such a remedial approach, deterrence can "only be partially pursued."[15]

Merely requiring a violator to give back such profits leaves him no worse off than before his violation, and therefore, does not serve to deter. Congress recognized this shortcoming when it enacted legislation in 1990 authorizing the SEC "to impose substantial money penalties, *in addition to the disgorgement of profits*."[16] In enacting the Securities Law Enforcement Remedies Act of 1990, Congress sought to rectify the condition where a respondent "makes a deliberate decision to violate the law and causes significant harm to the markets [but] does not risk any monetary sanction more severe than an order of disgorgement."[17]

Penalties, by contrast, are "intended not simply to disgorge profits but also to impose punishment." *Tull v. United States*, 481 U.S. 412, 423 (1987). They "also seek to deter future violations by basing the penalty on its economic impact." *Ibid.* Indeed, in *Tull*, the Supreme Court rejected any similarity between the two types of remedies:

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characterized its sanction as "a nonpunitive equitable remedy meant to deprive wrongdoers of 'ill-gotten gains.'"

[14] H.R.Rep. No. 101-616, 101st Cong., *reprinted in* 1990 U.S.C.C.A.N. 1379, 1384.

[15] Becker, 76 J. Pol. Econ. at 198. Disgorgement is similar to restitution and is intended to prevent "unjust enrichment." *See Litton Industries, Inc. v. Lehman Brothers*, 734 F.Supp. 1071, 1075 (S.D.N.Y. 1990) ("it is essential to bear in mind that disgorgement is a mechanism by which the equitable remedy of restitution is effectuated"). The focus is on the value of a wrongdoer's illegal profits, and the return of such profits to the wrongdoer's victims since it is the profit that serves as the proximate cause of the fraud. *Id.* The goal is to restore the *status quo ante* by providing compensation to victims "so that they are no worse off than if the offenses were not committed." Becker, 76 J. Pol. Econ. at 194.

[16] 1990 U.S.C.C.A.N. at 1384 (emphasis added).

[17] *Ibid.* The committee report accompanying this Act clearly distinguished between penalties and disgorgement.

> Disgorgement merely requires the return of wrongfully obtained profits; it does not result in any actual economic penalty or act as a financial disincentive to engage in securities fraud. A violator who avoids detection is able to keep the profits resulting from illicit activities. Currently, even a violator who is caught is required merely to give back his gains with interest, leaving him no worse off financially than if he had not violated the law. The Committee therefore concluded that authority to seek or impose substantial money penalties, in addition to the disgorgement of profits, is necessary for the deterrence of securities law violations that otherwise may provide great financial returns to the violator.

1990 U.S.C.C.A.N. at 1384.

> An action for disgorgement of improper profits is, however, a poor analogy [to an action for civil penalties]. Such an action is a remedy only for restitution--a more limited form of penalty than a civil fine. Restitution is limited to "restoring the status quo and ordering the return of that which rightfully belongs to the purchaser or tenant . . . ." [while penalty] concerns are by no means limited to restoration of the status quo.

*Id.*, at 424 (citations omitted).[18]

Because they serve different remedial purposes, imposing a monetary sanction for the purpose of disgorgement is not the same as doing so for a more punitive purpose. Unlike restitution or disgorgement, where the objective is to make the *victims* whole by compensating them for what they lost, the goal of penalties is to make *defendants* whole by stripping away the benefit that they expected to receive from their actions.[19] Since the former involves an *ex post* determination of the victims' *exact losses*, while the latter requires an *ex ante* assessment of the respondent's *expected gains*, "a single measure . . . will rarely serve both objectives."[20]

Basing a penalty upon disgorgement principles also creates perverse incentives by encouraging violators to expend more resources in planning their offenses and in avoiding detection, since the amount of any penalty assessed against them, if caught, will be reduced by the amount of such expenditures. This inexorably leads to the same type of moral hazard that the net worth consideration exacts on our penalty process--by encouraging violators to pump up the liability side of their personal balance sheets. Moreover, this approach will result in no penalty

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[18] In *SEC v. Lorin*, 869 F.Supp. 1117, 1122 (S.D.N.Y. 1994), the court distinguished between the interests served by penalties and those by disgorgement as follows:

> An individual who stole an item might be required to return the item, serve time in jail, and pay an amount of money to the government. Returning the item puts the individual where he or she would have been had he or she not stolen the item, and is therefore similar to disgorgement. Simultaneously, the victim of the theft is generally returned to where he or she would have been had the theft not occurred. Serving time in jail and paying money to the government, meanwhile, do not serve the purpose of returning the affected parties to the status quo, and therefore serve the purpose of fines, penalties, and forfeitures.

[19] *See* David D. Haddock, Fred S. McChesney & Menahem Spiegel, *An Ordinary Economic Rationale for Extraordinary Legal Sanctions*, 8 Cal. L. Rev. 1, 6 & n.17 (1990) ("making the [victim] whole is not the same thing as making the defendant whole"). The authors are actually referring to "punitive damages," a sanction that is conceptually akin to civil penalties. *See* Tull, 481 U.S. at 423 n.7.

[20] Haddock, McChesney & Spiegel, at 6 n.17. Expected gains involve more than simply the amount of the profit generated by the wrongful activity. As Bentham recognized when urging that punishments not be less than "the profit of the offence," such gains refer "not merely the pecuniary profit, but the pleasure of advantage, of whatever kind it be, which a man reaps, or expects to reap, from the gratification of the desire which prompted him to engage in the offence." Bentham, Principles of Morals 166.

in the case where the respondent's net profits are nil, as Judge Levine observes in another matter.[21] Thus, the application of disgorgement principles to the calculation of penalties will undermine the deterrent value of our monetary penalties. *Cf. Tull,* 484 U.S. at 423 (imposition of $35,000 penalty upon respondent who received no profits warranted to further goals of punishment and deterrence).

Requiring the Division to establish a wrongdoer's net gain with "reasonable precision" exacerbates the problem. Such precision is not feasible for measuring gains on an *ex ante* basis, the perspective that must be applied when estimating *expected* gains. From that vantage point, the defendants gains and costs are simply too speculative to measure with any precision. Aside from this conceptual problem, mandating that kind of exactitude will create the same kind of accounting nightmares that currently plague our net worth inquiries. As is the case with net worth, the Division is not positioned to sustain this burden--let alone to do it with "reasonable precision"--since the determinative information is in the hands of the respondent.[22] Finally, such precision should be reserved for the more weighty matters such as establishing liability and calculating penalties upon deterrence principles.

Under our well-established precedent, ill-gotten "gains" generally referred to the gross commissions generated by the wrongdoer. *See e.g., In re Gordon*, [1992-1994 Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶ 25,667 at 40,182 (CFTC, Mar. 16, 1993) (interpreting "financial benefit" accruing to a broker for civil penalty purposes as "his commissions"). Although we have not always adhered to this interpretation in practice, it has guided the way we have approached our penalty sanctions until now. While we are compelled to follow the Fifth Circuit's contrary mandate in this matter, I vigorously oppose incorporating its standard for measuring ill-gotten gains as part of our legal precedent.[23]

**<u>Conclusion</u>**

As a financial regulator, we need to recognize the important role that economic ideas play in shaping our rules and decisions. We should understand, as Easterbrook and Fischel point out, that "fundamentally economic concepts . . . [are] suitable tool[s] for understanding and shaping

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[21] *See In re First Financial Trading, Inc.*, [2002-2003 Transfer Binder] Comm. Fut. L. Rep. (CCH) ¶ 29,089 at 53,704 & n.196 (ALJ, Jul. 8, 2002).

[22] Moreover, limiting the punishment for failing to fully cooperate in this process to the drawing of an "adverse inference," rather than the more deserving sanction of waiver, also sends out the wrong signals to potential wrongdoers.

[23] While the majority notes that penalties in excess of the respondent's gains will "sometimes" be called for consistent with our precedent, simply applying a premium to a respondent's net profits is unlikely to serve the goal of "effective deterrence." Deterrence principles require that any multiple be applied to the *revenues* that the respondent *expected* to attain when he contemplated wrongdoing, not to the *net profit* that he *realized* from his wrongdoing. Moreover, a penalty that combines elements of disgorgement and deterrence is somewhat of an oxymoron: Since a sanction based upon the former principle is not designed to deter misconduct, adding a premium to such a "penalty" likewise will not serve that purpose.

the content of [our] rules."[24] We should also understand, as the chairman of the Federal Trade Commission recently observed, that "[m]any of the strongest contributions [to regulatory law and policy] have come from scholars who realized the importance of translating economic concepts into practical rules and a

[24] Easterbrook & Fischel, 52 U. Chi. L. Rev. at 613.

nalytical techniques that courts and enforcement agencies could apply successfully."[1] We, therefore, should guard against a tendency to restrict the application of such clearly useful analytical tools in our decisions.[2] By rejecting the use of well-established concepts from the discipline of economics--such as the efficient capital market theory or the optimal deterrence model--we only foreclose the possibility that our sanctioning policy will be rationally based.

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Commissioner Sharon Brown-Hruska Date:July 31. 2003

[1] FTC Chairman Timothy J. Muris, Improving the Economic Foundations of Competition Policy, Address Before the George Mason University Law Review's Winter Antitrust Symposium (Jan. 15, 2003), available at http:// www.ftc.gov/speeches/muris/improveconfoundatio.htm.

[2] *See* Michael K. Block, *Optimal Penalties, Criminal Law and the Control of Corporate Behavior*, 71 B. U. L. Rev. 395 (1991) (observing a "hostility towards optimal penalty theory" stemming from unfamiliarity with law-and-economics literature on that subject).