COMMISSION AUTHORIZED

Comment to the Commodity Futures Trading Commission on Proposed Regulation 155.5 from the Staff of the Bureau of Economics of the Federal Trade Commission¹

July 20, 1990

I. Introduction and Summary

The staff of the Bureau of Economics of the Federal Trade Commission appreciate this opportunity to comment on the Commodity Futures Trading Commission's (CFTC) Proposed Regulation 155.5 on dual trading by floor brokers on the commodity exchanges.² Regulation 155.5 would ban dual trading except in limited instances. The CFTC plans to implement the ban in phases according to its proposed Dual Trading Restriction Implementation Plan (DTRIP). By phasing in the ban, the CFTC will have the opportunity to collect and analyze information on the effects of a ban before deciding whether to extend it to all exchanges and all commodities.

The CFTC has already collected a significant amount of data. These data are described and analyzed in a November 1989 report prepared by the Division of Economic Analysis of the CFTC entitled, "Economic Analysis of Dual Trading on Commodity Exchanges" (hereafter "Dual Trading Study"). We commend the CFTC for gathering and analyzing evidence on the effects of a dual trading ban before extending it to all markets. We agree that a thorough appraisal of the likely effects of a ban should precede a decision to extend it to all markets.

To support the proposed ban on dual trading, the CFTC cites to a finding from the Dual Trading Study that dual trading is not more prevalent in low volume markets and in more distant trading months, the types of markets in which dual trading should provide the greatest benefits. Our analysis of some of the CFTC's data leads us to suggest that the CFTC reconsider this finding. In addition, we believe that some of the evidence contained in the Dual Trading Study suggests that, on some exchanges, dual trading provides demonstrable benefits. Thus, we suggest that the CFTC amend its proposed DTRIP to allow more intensive analysis of the exchanges where dual trading may provide benefits.

Most importantly, we recommend that, to the extent possible, the DTRIP place the initial round of bans on the exchanges and commodities that have already been extensively analyzed.³ If the commodities and exchanges for the initial round of bans are selected in this manner, the CFTC would then be able

⁸ In the Dual Trading Report, the CFTC staff analyzed in detail fourteen particular futures from ten different exchanges.

¹ These comments represent the views of the Staff of the Bureau of Economics of the Federal Trade Commission. They are not necessarily the views of the Commission or any individual Commissioner. Questions concerning these comments should be addressed to Timothy Daniel, Assistant Director for Economic Policy Analysis, (202) 326-3520.

² 55 Fed. Reg. 1047 (January 11, 1990).

to examine in detail how particular markets operate with and without a dual trading ban. We believe that our suggestions might help insure that the CFTC gathers sufficient information during the DTRIP to determine the likely costs and benefits from extending the ban to all markets.

The remainder of our comment is organized as follows. First, we discuss the interest and experience of the Federal Trade Commission. Second, we summarize briefly the Proposed Regulation 155.5. Third, we define dual trading and document its prevalence in various exchanges. Fourth, we discuss the potential costs and benefits associated with dual trading. Fifth, we discuss some of the evidence contained in the Dual Trading Study that assesses the prevalence of and potential benefits of dual trading. In particular, we discuss areas where our interpretation of the results differs from the interpretation provided in the Dual Trading Study. Sixth, based largely on the preceding analysis, we provide suggestions regarding possible modifications to the DTRIP.

II. Interest and Experience of the Staff of the Federal Trade Commission

The Federal Trade Commission is charged with promoting competition and protecting consumers from unfair and deceptive commercial practices.⁴ In fulfilling this mandate, the staff of the Federal Trade Commission of ten submit comments, upon request, to federal, state, and local governmental bodies to help assess the competitive and consumer welfare implications of pending policy issues. Commission staff have gained considerable experience in analyzing the impact of various private and government restraints on competition and the costs and benefits to consumers of those restraints. More specifically, the staff have commented on regulations, similar to proposed regulation 155.5, which address potential conflict of interest issues.⁵ In addition, the staff have submitted comments on the securities industry,⁶ and conducted studies of various aspects of investment markets.⁷

⁶ See, for instance, comments of the staff of the Bureau of Economics of the Federal Trade Commission to the Securities and Exchange Commission on proposed amendments to rule 12b-1 of the Investment Company Act of 1940 (September 6, 1988).

⁷ See, Hilke, <u>Minimum Quality Versus Disclosure Regulations</u>: <u>State</u> <u>Regulation of Interstate Open-end Investment Company and Common Stock</u> <u>Issues</u>, Bureau of Economics Staff Report (1987); and Schumann, <u>State</u> <u>Regulation of Takeovers and Shareholder Wealth</u>: <u>The Effects of New York's</u> <u>1985 Takeover Statutes</u>, Bureau of Economics Staff Report (1987).

⁴ See 15 U.S.C. Sections 41 et seq.

⁵ See, for example, comments from the staff of the Federal Trade Commission to the Department of Housing and Urban Development on proposed revisions to regulations pertaining to the payment of referral fees to real estate brokers (July 15, 1988), and letter from Thomas B. Carter, Director of the FTC's Dallas Regional Office to Mr. Jack B. Carson, Executive Director of the Virginia Board of Pharmacy on proposed regulations concerning the sale of prescription drugs by physicians (November 27, 1989).

III. Proposed Regulation 155.5

Proposed regulation 155.5 would severely restrict dual trading. In essence, the regulation would ban dual trading on futures and options markets with limited exceptions. Given the limited nature of the exceptions, and for ease of exposition, we will refer to the proposal as one that bans dual trading.

The proposed ban would not take effect immediately in all markets on all exchanges. Instead, the CFTC plans to impose dual trading bans in a few markets on a few exchanges so that some evidence on the effects of a ban can be obtained and analyzed before the ban is made more general. CFTC refers to the limited ban on dual trading as its Dual Trading Restriction Implementation Plan (DTRIP).

IV. Dual Trading: Defined and Measured

In futures and options markets, trades are executed on the floors of the various exchanges.⁸ Currently, floor participants fall into one of three categories: exclusive personal traders; exclusive brokers; and dual traders. Exclusive personal traders trade solely for their own accounts. Exclusive brokers, by contrast, specialize in handling customer orders. Dual traders fill both roles, that is, during a particular trading session a dual trader handles customer orders and trades for his own account.

A dual trader's total trading volume can be divided into two categories: personal trading and customer trading. The larger of these volumes is considered his "primary volume" and the smaller his "secondary volume." Nondual traders, by definition, have no secondary volume.

The prevalence of dual trading varies across exchanges and across commodities within a particular exchange. The following two tables provide information on the prevalence of dual trading across various exchanges. Table I lists the total number of floor participants on various exchanges and the proportion of these participants who engaged in dual trading. The Table provides two definitions of dual trading. The first definition, labeled 0% secondary volume, considers a floor participant a dual trader if his secondary volume is nonzero. In other words, under the 0% definition, nondual traders specialize completely either in providing brokerage services for clients or in trading on their own accounts. The second definition. labeled 10% secondary volume, considers a floor participant a dual trader only if his secondary volume exceeds 10% of his total trading volume. More traders qualify as dual traders under the first definition than the second.

⁸ The two most prominent exchanges are the Chicago Board of Trade (CBT) and the Chicago Mercantile Exchange (CME). Together, these two exchanges account for approximately 76 percent of total futures and options trading in the United States. (See 55 Fed. Reg. 1052 (January 11, 1990))

⁹ These were the two definitions used throughout the CFTC's November 1989 Report.

TABLE I

Number of Floor Participants and the Proportion Who Qualify as Dual Traders, various exchanges (data from fifteen trading days, fourth quarter of 1988)

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Exchange ¹⁰	Total number of traders	Percent dual traders: 0%*	Percent dual traders: 10%*
CBT	3635	39.6%	8.2%
CME	1707	38.2	11.1
MCE	1091	22.8	3.7
NYME	496	52.8	29.1
CMX	250	63.2	32.3
CSCE	208	69.7	47.7
NYCE	171	54.4	28.7
KCBT	91	52.8	15.4
MGE	43	25.6	13.9
CRCE	19	42.1	10.5
TOTAL	7639	39.1	12.1

* 0% (10%) definition means that the secondary volume of dual traders exceeds 0% (10%)

Looking first at the "0%" column, Table I indicates that 39% of all traders on these ten exchanges were dual traders to some extent during this period. Note the variation across exchanges: the proportion of dual traders ranges from about 70% on the CSCE to 23% on the MCE. The "10%" column indicates that only 12% of all traders have a secondary volume that exceed 10% of their total volume. Still, substantial variation exists: dual traders represent over one fourth of all traders on four of the exchanges under this definition.

Table II provides for each exchange information on the total volume of trading and the proportion of that volume handled by dual and nondual traders. As in Table I, two definitions of dual trading (the 0% and 10% standards) are used.

¹⁰ Exchanges: CBT: Chicago Board of Trade; CME: Chicago Mercantile Exchange; MCE: MidAmerica Commodity Exchange; NYME: New York Mercantile Exchange; CMX: Commodity Exchange, Inc.; CSCE: New York Coffee, Sugar, and Cocoa Exchange; NYCE: New York Cotton Exchange; KCBT: Kansas City Board of Trade; MGE: Minneapolis Grain Exchange; CRCE: Chicago Rice and Cotton Exchange.

TABLE II

Average Daily Total Trading Volume, Percent of Total Volume Accounted for by Dual Traders, and Percent of Total Volume Accounted for by Secondary Volume (data from fifteen trading days, fourth quarter of 1988)

Average daily volume (contracts)	Pct. acct. for by dual <u>traders: 0%*</u>	Pct. acct. for by dual traders: 10%*	Pct acct. for by second- ary vol: 0%*
923.716	55.5%	18.8%	6.8%
487,179	35.8	16.3	5.7
27,969	36.5	14.5	4.7
262,721	39.7	26.5	8.5
99,029	54.7	38.5	13.1
61,339	59.5	44.4	14.6
24,305	55.9	35.2	11.1
11,382	35.7	14.1	4.5
3,128	27.9	21.1	7.3
361	56.7	26.2	9.1
1,901,129	47.9	21.2	7.4
	Average daily volume (contracts) 923,716 487,179 27,969 262,721 99,029 61,339 24,305 11,382 3,128 361 1,901,129	Average daily volumePct. acct. for by dual traders: 0%*923,71655.5%923,71655.5%923,71655.5%487,17935.827,96936.5262,72139.799,02954.761,33959.524,30555.911,38235.73,12827.936156.71,901,12947.9	Average daily volume (contracts)Pct. acct. for by dual traders: $0\%^*$ Pct. acct. for by dual traders: $10\%^*$ 923,716 55.5% 18.8% 923,716 55.5% 18.8% 487,179 35.8 16.3 27,969 36.5 14.5 262,721 39.7 26.5 99,029 54.7 38.5 61,339 59.5 44.4 24,305 55.9 35.2 11,382 35.7 14.1 3,128 27.9 21.1 361 56.7 26.2 1,901,129 47.9 21.2

 0% (10%) definition means that the secondary volume of dual traders exceeds 0% (10%)

Table II shows clearly the wide variation across exchanges in both the volume of trading and the proportion of volume handled by dual traders. Note, in particular, that two exchanges with relatively high proportions of total volume handled by dual traders are the New York Coffee, Sugar and Cocoa Exchange (CSCE) and the Commodity Exchange, Inc. (CMX).

Tables I and II indicate that dual traders exist on all exchanges to some extent, and that these traders handle a significant percentage of total volume. Comparing the 10% columns of Tables I and II indicates that many dual traders have a secondary volume below 10%; that is, many traders who qualify as dual traders under the 0% standard qualify as nondual traders under the 10% standard. In other words, a significant proportion of dual traders concentrate, but do not specialize, on either trading for customers or trading on their own accounts.

The right-most column of Table II provides an alternative way to consider the volume of dual trading on a particular exchange. The figures in this column represent the proportion of total volume represented by "secondary volume." If all traders split equally their trading between personal and customer trading, then the volume of trading represented by "secondary volume" would be 50%. By contrast, if all traders specialized in either customer or personal trading, secondary volume would be 0%. Table II shows that, on average, only 7.4% of all volume is "secondary volume."¹¹ Note again, however, that the proportions vary across exchanges, and that secondary volume is highest on the CSCE and the CMX.

We believe that the Dual Trading Study provides convincing evidence that exchanges differ markedly in terms of the average volume of daily contracts traded, the number of traders on the floor, and the proportion of traders who are dual traders. Presumably, the observed differences can be attributed to some extent to variations in important features, such as customers' demand for liquidity, the cost to traders of obtaining information, the volume of contracts traded in a particular session, and the ability of new traders to enter and exit the exchange. While we do not attempt to explain the variation in the structures of the various exchanges, we would caution that the observed variation argues against generalizing the findings from one exchange to others, or basing policy on the average effects across all exchanges.

V. The Costs and Benefits of Dual Trading

The costs associated with dual trading arise from a conflict of interest problem. For instance, suppose a dual trader receives an order to sell a block of futures that is sufficiently large to affect the price of the particular future involved. The dual trader could personally benefit by selling from his own account ahead of the client's order, and then repurchasing the future for his own account after its price had fallen. By considering the potential gains on his own account, the dual trader may fail to secure the best terms for his client. In addition, behavior of this nature may not only impose significant efficiency costs by distorting pricing signals, but also may lower investor confidence in the futures and options markets overall. The Federal Register Notice provides details on other abuses that either rely on dual trading or are facilitated by it.¹²

As to potential benefits, it has been argued that dual trading improves the operation of futures and options markets in two ways. First, the gains available from being able to trade both for clients and for one's own account may increase the supply of traders on the floors of the exchanges. This increase in supply of traders could make the markets more liquid (i.e., make it easier for a buyer to find a seller), thereby lowering the costs of trading to all participants. Second, it has been argued that dual traders, because they have their own money at stake, tend to be the most skillful traders, which then lowers the costs of executing trades for their clients. The next section discusses evidence collected and analyzed by the CFTC which attempts to measure the benefits of dual trading.

¹¹ The CFTC's Federal Register Notice highlights this finding. <u>See</u> 55 Fed. Reg., p. 1050.

¹² The possibilities for abuse are not hypothetical. In 1989 the FBI alleged that several traders on the Chicago Mercantile Exchange and the Chicago Board of Trade engaged in abusive trading practices. Pursuant to that investigation, the Department of Justice has obtained several plea agreements which describe the methods by which these traders received compensation for their trading abuses. See 55 Fed. Reg., pp. 1049-52.

VI. An Appraisal of Some of the Findings cited in the Dual Trading Study

In an effort to analyze the determinants of dual trading and to measure dual trading's benefits (which are the same as the costs of banning it), the CFTC gathered extensive data from all but one of the active commodity exchanges.¹⁸ Specifically, the CFTC randomly selected 15 trading days from the fourth quarter of 1988 and gathered information on every trade made on those dates. Information on approximately 4,200,000 futures transactions and 400,000 options transactions was gathered and analyzed. The CFTC's data collection and subsequent analysis is impressive, and the findings from this extensive study were reported in the Dual Trading Study. The Dual Trading Study represents the first systematic attempt to assess the economic benefits associated with dual trading.

There are a few instances, however, where we would interpret the results contained in the Dual Trading Study somewhat differently than did the CFTC Division of Economics staff. We focus on two such differences: whether dual trading is more prevalent in low volume markets and in distant trading months, and whether dual trading contributes measurably to a market's liquidity.

a. <u>Prevalence of Dual Trading in Low Volume Markets and More Distant</u> <u>Trading Months</u>

One of the findings cited in the Dual Trading Study is that "The incidence of dual trading is not higher in low volume markets or more distant trading months."¹⁴ This finding is important because it provides some support for the CFTC's proposal to ban dual trading in *all* markets. The analysis presented in the Dual Trading Study, while consistent with the finding that the incidence of dual trading is not higher in low volume markets or more distant months, relies on the comparison of simple averages. In this section, we present some results using multivariate statistical techniques which we believe provide some potentially useful insights on whether dual trading is more prevalent in low volume markets and distant trading months. Our analysis leads us to suggest that the CFTC consider further the factors that influence the degree to which dual trading exists in certain markets.

With respect to low volume markets, the data presented in the CFTC Report indicate that, on average, the proportion of trades handled by dual traders tends to decline as the size of the market declines.¹⁵ It should be noted, however, that the data indicate significant variation across exchanges, and that in two exchanges (the Chicago Rice & Cotton Exchange and the New York Coffee Sugar & Cocoa Exchange) the proportion of trades handled by dual traders is actually highest in the lowest volume markets (fewer than 60 contracts per day.) We suggest that the CFTC consider whether the variation across exchanges in the proportion of dual trading in low volume markets argues in favor of analyzing these markets in more detail before banning dual trading in all markets.

¹³ One small exchange was omitted because the exchange could not provide the necessary data in machine readable form.

¹⁴ Dual Trading Study, p. 3.

¹⁵ Dual Trading Study, Tables 1.10 and 1.11.

With respect to distant trading months, the data in the CFTC Report indicate no apparent relationship between the proportion of trades handled by dual traders and the time period separating the contract's trading and maturity dates.¹⁶

Our analysis uses data from the Dual Trading Study to examine how various factors influence the extent to which dual trading exists in a particular market.¹⁷ The CFTC dataset contains detailed information on fourteen particular commodity markets for fifteen randomly selected trading days from the fourth quarter of 1988.¹⁸ In creating this dataset, the CFTC first divided each of the fifteen trading days into half-hour trading brackets. As a result, each observation in the dataset contains information on, among other things, the volume of trading handled by dual and nondual traders during a particular half-hour trading period, and the prices at which contracts traded. Our interest here is to discover whether the use of a different approach supports the Dual Trading Study's finding that dual trading was not more prevalent in lower volume trading markets and in more distant trading months. For our analysis, we estimated the following multivariate regression equation:

 $PCTDUAL_t = a_0 + b_1 TOTVOL_t + b_2 LENGTH_t + b_3 BASPREAD_t + b_4 RISK_t$

+ c_t

where,

PCTDUAL	-	percentage of the total volume of trading handled by dual traders during bracket t;
TOTVOL	=	total number of contracts traded during bracket t;
LENGTH	-	time period (in months) between the trading date and the maturity date for contracts traded in bracket t;
BASPREAD _t	-	estimate of the bid/ask spread in bracket t, calculated as the average of the absolute value of each price change that occurred in the half-hour bracket divided by the last price observed in the bracket;
RISK _t	-	estimate of the price risk in bracket t, measured by the difference between the maximum and the minimum prices during the bracket divided by the average price observed during the bracket;
c _t	-	random error term; and

¹⁶ Dual Trading Study, Table 1.13.

¹⁷ The CFTC's Division of Economic Analysis kindly provided these data to us.

¹⁸ The commodity markets are listed in Table 3.5 of the Dual Trading Study. These data underlie the multivariate regression analysis discussed on pages 41-47 and in Appendix A of the Dual Trading Study. a_0 and b_1 - b_4 are coefficients to be estimated.

This specification presumes that the prevalence of dual trading on a particular market depends on the potential rewards to engaging in the practice. Factors that should influence a trader's decision to dual trade include the market's riskiness and liquidity. The variable RISK is included as a measure of the market's riskiness, and the variables TOTVOL and BASPREAD are included as measures of the market's liquidity.¹⁹ The variable LENGTH is included to test whether, after controlling for these other factors, dual traders are more or less prevalent in more distant trading months.

If, contrary to the finding cited in the Dual Trading Study, dual trading provided important benefits in low volume markets and in distant trading months, the estimated coefficient on TOTVOL would be negative and the estimated coefficient on LENGTH would be positive. The coefficient on RISK would be positive if relatively risky markets (i.e., those with greater price fluctuations) provide greater opportunities for dual traders to use their personal accounts to provide temporary liquidity in hopes of earning income. Finally, if the rewards to dual trading decrease as the market becomes more liquid, we would expect the coefficient on BASPREAD to be negative.

These data raise two econometric issues. First, each observation is based on trading that occurred in a particular thirty minute trading bracket. Consequently, the variables included in the analysis are averages derived from the individual trades that occurred during the bracket. As noted earlier, trading volume in a particular bracket varies widely both across exchanges and across markets on a given exchange. Because our variables are based on averages, they will be measured more reliably in higher volume brackets.²⁰ The procedure used to estimate the parameters of interest should account for these differences.

Second, the dependent variable (PCTDUAL) cannot be less than zero or greater than one hundred. In general, the estimation procedure should try to account for this feature of the dependent variable.²¹

Due to these econometric issues, we estimated the equation three different ways.²² First, we used the standard ordinary least squares (OLS)

²⁰ In statistical terms, the variance of an average will decline as the number of observations used to compute the average increases.

²¹ In econometric terms, the dependent variable is censored both from below and from above.

²² Our specification is admittedly simplistic in that it assumes that the independent variables cause changes in the dependent variable, PCTDUAL. As discussed in the Dual Trading Study, causation could also run the other way: the amount of dual trading could influence a market's liquidity. This simultaneity suggests that econometric techniques more elaborate than those used here or in the Dual Trading Study may be required to estimate the (continued...)

¹⁹ The difference between the bid and ask prices (BASPREAD) is commonly used as an indicator of liquidity. Greater liquidity leads to lower bid-ask spreads, which makes it easier for a buyer to locate a seller and vice versa.

approach. This approach makes no adjustment for either of the two econometric issues discussed above. Second, we used a weighted ordinary least squares (OLSWT) approach, which accounts for the fact that the data are increasingly reliable as the number of contracts traded in the bracket increases. Third, we used the TOBIT estimation procedure, which accounts for the fact that the dependent variable is bounded by zero from below and one hundred from above.²³

The following table provides the estimated coefficients from these three estimation procedures. For each procedure, the equation was estimated first using the 0% definition of dual trading, and then using the 10% definition.²⁴

²²(...continued)

²³ Unfortunately, when we tried to control for both econometric issues simultaneously (by using a weighted Tobit) the estimation procedure failed to converge.

relationships between dual trading and other variables of interest. Our purpose in presenting these results is merely to point out that the Dual Trading Study's finding regarding the prevalence of dual trading in lower volume markets and more distant trading months may not hold up under relatively simple statistical scrutiny.

²⁴ Recall that the 0% (10%) definition defines a trader as a dual trader if his secondary volume exceeds 0% (10%). Table III indicates that the proportion of trading volume handled by dual traders falls from approximately 63% to approximately 31% when the definition shifts from 0% to 10%. For our purposes, both definitions are somewhat flawed. The 0% definition defines too many traders as dual traders because a trader is considered to be a dual trader if he makes a single trade on his own account to correct an error he made while handling a client's order. While the 10% definition corrects this by considering such a trader to be a nondual trader, the 10% threshold may cause errors in the other direction: traders with close to but less than 10% secondary volume may be incorrectly classified as nondual traders.

TABLE III

Estimated regression coefficients (absolute value of t-statistics in parentheses) Dependent variable: PCTDUAL Number of observations: 5266

0% Definition

	OLS	OLSWT	TOBIT
TOTVOL	.0002*	.0002**	.0002
	(2.28)	(18.32)	(0.59)
LENGTH	1.54**	2.13**	2.04**
	(11.89)	(12.55)	(13.90)
BASPREAD	-5.63**	33.72 **	-5.53 **
	(2.92)	(8.47)	(3.27)
RISK	7.07 **	2.87 **	6.81**
	(10.88)	(5.93)	(8.65)
ADJ R ²	0.0445	0.1264	n/a
Mean of PCTDUAL	62.76	62.76	62.76

10% Definition

	OLS	OLSWT	TOBIT
TOTVOL	0002*	.00003**	0001
	(2.51)	(2.82)	(0.23)
LENGTH	0.58**	0.95**	0.33*
	(4.84)	(7.45)	(2.46)
BASPREAD	10.14 **	54.79**	11.03**
	(5.63)	(18.41)	(8.08)
RISK	6.29 **	1.62**	7.54 **
	(10.38)	(4.48)	(11.25)
ADJ R ²	0.0494	0.1716	n/a
Mean of PCTDUAL	30.95	30.95	30.95

** significant at 99% level
* significant at 95% level

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These results with respect to TOTVOL and LENGTH are both interesting and puzzling. First, note that the coefficient on TOTVOL is positive and significant using the weighted least squares (OLSWT) approach but insignificantly different from zero using the TOBIT procedure.²⁵ The results from the OLSWT analysis support the Dual Trading Study's finding in that they indicate that dual trading is actually more prevalent in higher volume markets. Still, the failure of this result to carry over to the TOBIT analyses suggests that the relationship between the prevalence of dual trading and the volume of trading in the market may be more complicated than suggested in the Dual Trading Study.

Second, the coefficient on LENGTH is consistently positive and significant, suggesting (contrary to the finding cited in the Dual Trading Study) that dual trading is more prevalent in more distant trading months.²⁶ These results lead us to suggest that the CFTC reconsider its conclusion that dual trading is not more prevalent in more distant trading months.²⁷

The results from these regressions do not provide a clear picture of the determinants of dual trading.²⁸ The sensitivity of the results depending on the specification used leads us to suggest that the CFTC consider using the DTRIP to examine these issues further. Perhaps the most straightforward way to do this would be to compare a market's performance during a period when dual trading is permitted with its performance during a period when dual trading in selected markets, we suggest that the CFTC consider the possible benefits and costs of banning dual trading in some of the markets in which it has already collected and analyzed extensive data, such as those that underlie the Dual Trading Study's regression analysis.

b. <u>Measuring the Effect of Dual Trading on Liquidity</u>

The econometric section of the Dual Trading Study presents a model capable of estimating the importance of dual trading to a market's liquidity.

²⁶ The coefficients on LENGTH range in value from 0.33 to 2.13. This suggests that, holding other factors constant, increasing the contract length by three months would be associated with an increase in the proportion of trades handled by dual traders of between 1.0% and 6.4%.

²⁷ In addition, in separate analyses we added dummy variables to account for the three types of markets included in the data (agricultural, financial, and international/metals). Inclusion of these dummies did not alter the results reported in the text. Interestingly, the coefficients on the dummy variables suggest that dual trading was significantly more prevalent in international/metals markets and significantly less prevalent on financial markets. These analyses lead us to suggest that the CFTC use the DTRIP to conduct detailed analyses of the effects of dual trading in particular markets.

²⁸ Note, for instance, that the coefficient on BASPREAD is positive and significant under most specifications but negative and significant under some.

²⁵ Looking at the results from the TOBIT procedure, the coefficient on TOTVOL is positive under the 0% definition and negative under the 10% definition. However, the relatively low t-statistics indicate that neither coefficient is significantly different from zero.

Specifically, this model generates an estimate of a parameter that captures the marginal increase in liquidity provided by the volume of trade handled by dual traders. In this model, liquidity is measured by the difference between the bid and ask prices -- the so-called "spread". When this model is estimated using the data from all fourteen commodities, the parameter estimate suggests that the marginal contribution to liquidity from the trading volume of dual traders is negligible. After citing this finding, the Dual Trading Study concludes:²⁹

A literal interpretation of (this result) implies that, at a given level of nondual trading, dual trading has no effect on liquidity. As will be shown in subsequent analyses, this literal interpretation is overly aggressive. It is more reasonable to conclude that... nondual trading makes a greater contribution to liquidity than dual trading.

Despite the qualification, the text's overall impression is that dual traders provide little if any contribution to a market's liquidity. One of the "subsequent analyses", however, suggests the opposite. When the same model is estimated using only the data from commodities traded on the metals and international commodities exchanges, the results suggest that dual traders are far more important than nondual traders to the exchange's liquidity.³⁰ While the Dual Trading Study notes that, in this case, "the relative influence of dual trading is more important than for nondual trading,"³¹ it nonetheless concludes that dual traders generally provide nothing unique to futures markets.

We think the conclusion may have been drawn too broadly. The econometric results clearly suggest that dual traders provide a significant amount of liquidity to the metals and international agricultural markets. In addition, Tables I and II indicate that these are the exchanges (the CSCE and the CMX) where dual trading is most prevalent. Together, these findings suggest to us that dual traders may provide important services to these exchanges and that banning dual trading could impose some efficiency costs. Whether these costs would be outweighed by other benefits, of course, is the ultimate question. Given that extending a ban on dual trading to these exchanges might entail significant costs, we recommend that the CFTC analyze these exchanges in more detail than is currently contemplated by the proposed DTRIP.

We have one further suggestion regarding the design of the DTRIP. The Dual Trading Study indicates that the CFTC has analyzed extensively data from the fourth quarter of 1988 from fourteen futures markets on ten exchanges. If these same markets were chosen for the initial round of bans on dual trading, the CFTC would have the opportunity to examine how these markets operate with and without a dual trading ban. Given the variety in market characteristics, it becomes all the more important to analyze particular markets in detail and not extrapolate the results found for certain markets (say,

²⁹ Dual Trading Study, p. A-8.

³⁰ In this analysis, the metals and international commodity exchanges are the New York Coffee, Sugar and Cocoa Exchange (CSCE), the Commodity Exchange, Inc. (CMX), and the New York Cotton Exchange (NYCE).

³¹ Dual Trading Study, p. A-11.

the financial markets or proximate trading months) to others (say, the metals markets or distant trading months) where similar results may not apply. If such an approach is possible, we believe it would provide information helpful in assessing the costs and benefits of dual trading in various settings.

VII. Conclusion

We suggest that the CFTC revise its DTRIP in three ways. First, we suggest that low volume markets and distant trading months be analyzed in detail before extending a dual trading ban to these types of markets. Second, we suggest that more attention be given to the metals and international commodity exchanges because the Dual Trading Study suggests that dual trading may be important to the efficient operation of these exchanges. Third, we suggest that the DTRIP focus the initial round of dual trading bans on markets where substantial amounts of information have already been collected and analyzed. Such a design would allow the CFTC to examine efficiently whether dual trading provided demonstrable benefits in excess of costs in particular markets. If net benefits are detected, the CFTC may wish to reconsider its proposal to extend the dual trading ban to all markets.

We hope our comments are helpful. In closing, we would like to commend the CFTC for its decision to collect information on the likely effects of a dual trading ban in selected markets prior to deciding whether to extend the ban to all markets.