IN THE UNITED STATES DISTRICT COURT

FOR THE WESTERN DISTRICT OF WISCONSIN

- -

SOUTHWIRE COMPANY, GASTON COPPER RECYCLING CORPORATION, ASARCO INC., n/k/a ASARCO LLC, KENNECOTT UTAH COPPER CORP., LEVITON MANUFACTURING CO., INC., AMERICAN INSULATED WIRE CORPORATION, ESSEX ELECTRIC, INC., n/k/a EXEON INC., MUELLER COPPER TUBE CO., INC., MUELLER COPPER TUBE PRODUCTS, INC., SUPERIOR TELECOM, INC., n/k/a SUPERIOR ESSEX INC., AETNA INSULATED WIRE; CERRO E.M.S. LIMITED, CERRO FABRICATED PRODUCTS, INC., CERRO FLOW PRODUCTS, INC., CERRO METAL PRODUCTS COMPANY, CERRO WIRE & CABLE CO., INC., COMTRAN CORPORATION, HENDRIX WIRE & CABLE, INC., THE KERITE COMPANY, ROCKBESTOS-SURPRENANT CABLE CORP. and OWL WIRE AND CABLE INC.,

Plaintiffs,

v.

J.P. MORGAN CHASE & CO., as successor to J.P. MORGAN & CO., INC. and MORGAN GUARANTY TRUST COMPANY OF NEW YORK,

Defendants.

MDL Docket No. 1303

OPINION AND ORDER

02-C-707-C, 03-C-314-C, 03-C-316-C, 03-C-317-C, 03-C-318-C, 03-C-368-C 06-C-169-C

- -

This civil antitrust action for money damages is before the court on the motion of defendants J.P. Morgan Chase & Co. and Morgan Guaranty Trust Company of New York for summary judgment on the claims of plaintiffs Southwire Co., Gaston Copper Recycling Corp., ASARCO LLC, Kennecott Utah Copper Corporation, American Insulated Wire Corporation, Leviton Manufacturing Co., Inc., Exeon Inc., Mueller Copper Tube Co., Inc., Mueller Copper Products, Inc., Superior Essex, Inc., Cerro Flow Products, Inc., Cerro Metal Products Company, Cerro Wire & Cable Co, Inc., Comtran Corporation, The Kerite Company, Rockbestos-Surprenant Cable Corp and Owl Wire and Cable Inc. (Plaintiffs Aetna Insulated Wire, Cerro E.M.S. Limited, Cerro Fabricated Products, Inc., and Hendrix Wire & Cable, Inc., have stipulated that they did not purchase copper cathode or copper rod during the years 1993-1996 and for that reason are not claiming damages in this action. They will be dismissed as parties.)

Plaintiffs contend that defendants violated section 1 of the Clayton Act, 15 U.S.C. § 15, and section 4 of the Sherman Act, 15 U.S.C. § 1, by conspiring with Sumitomo Corporation's chief copper trader, Yasuo Hamanaka to "squeeze" the copper market and raise prices for Sumitomo's copper holdings. (A "squeeze" is a "market situation in which the lack of supplies tends to force shorts to cover their positions by offset at higher prices." CFTC Glossary: A Guide to the Language of the Futures Industry, available at http://www.cftc.gov/opa/glossary/opaglossary_s.htm (last visited Apr. 23, 2007). Plaintiffs' theory is that defendants were aware that Sumitomo was manipulating copper futures prices and that they provided services and loans to finance and hide Sumitomo's illegal activity. Plaintiffs allege that defendants' deals were structured as individual option and forward transactions but that they were in fact financing arrangements supporting Hamanaka's market manipulations.

Although trial in the case is scheduled to begin on May 29, 2007, defendants believe that trial will not be necessary because plaintiffs lack sufficient evidence from which a jury could find that defendants knowingly agreed with Hamanaka to take actions that would result in a manipulation of the copper market. In addition, defendants argue that plaintiffs cannot establish that they have suffered an antitrust injury because their own damages expert has acknowledged that the econometric model he employed does not attempt to discern whether defendants' allegedly manipulative transactions had any actual effect on the price of copper traded on the New York and London metal exchanges. Defendants maintain that without this information plaintiffs cannot show a connection between the transaction and the price of physical copper. Further, defendants argue, even if plaintiffs can prove a conspiracy between defendants and Hamanaka that affected the price of exchange-traded copper, they lack standing to sue for nearly half the purchases they claim were affected by the conspiracy. Finally, defendants have moved in limine to exclude the reports of plaintiffs' expert witnesses, Christopher Gilbert, Roy Henry and Marianne DeMario.

I conclude that the evidence is sufficiently disputed to allow a jury to find reasonably that defendants "knew that Sumitomo intended to restrain trade, intended that trade be restrained, and materially contributed to that restraint," Loeb Industries, Inc. v. Sumitomo Corp., 306 F.3d 469, 497 (7th Cir. 2002), that the econometric model that plaintiffs' expert has employed is not obviously inadequate to identify the effect of the allegedly manipulative transactions on the price of exchange-traded copper and that although plaintiffs have established their antitrust standing to bring suit, the question of what damages they may receive at trial is not one that can be decided on the present record. Therefore, defendants' motion for summary judgment will be denied in its entirety. In addition, because the expert testimony of Christopher Gilbert, Roy Henry and Marianne DeMario qualifies as expert under Fed. R. Evid. 702 and Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579 (1993), defendants' motions in limine to exclude the testimony of these experts will be denied.

From the parties' proposed findings of fact, I find the following facts to be material and undisputed.

UNDISPUTED FACTS

A. The Cast of Characters

Plaintiffs are either integrated producers of copper or manufacturers of copper wire or copper tubing. With the exception of plaintiffs Aetna Insulated Wire, Cerro E.M.S. Limited, Cerro Fabricated Products, Inc., and Hendrix Wire & Cable, Inc., all of them purchased copper cathode, rod or ingot during the period 1993-1996. Defendant J.P. Morgan Chase & Co. is a leading global financial services firm and one of the largest banking institutions in the United States. Defendant Morgan Guaranty Trust Company of New York is a wholly owned subsidiary of defendant J.P. Morgan Chase & Co. (For the purposes of litigation, defendants have been treating themselves as one entity and I will do the same.) J.P. Morgan Securities Ltd. is a securities dealer incorporated in England and Wales and a member of the London Metal Exchange.

Sumitomo Corporation is one of Japan's oldest trading houses, with interests that include banking, computer manufacturing, chemicals, mining and machinery. It is a major metals trader in Japan and in other parts of the world. In the early 1990s, it handled approximately 500,000 metric tons of copper a year, or about 5% of the world's total annual copper production.

Yasuo Hamanaka began working for Sumitomo Corporation in Japan in 1970. In 1985, when he was working as a copper trader in the non-ferrous metal department, he lost $6.5 billion yen on Sumitomo's copper transactions. Not wanting to disclose the losses, he began taking steps to cover them up by engaging in a variety of financial transactions, including derivative transactions in the copper future markets that continued into 1996.

Hamanaka was authorized to deal in derivatives and other kinds of financial transactions, but he ignored Sumitomo's internal regulations in the way he carried out the transactions and the purposes for which he pursued them. To give his actions verisimilitude, he counterfeited documents and forged signatures.

In 1993, Keith Murphy was head of defendants' base metal activities, which had their headquarters in London. From 1993 until 1996, he was responsible for direct marketing to existing and prospective global clients with the goal of generating revenue and market share for defendants.

B. Physical Copper

Copper producers extract ore from a mine and crush or mill it into a gravel-like substance known as concentrate. Smelters separate out the nonferrous metals in the concentrate, producing one-meter square plates of anode, which are approximately 90% copper. That anode is refined electrolytically to create sheets of cathode, which are fed into a furnace at a mill and melted into rod or wire. Loeb Industries, Inc. v. Sumitomo Corp., 306 F. 3d at 475. Refined copper can also be made from copper scrap, which is recycled and reintroduced into the refining process.

Participants in the physical copper market include integrated producers, smelters, semi-fabricators, merchants and traders, manufacturers, retailers and scrap dealers, all of whom buy and sell copper at each state of the production process. Integrated producers are mining companies engaged in the extraction and refining of copper. They both buy and sell refined and pre-refined products. In the event of a production shortfall, an integrated producer might purchase cathode or rod from a third party, rather than refining copper itself. A consumer cannot tell the specific origin of a particular sheet of cathode from looking at it or at the documentation accompanying delivery.

C. Copper Transactions in General

Copper transactions take place in three markets: the physical copper market, the futures market and the over-the-counter derivatives market. In the physical copper market, customers buy copper in its physical form for further refining, for use in a product or for resale. From October 1993 to December 1996, plaintiffs purchased copper cathode or rod from numerous integrated producers and from merchants. (Although purchases of rod pay a premium over and above that paid for cathode, the court of appeals held that the additional premium does not render the purchaser's injury direct. The premium is small and ends to increase as the Comex price increases. Loeb Industries, 306 F.3d at 495.

In the futures market, copper is traded on commodities exchanges through warrants and futures contracts traded on either the London Metal Exchange (LME) or the New York Mercantile Exchange (known as Comex) on a principal-to-principal basis. The London

Metal Exchange contracts assume an eventual delivery of physical copper on a prompt date. In reality, such deliveries rarely do not occur because the majority of the LME business is carried out for trade hedging, that is, for minimizing the risks of price fluctuations in the market at the time of delivery.

On the over-the-counter market, copper derivative transactions are negotiated privately between dealers and end-users.

D. Defendants' Copper Transactions with Sumitomo

In 1992 and early 1993, defendants began to focus on their base metals trading business. To that end, Kevin Murphy and another employee of defendants, Brian Harmon de Clare, approached Yasuo Hamanaka in August 1993, to discuss setting up a copper trading relationship with Sumitomo.

Defendants engaged in a number of transactions with Sumitomo between 1993 and 1996, five of which are of particular significance in the parties' eyes. importance to the suit. In September 1993, Sumitomo, through Hamanaka, proposed a large copper derivatives transaction to Murphy. Although the proposal raised concerns among defendants' managers, who declined the transaction as proposed, they approved it after Sumitomo changed its timing. As proposed originally, Sumitomo was to sell defendants over-the-counter put options for 600,000 metric tons at a strike price of $2000 per metric ton, along with three financially settled forward transactions under which defendants would buy 585,000 metric tons of copper at prices between $1740 and $1750 per metric ton, with both transactions to be settled in cash. The premium for the options was $145.8 million. After amendment, to allay defendants' concerns about Sumitomo's use of the transaction to beef up its mid-year earnings, the metric tons of copper were increased to 1 million.

In the process of considering Sumitomo's proposals, defendants asked Kazutaka Suzuki, one of defendants' senior credit officers in Tokyo, to discuss the proposed transaction with Sumitomo senior management. In a memorandum, Suzuki reported that he had called Takehiko Yonezu, a member of Sumitomo's executive committee and a senior managing director. Suzuki wrote that he described the proposed deal to Yonezu as one involving a sale of copper put options covering as much as 1 million metric tons for a premium payment to Sumitomo's Hong Kong subsidiary of $280 million to $300 million. According to Suzuki, Yonezu confirmed the company's awareness of the transaction and told Suzuki that the transaction was related to one of Sumitomo's clients located near Hong Kong.

In March 1994, Hamanaka approached defendants about entering into a copper option transaction involving put and call options and forward contracts. Defendants' Tokyo Management Committee met on March 29 to discuss the Sumitomo proposal, which was to close before March 31 and would involve 1.8 million metric tons of copper and a premium payment to defendants of $253.8 million. The deal was to provide funding at an effective price of 570 bp (basis points) over libor (the London InterBank Offered Rate), within a copper price range of $1900 to $2000 per metric ton on maturity. Defendants were aware that Sumitomo had access to ten year funds at 10 bp below libor. The committee was concerned that such a large deal so close to Sumitomo's fiscal year end might be used to manipulate reported earnings, particularly in light of the company's effort to obtain a similar deal two days before its September 1993 interim period end. The committee was worried about "the substantial market risk involved in obtaining funding in this manner." Handley Decl., dkt. #776, exhs. ##121-28, 130. Seeking further clarification of the company's motivation for the deal, the committee learned from Price Waterhouse that Japan's Generally Accepted Accounting Procedures would not allow Sumitomo to take the premium on the deal as income or use the deal in any other way to manipulate earnings. Japan's procedures required capitalization until expiration of premiums on commodity options. Sumitomo told the committee that its motivation was to obtain funding without drawing down other credit lines and that the substantial market risk of obtaining funding in this way was not a concern because it had offsetting options purchased from a client. The committee concluded that it had no reason to withhold approval for the transaction. Although it would have preferred to do the deal after Sumitomo's fiscal year end, it did not insist on this condition. The deal went ahead on March 30, 1994.

On April 4, 1994, Hamanaka transferred defendants' entire premium payment back to defendants, where the deposit earned overnight interest rates, pending further instructions from Sumitomo. Defendants did not consider the deposit unusual; clients left funds with defendants on occasion.

On August 24, 1994, Murphy arranged a meeting with Sumitomo's senior management. One of the purposes of the meeting was "to glean understanding as to the extent that Immamura [sic] is aware and briefed on the business completed and the relationship, etc." Duncan Decl., dkt. #767, exh. #93.

In October 1994, when David Pryde was defendants' Global Head of Commodities. he met briefly with Akio Imamura, General Manager of Sumitomo's Non-Ferrous Metals Division and Hamanaka's superior, and discussed the copper derivatives transactions between defendants and Sumitomo. Imamura told Pryde, "[Y]ou are not seeing the whole deal. There are a couple of legs to this and you are only seeing part of the deal." Polland Decl., dkt. #679, Vol. I, exh. #23.

Four days later, Pryde traveled with Murphy to China, where they met with the president of CNIEC, a major state run copper producer, who told Pryde that he had entered into a large transaction with a large copper trader in the region. This led Pryde to believe that CNIEC was Sumitomo's customer.

In a faxed letter dated November 14, 1994, Murphy wrote Hamanaka to tell him that defendants were executing some "forward producer" selling around the $2745 level. He added, "If you have an interest, we must borrow this material 3's to the average of 95." Id., exh. #162. On November 15, Hamanaka thanked Murphy for his useful information and comments, "which were greatly valuable." Duncan Decl., dkt. #767, # 153. On November 16, 1994, Sumitomo Hong Kong paid defendants $421,308,500.00 to settle transactions dated November 19, 1993 and March 30, 1994.

In December 1994, Murphy wrote Hamanaka to propose a potential action in the cash copper market and three-month trading strategies. On December 21, 1994, defendants paid Sumitomo $31.92 million for put options on 240,000 tons of copper and an additional forward position of 153,600 tons. The positions were to expire in the fourth quarter of 1995.

Defendants executed additional large cash and copper futures trades on Sumitomo's behalf throughout 1995. Sumitomo purchased more than 1 million tons of copper and sold an additional 858,000 tons in trades executed by defendants. These volumes exceeded Sumitomo's 500,000-ton requirements for physical copper. Its total volume of copper transactions on the exchanges for the year was 2.4 to 2.5 million tons and its total volume of copper-related transactions may have been as much as 50 million tons.

On March 28, 1995, Sumitomo and defendants entered into another large financing transaction immediately before the March 31 end of Sumitomo's fiscal year. Defendants purchased call options and went short a forward, making a premium payment to Sumitomo of $90 million. (A forward contract is a "cash transaction common in many industries, including commodity merchandising, in which a commercial buyer and seller agree upon delivery of a specified quality and quantity of goods at a specified future date." CFTC Glossary, available at http://cftc.gov/opa/glossary/opaglossary_f.htm (last visited Apr. 23. 2007).

On September 29, 1995, defendants entered into a copper derivatives transaction with Sumitomo. Their next large transaction took place in March 1996 and involved put and call options, forwards and a total premium payment to Sumitomo of approximately $49.5 million. Although defendants' management had concerns about market manipulation, it found no reason not to engage in the Sumitomo transaction. It believed that the "deal in no way involves Sumitomo trying to squeeze the price as per the allegations. In fact it is delta neutral." Polland Decl., dkt. #679, Vol. 1, exh. #59. ("Delta" is "the expected change in an option's price given a one-unit change in the price of the underlying futures contract or physical commodity. For example, an option with a delta of 1.5 would change $.50 when the underlying commodity moves $1.00." "Delta neutral" "[r]efers to a position involving options that is designed to have an overall delta of zero." CFTC Glossary, available at http://www.cftc.gov/opa/glossary/opaglossary_d.htm (last visited Apr. 23, 2007). The transaction earned defendants the approximate revenue of $20.5 million on a $49.596

million transaction.

Between November 1993 and June 1996, defendants executed 149 trades on the London Metal Exchange trading copper on Sumitomo's behalf.

In its copper trading business, defendants' role was that of a dealer. As a financial institution, it was required to, and did run a delta neutral copper book, otherwise known as keeping a "square book." As a general rule, defendants kept their option book "delta neutral" on a portfolio basis, although not necessarily on intraday trading

E. Audits

At the beginning of 1995, defendants' audit department became concerned about the base metals trading in the London office. The department undertook a review of defendants' base metals business, including its copper trading operations and the copper derivations transactions between defendants and Sumitomo. In a report issued December 21, 1995, the auditors identified a number of control and procedural problems within the base metals business, but found no evidence of fraud.

In the fall of 1995, defendants engaged Arthur Andersen to undertake an independent confirmation of all transactions in base metals in London. In response to the auditors' report, defendants made changes in the London office, after which they were confident that they had taken appropriate action and that they had found no evidence of fraud.

F. The Unraveling of Hamanaka's Schemes

On April 11 and 12, 1996, Hamanaka was deposed by the Commodities Futures Trading Commission. On May 20, he was removed by Sumitomo from day-to-day trading. On June 5, 1996, he disclosed his unauthorized trading to Sumitomo, precipitating his dismissal and accelerating the sharp decline in the copper market, which fell from highs of around $2,800 a ton to below $2,000 a ton.

On June 14, Hamanaka issued a statement taking responsibility for the disgrace he had caused Sumitomo and explaining the methods he had used to carry out his scheme, which included his insistence on receiving trade confirmations directly so that Sumitomo did not find about them. The same day, Sumitomo announced that it had suffered a loss of $1.8 billion as a result of allegedly unauthorized copper trading by Hamanaka over a ten-year period and that it was terminating Hamanaka's employment. In September 1996, Sumitomo revised its losses upward to $2.6 billion. Hamanaka admitted he was guilty of fraud and forgery, was sentenced to eight years in prison and served a little more than seven years' incarceration.

When word circulated of the confession, defendants' audit/risk management department expressed concern that Murphy might flee the country or even commit suicide. Traders in the London office did not share those concerns. Defendants reassigned Murphy to the New York office and demoted him to a marketing role.

G. Investigations of Market Manipulation

After Sumitomo disclosed Hamanaka's activities, a number of regulatory investigations of Sumitomo and its trading partners were instigated; others had begun before the disclosure was made. For example, on November 8, 1995, the London Metal Exchange wrote to all members, including J.P. Morgan Securities, Ltd., requesting information on their clients' large copper positions, including "futures, options and their delta equivalent and off-Exchange products, where any such position exceeds 300 lots (7500 metric tonnes)." On November 17, 1995, Kieran Sykes, Vice President, Global Brokerage, for J.P. Morgan Securities, wrote the exchange to say that its only copper-related activity was limited to clearing exchange contracts for one client, defendant Morgan Guaranty Trust. Attached to the letter was a chart showing client contracts beneficially owned by Morgan Guaranty Trust for its own account. These included futures, puts and calls. Duncan Decl., dkt. #768, exh. #240.

On November 24, the exchange thanked J.P. Morgan Securities for its November 17 letter, but reiterated that "client" means "the ultimate position holder." Id., exh. #233. The exchange asked the company again to go through its house accounts, brokers and parent company omnibus accounts to determine the ultimate client, his positions, the dates thereof and the tonnages involved. Sykes responded on November 28, saying that J.P. Morgan Securities had previously informed the exchange that its client was Morgan Guaranty Trust and that the trust company did not act as a broker or keep a parent company omnibus account at J.P. Morgan Securities.

The exchange tried again to elicit information from J.P. Morgan Securities on December 6, when it wrote Sykes to say that one of the purposes of its inquiry was "to identify the beneficial owners of OTC or off-Exchange contracts, which have the effect of creating an on-Exchange hedge of exactly the type you have described in your letter." Duncan Decl., dkt. #768, #243. Alan Wethered, Managing Director and Chief Executive of J.P. Morgan Securities, wrote the exchange on December 8, to say that Morgan Guaranty Trust was a client of J.P. Morgan Securities, that it maintained an account with J.P. Morgan Securities for the purpose of clearing London Metal Exchange contracts, that the account was strictly an arm's length account and that Morgan Guaranty Trust was the "ultimate position holder." Wethered stated his belief that J.P. Morgan Securities had been entirely forthcoming in reporting the positions of Morgan Guaranty Trust to the exchange. Id., exh.

#244. At some point, because defendants had concerns about the confidentiality of the London Metal Exchange, they suggested that it ask the Securities and Investment Board in London to make requests for information.

On January 18, 1996, the Securities and Investment Board began an investigation of J.P. Morgan Securities, Ltd. and its activities in the copper market. On January 31, J.P. Morgan Securities provided the board with the information it had requested. It gave the board the details of its positions in "any form of contract or holdings of warrants based on copper as of 11 December 1995" and "details of all JPSML's positions in any form of contract or holdings of warrants based on copper as of 12 January 1996." Id., exh. #245. It added that defendant Morgan Guaranty Trust was "the ultimate position holder in respect of all positions identified in the attachments [to the letter]." Id. The board requested details from defendant Morgan Guaranty Trust of all of its open positions in London Metal Exchange contracts; defendant provided the details immediately, including details of all positions with Sumitomo. Id., exh. #247.

Starting in the summer of 1996, the Federal Reserve Board and the New York State Banking Department reviewed defendants' copper trading activities. During this review, the two agencies maintained offices at defendants' headquarters in New York City, where they had access to defendants' employees and records. More than twenty of defendants' employees spoke with representatives of the board or the banking department or both.

The Federal Reserve confirmed that Hamanaka enjoyed a close personal relationship with Murphy and that during the 1993-1996 period, Sumitomo had accounted for 75-80% of the revenue earned by defendants' commodities business. Defendants reviewed with the Federal Reserve its 1995 audit and analysis of the London base metal trading. In its investigative findings, the Federal Reserve expressed "serious concerns about the general level and content of management oversight of the Global Base Metals Business" and about Murphy's "business practices and conduct." Duncan Decl., dkt. #767, exh. #129. It found that although management was aware of Murphy's conduct, "no steps were taken to limit his authority or provide him with additional management oversight" and that "within the context of [defendants'] relationship with Sumitomo, there were a large number of warning signs that all was not well. . . . Along the same lines, we have also noted a troubling lack of forthrightness in the context of [defendants'] dealings with regulatory authorities." Id. These included Murphy's testimony to the Federal Reserve that he had dealt with several traders at Sumitomo, which was not true, and his testimony to the Securities and Investment Board that Sumitomo had never asked defendants to facilitate trading by a third party through Sumitomo's account with defendants. In fact Hamanaka had made such a request and Murphy had sent a power of attorney to Hamanaka to facilitate the third party trading. Id.

On December 11, 1996, the Federal Reserve and the New York State Banking Department entered into a Memorandum of Understanding with defendants. The memorandum addressed improvements in defendants' control structure but made no reference to Sumitomo, to market manipulation or fraud. However, the parties did agree that defendants would "address and consider" "the effectiveness of the due diligence process, including: (A) policies and procedures for determining that the business purposes of transactions executed with customers are reasonably transparent to both parties, that transaction structures are appropriate for the business purpose intended, that potential legal, market and reputational risks have been identified, and that documentation and legal risks have received appropriate legal review." Duncan Decl., dkt. #767, exh. #128.

Sumitomo and Merrill Lynch were investigated by the Commodities Futures Trading Commission in connection with an alleged manipulation of the copper markets. On May 11, 1998, the commission issued an order against Sumitomo and made several findings. The commission found that Sumitomo had established a dominant position on the London Metal Exchange, acting through various agents, and that it had done so for the purpose of manipulating the price of copper and copper futures upwards. In a separate proceeding, it found that Merrill Lynch had aided and abetted the Sumitomo conspiracy. It concluded that "the manipulators' warrant-taking operation was not motivated by any genuine commercial need" and this knowledge and intent supported the finding of aiding and abetting. Polland

Decl., dkt. #679, Vol. I, exh. #69, at 4. The commission found that Merrill Lynch had "realized profits from the increased backwardation in spreads created by the manipulators' activities." Id. Sumitomo paid $150 million and Merrill Lynch paid $15 million to settle the matter.

In the summer of 1996, the Commodities Futures Trading Commission began an investigation of defendants. Defendants produced documents to the commission and their employees testified before the commission. (Some of these same employees or others testified before other regulatory agencies.). The commission never brought any charges or sought any sanction against defendants related to their copper trading relationship with Sumitomo. The Financial Services Authority advised defendants on April 16, 1998 and August 14, 1998, that it would not "seek to have its investigators make further inquiries." Id., exhs. ##71 & 72.

H. Murphy's Status

In February 1997, defendants ended market making activity in base metals and closed the doors on its copper trading business. In January 1997, Murphy left defendant's employ. He received no bonus and forfeited his options.

In April 1997, Murphy wrote defendants' managing director, asking for renegotiation of his severance agreement that would include his 1996 bonus and his stock options. In July 1997, Murphy talked with Barbara Hack, an employee of defendants, and told her he believed his option forfeiture was not fair after what he had contributed to revenue for 1996. He added that he had been the "good corp. citizen" and had taken calls from the press and The Wall Street Journal, baiting him for information and had called defendants immediately. Duncan Decl., dkt. #771, exh. #300. Defendants declined Murphy's request to reinstate his stock options.

On November 23, 1998, Murphy entered into a settlement agreement and general release in which he agreed that he would not "directly or indirectly, use or disclose, or permit or aid the use by or disclosure . . . of any privileged, confidential or proprietary business information relating to" defendants' business. Id. exh. #302. Murphy agreed to give defendants notice of any subpoenas and the opportunity to resist them. Under the agreement, Murphy received a "special payment of $225,000 and the reinstatement of approximately $700,000 in stock options forfeited on his termination." Id.

I. Damages

Throughout the period of the alleged conspiracy, plaintiffs were parties to contracts under which they were obligated to sell cathode or rod to various purchasers. When they were unable to produce enough cathode or rod to fill their contractual obligations, they purchased cathode or rod from other sources, including other integrated producers and merchants. The integrated producers from whom plaintiffs purchased cathode and rod did not themselves produce all the cathode and rod they sold. The parties dispute the percentage of cathode and rod sold for the first time by each producer.

From 1993-1996, plaintiffs American Insulated Wire, Leviton Manufacturing Company and Superior Telecom purchased cathode and rod exclusively from integrated producers. During the same period, plaintiffs Kennecott, Asarco, Essex Group, Mueller Copper Tube Company, Mueller Copper Tube Products and Southwire purchased cathode through merchants when they were unable to obtain the product from integrated producers. These merchants included AICO Corp., BAL Metals International, Inc., Billiton Metals Inc., Brandeis Ltd., Cerro Sales Corp., Conversion Resources, Inc., Essex, Gerald Metals, Glencore Ltd., Heisei Minerals Corp., International Metals, J. Aron & Co., Kataman Metals, Inc., Kobe Copper Products, Kojemi Corp., Manitoba Corp., Metal Commodities, MG Metal and Commodity Co., Miles Metal Company, Minemet Inc., Minorco, Mitsubishi Materials America Corp., Mitsui & Co., Outokumpu, Pechiney World Trade Inc., PMX Industries, Inc., Samsung America, Inc. and Southwire Company. (In making this finding, I have disregarded the statements of plaintiffs' employees to the extent they conflicted with the sworn statements of the merchants themselves about their sales of cathode or copper rod when plaintiffs' employees did not explain how they would have had personal knowledge of the sources of the products sold, when they did not make it clear that the purchases were made within the relevant time period or when plaintiffs' own admissions of those of its experts classified the source as a merchant rather than a producer.) The parties dispute the terms and conditions under which these sales were made, whether the merchants ever took possession of the copper and when and how payments were exchanged among plaintiffs, the merchants and the integrated producers.

OPINION

A. Evidence of Defendants' Knowing Participation in Conspiracy

Section 4 of the Sherman Act, 15 U.S.C. § 1, makes illegal "[e]very contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several States, or with foreign nations" and subjects persons found guilty of such conspiracies to criminal penalties. Section 1 of the Clayton Act, 15 U.S.C. § 15, gives persons injured "by anything forbidden in the antitrust laws" the right to sue for relief in federal court. To prove the elements of a claim under § 4 of the Sherman Act of knowing participation in a conspiracy, a plaintiff must come forward with evidence showing that the defendant "'had a conscious commitment to a common scheme to achieve an unlawful objective.'" Monsanto Co. v. Spray-Rite Service Corp., 465 U.S. 752, 764 (1984) (quoting Edward J. Sweeney & Sons, Inc. v. Texaco, Inc., 637 F.3d 105, 111 (3d Cir. 1980)). In this case, plaintiffs must prove that defendants "knew that Sumitomo intended to restrain trade, intended that trade be restrained, and materially contributed to that restraint." Loeb Industries, Inc. v. Sumitomo Corp., 306 F.3d 469, 497 (7th Cir. 2002) (citing Phillip E. Areeda, Antitrust Law: An Analysis of Antitrust Principles and Their Application, ¶ 1474a (1986)).

Ordinarily, when a court decides a motion for summary judgment, it must view the facts in the light most favorable to the party opposing the motion. Matsushita Electric Industrial Co. v. Zenith Radio Corp., 475 U.S. 574, 587 (1986). "But antitrust law limits the range of permissible inferences from ambiguous evidence in a § 1 case." Id. at 588. To defeat a motion for summary judgment in an antitrust case, the opponent of the motion "must present evidence 'that tends to exclude the possibility' that the alleged conspirators acted independently." Id. (quoting Monsanto Co., 465 U.S. at 764).

Eleven years after the public first learned of Yasuo Hamanaka's misconceived schemes to recoup his copper trading losses, it remains unproven whether defendants conspired with Hamanaka or Sumitomo or both to manipulate the copper market. Defendants contend that this is because they were never part of any conspiracy with Hamanaka. In their view, plaintiffs have failed to adduce any evidence that is not as consistent with legitimate transactions on defendants' part as it is with conspiratorial actions, that is, they have not come forward with evidence that excludes the possibility that defendants' dealings with Sumitomo and Hamanaka were entirely proper.

Plaintiffs contend that their evidence is more than sufficient to exclude any possibility that defendants' dealings were proper, asserting to the contrary that the evidence establishes that defendants knew of Sumitomo's intent to restrain trade, that defendants had the same intent and that they materially contributed to the restraint.

1. Defendants' knowledge of Sumitomo's intent to manipulate the market

Plaintiffs have adduced evidence that it was public knowledge in August and September 1993 that Sumitomo was involved in market manipulation. Articles had appeared describing a copper squeeze, naming Sumitomo and reporting that the London Metal Exchange had issued several regulatory warnings concerning copper manipulation to its members, including J.P. Morgan Securities. In addition, plaintiffs cite defendants' assessment of the September 30, 1993 transaction proposed by Sumitomo. Plaintiffs acknowledge that defendants declined Sumitomo's first proposal, but assert that the deal's significance lies in the fact that it would have alerted defendants to Sumitomo's willingness to engage in improper financing transactions.

Plaintiffs claim additional support from a series of internal memoranda defendants prepared, discussing the possibility of defendants' internal copper hedge positions having an effect on the liquidity of the physical copper market. These memoranda did not relate to defendants' over the counter transactions with Sumitomo, but to defendants' attempts to predict the effect of the transactions on defendants' risks. The authors noted that if defendants were forced to enter into separate hedging transactions in the future, those transactions might affect the price of copper. However, plaintiffs cite the memoranda as showing defendants' awareness of the possibility that the size of their transaction with Sumitomo might have an adverse effect on the market's liquidity at some time. Finally, plaintiffs note that when The Wall Street Journal published an article in 1995 concerning squeeze rumors, Murphy sent it to Hamanaka.

2. Defendants' intent to manipulate the market

On the necessary element of defendants' intent, plaintiffs have a considerable amount of circumstantial evidence. Most of it is ambiguous, such as evidence of the confidentiality that defendants promised Sumitomo in their dealings. (It is as plausible to believe that confidentiality is a critical criterion for winning clients in the competitive world of metals trading as it is to believe that confidentiality means concealment of improper activities.)

Plaintiffs cite evidence showing that defendants allowed Hamanaka to handle his own confirmations and allowed Murphy to handle all confirmations and payments on defendants' end. Defendants have produced evidence that although they sent trade confirmations directly to Hamanaka, they did so because they had what they thought was authorization from Sumitomo for doing so. Defendants' evidence shows, moreover, that they took steps to talk with Hamanaka's superiors to insure that the company knew of the nature and scope of Hamanaka's transactions. As for Murphy's handling of confirmations, the evidence shows that defendants did not sign off on the handling of confirmations and payments but allowed Murphy to mail those on to Sumitomo (in care of Hamanaka) after the back office had reviewed and approved them.

Plaintiffs assert that defendants kept Sumitomo's management in the dark about the conspiracy. They cite Murphy's discouragement of any contact between defendants' Tokyo office and Sumitomo, Hamanaka's "beating up" of Murphy when any representative of defendants approached Sumitomo's management and Murphy's promise to Hamanaka that no one from the Tokyo office would "bother" Sumitomo. According to plaintiffs, this led to a remark from an exasperated Toyko employee that he was not allowed to conduct due diligence on the Sumitomo transactions.

Plaintiffs ignore the contradictory evidence that defendants adduced of their efforts to ascertain from Sumitomo officials both that the officials knew of Hamanaka's trading and that the trades were for a legitimate hedging purpose. Defendants dispatched a Toyko employee to check with a Sumitomo employee on the good faith basis of the proposed September 1993 transaction and David Pryde met personally with Imamura to talk with him about Sumitomo's copper trading. Defendants set up at least two luncheon meetings with top Sumitomo officials during this period to discuss the copper trading, among other topics, and they obtained information from a large Chinese corporation that it was engaged in large scale business with a prominent Asian trader. If the Chinese were dealing with Sumitomo, it would explain Sumitomo's need for the derivatives transactions it sought with defendants.

On the question of concealing information from regulators, the undisputed facts seem to show that the alleged "stonewalling" consisted merely of J.P. Securities' refusal to turn over to the London Metal Exchange records about the clients of defendant Morgan Guaranty Trust. Plaintiffs have not established what J.P. Securities' legal obligations were in this regard, that is, whether it had a legal obligation to defendant Morgan Guaranty Trust and its clients not to turn over this information or conversely, whether it had a legal obligation to turn over the information to the exchange. Moreover, it is significant that even now, after plaintiffs have gained access to all the information that could bear on the alleged conspiracy, neither they nor any regulatory body has identified any incriminating information that defendants did not provide to the regulators. Plaintiffs have not shown that there is any evidence in defendants' possession that would have prevented any additional market manipulation if it had been turned over earlier.

It is hard to imagine that a jury would place much weight on defendants' special payment to Murphy and reinstatement of his stock options in 1998. Plaintiffs try to put a spin on the actions by linking them to the "looming copper litigation." This effort would be more successful if defendants had made the payment and reinstatement in connection with Murphy's termination in July 1996. Instead defendants released him without any severance pay and held his stock options forfeited. Between then and November 23, 1998, when the payments were made, Murphy had talked to a number of regulators and had had ample opportunity (and potential motivation arising from defendants' treatment of him) to disclose information that would be harmful to defendants. Of course, he had his own reasons to refuse to disclose information harmful to him personally, but these were independent of any payments or lack of payments from defendants.

Nothing about the agreement that Murphy entered into is out of the ordinary for companies dealing with departing employees who have had access to confidential business information. In suggesting that the payment was made because Murphy had told defendants he had been the "good corp. citizen" and remained silent rather than disclose relevant evidence to regulators, plaintiffs misstate Murphy's actual statement. He told defendants that he had been a good corporate citizen by refusing to talk to the press. He did not say, and the evidence does not show, that he ever refused to talk to regulators or failed to respond to a subpoena issued in any lawsuit.

Plaintiffs argue that the intimate and conspiratorial relationship between Murphy and Hamanaka is evidence of defendants' knowledge of the entire conspiracy and defendants' part in it. Setting aside the tautological error in saying that the conspiratorial relationship is evidence of the conspiracy, plaintiffs have produced no evidence that would require a jury to find that Murphy was conspiring with Hamanaka on behalf of defendants. Brokers and traders speak on the telephone frequently and use the telephone to discuss specific matters; such activity is as consistent with innocent behavior as it is with conspiracy. The same is true of Murphy's close personal relationship with his biggest client, including sending Hamanaka articles about the price of copper and giving him advance notice of a proprietary commodities index that defendants were developing.

Plaintiffs look for support from Murphy's November 14, 1994 message to Hamanaka about defendants' copper-producer clients taking a bearish position on the London Market Exchange. It is difficult to tell from the message whether Murphy was simply talking to Hamanaka about buying "forward producers selling around the 2745 level," passing on confidential information about defendants' clients or acting to give Hamanaka a chance to take more copper off the market.

Finally, plaintiffs point to defendants' concern about Murphy's possible reaction to the news of the market collapse and the realization that his friend and client might be going to prison. As the evidence shows, although defendants were sufficiently concerned to place Murphy under surveillance to insure against self-harm or flight, their concerns were misplaced. Their concern is not evidence of their guilt or Murphy's; it was not unreasonable for them to be concerned about the effect on Murphy when he learned of Hamanaka's firing and the resulting effect on the copper market.

If this were all the evidence that plaintiffs had, Matsuishita Electric might compel the conclusion that defendants were entitled to summary judgment. Much of plaintiffs' evidence is ambiguous and subject to two meanings, one of which favors defendants' position that no conspiracy existed.

There is, however, additional evidence in the form of the transactions themselves. It is possible that these transactions should be viewed as entirely innocent, as defendants maintain they are. It is also the case that the transactions could be seen reasonably as part of a conspiracy. Before a jury could find that defendants' acts have an innocent explanation, it must sort out a plethora of disputed issues of fact. Both sides have retained highly qualified experts to analyze the nature of the transactions. The experts have expressed radically different opinions about whether these transactions should be characterized as having rational economic purposes and therefore are presumptively legitimate, or whether they are deals that neither defendants nor Sumitomo would have entered into but for the knowing purpose of providing financing to Sumitomo to manipulate the market at great profit to defendants.

From defendants' perspective, the major transactions were typical transactions for market makers and dealers in derivatives such as defendants during this period. The transactions were purchases of over the counter put and call options on copper, combined in some instances with the purchase or sale of forward contracts that reduced the risk of the transactions to defendants "by creating a initial delta hedge of the net option position," Polland Decl., dkt. #679, vol. III, exh. #84, MacKay Expert Report, at 5, and priced in accordance with [defendants'] internal pricing policies and recommended dealer practices at the time. Id. According to defendants' expert, Robert MacKay, defendants managed the market risks of the positions by "dynamically delta hedging almost of the directional copper price risk in their overall copper portfolio with forward contracts on the London Metal Exchange and by partially hedging other option related risks, such as volatility risk, with offsetting put and call options traded either on the exchange on over the counter. Id. Because defendants hedged the directional price risk in their copper portfolio, "[they] would not have profited from nor would [they] have expected to profit from an attempted price manipulation by Sumitomo designed to increase or decrease copper prices. In fact, it can be shown for certain [of defendants'] transactions with Sumitomo that any profit to [defendants] attributable to rising prices was largely offset by specifically identified hedges while dynamic hedging at the portfolio level would have offset much, if not all, of the remaining profit from rising prices." Id. at 6.

Three of MacKay's conclusions raise interesting questions for trial. First, he says that "[t]he profitability of any particular transactions cannot be determined on a stand-alone basis. Profitability must be adjusted for offsetting gains or losses on hedges." Id. at 5. Second, he asserts that it is error to infer defendants' knowing participation in the conspiracy from merely looking at a transaction "without considering the fact that [defendants] hedged the transaction with other forwards and options." Id. at 6. Such an analysis "results in a large overstatement of [defendants'] potential profits. In other words, argue defendants, it is necessary to look at the profits that defendants expected to earn at the outset of the transaction, not what defendants did earn by subsequent hedging and market movement. Only then can a factfinder have any sense of how defendants would have assessed the transaction and thus determine whether the transaction would have alerted any reasonable dealer to the probability if not the certainty that it was a bogus transaction, intended only for financing. Third, MacKay challenges plaintiffs' expert's assertion that defendants' profits on the Sumitomo transactions were excessive because the experts do not provide any "supporting empirical analysis based on comparisons to appropriate benchmarks." Id.

Defendants contend that the evidence shows that because it ran a "square book" on copper, it had no reason to conspire with Sumitomo to manipulate the price of copper upward; doing so would have run counter to its business strategy. As MacKay has indicated, in a squeezed market, defendants would have lost money on many of their hedging transactions because they would have had to buy copper at a higher price than it could have obtained for the copper it had to sell. Defendants ask why, if their goal was to manipulate the price of copper upward, they would have declined to enter into the September 1993 scheme that Sumitomo proposed and documented their awareness of the possibility that the transaction was designed to help Sumitomo squeeze the market?

On the other hand, plaintiffs are adamant in their position that the transactions with Sumitomo were so unusual in their nature that any reasonable dealer, let alone entities as sophisticated as defendants, would recognize the transactions as having no purpose other than providing Sumitomo financing for its conspiracy. Plaintiffs cite the high profits that the transactions promised defendants, which should have raised a red flag, given Sumitomo's high credit rating and the competition for its business. Why would Sumitomo need to make the deal so profitable to defendants when it could borrow on more advantageous terms and when other dealers were competing with defendants to do business with Sumitomo?

Moreover, plaintiffs ask, why would defendants think it normal to be offered transactions that not only raised no downside price risk to them but provided a large profit they could book immediately and the prospect of higher profits if copper prices rose. If this were not enough, they say, the size of the deals should have been a warning to defendants; they and Sumitomo were dealing in quantities far in excess of the amounts traded on the London Metal Exchange.

Plaintiffs rely on the report of Anthony Saunders, one of their expert witnesses. According to Saunders, defendants had no risk of losing money in the March 1994 transaction; Sumitomo could not have realized a gain that would have offset any potential loss it might incur as a result of an underlying risk; and defendants' expected and realized profit from the transaction was "extraordinary." Duncan Decl., dkt. #766, exh. #68, at 37, ¶ 58. In addition, defendants entered into a transaction that would allow Sumitomo to transfer back to defendants funds obtained from defendants a week earlier and leave them on deposit for several months at below-market interest.

Finally, plaintiffs argue that it is suspicious that defendants carried out significant copper trading above and beyond the large financing deals, including manipulative trades executed on the London Metal Exchange during a known market squeeze, and that the trading often followed suspicious communications between Murphy and Hamanaka.

3. Defendants' contribution to the market manipulation

On the issue of defendants' contribution to the conspiracy, there is little to discuss. If plaintiffs can prove that defendants' transactions with Sumitomo were made knowingly for the purpose of financing Sumitomo's market manipulation, they will have proved defendants' contribution to the illegal restraint of trade.

I conclude that if the jury were to find plaintiffs' experts more believable than defendants', if it were to find that defendants knew the Sumitomo transactions were so commercially irrational as to be obvious disguises for financing manipulative conduct, and if it were to disbelieve defendants' evidence of the steps they took to confirm Sumitomo's awareness of the scope and volume of Hamanaka's dealings, it could find reasonably for plaintiffs on the question of defendants' involvement in Sumitomo's scheme to manipulate the market. As the Court of Appeals for the Seventh Circuit remarked in In re High Fructose Corn Syrup Antitrust Litigation, 295 F.3d 651, 661 (7th Cir. 2002), in discussing the evidence in that case of an actionable conspiracy to fix prices: "The evidence is not conclusive by any means—there are alternative interpretations of every bit of it—but it is highly suggestive of the existence of an explicit though of course covert agreement to fix prices." So too in this case. The evidence is suggestive of an agreement between defendants and Sumitomo to "fix" the copper market. Therefore, defendants' motion for summary judgment will be denied with respect to plaintiffs' claim that defendants conspired with Sumitomo to manipulate the price of copper.

B. Antitrust Standing

To bring suit for an antitrust violation, a plaintiff must have "antitrust standing" (as distinguished from Article III standing), a component of which is antitrust injury. To qualify as an antitrust injury, an injury must be proximately caused by the direct purchase of a product whose price has been affected by anti-competitive behavior. Loeb Industries, Inc. v. Sumitomo Corp., 306 F.3d 469, 481 (7th Cir. 2002). In Loeb Industries, the court of appeals held that in the context of this litigation, plaintiffs may demonstrate their antitrust standing by proving that (1) they were the first purchasers of copper from integrated producers and (2) the price of their first-purchased copper was inflated artificially by the alleged conspiracy between defendants and Sumitomo.

Defendants contend that even if plaintiffs are able to prove that defendants conspired with Sumitomo, plaintiffs have failed to adduce reliable evidence from which it may be inferred that they made purchases that qualify as compensable antitrust injuries. Defendants' attack on the adequacy of plaintiff's evidence takes two forms: their motion for summary judgment and their motions in limine, dkt. ##793 & 795. In both motions, defendants contend that the testimony of expert witnesses Christopher Gilbert, Marianne DeMario and Roy Henry is inadmissible. According to defendant, Gilbert's econometric model fails to draw a causal connection between plaintiffs' alleged injury (in the form of inflated copper prices) and the defendants' alleged wrongdoing. Moreover, defendants contend, the methods employed by DeMario and Henry in calculating the amount of plaintiffs' alleged damages is so flawed that it should be excluded, a result that would leave plaintiffs with no proof of the antitrust injuries they have allegedly sustained.

1. Testimony of Christopher Gilbert

Each plaintiff relies on the testimony of Christopher Gilbert to establish a connection between the alleged conspiracy and the allegedly inflated prices it paid for copper during the period of the conspiracy. Therefore, I begin with the question whether Gilbert's testimony is admissible.

a. Summary of the relevant testimony

Christopher Gilbert is Professor of Economics at the University of Trento, Italy, where he is the academic director of the doctoral program in economics and management. Gilbert has created an econometric model to forecast the price of copper "but for" the alleged manipulation. (Econometrics is the "application of statistical and mathematical techniques in solving problems as well as in testing and demonstrating theories." Random House Webster's Unabridged Dict. (2d ed. 2001).

In creating his model, Gilbert determined that certain accounts between defendants and Sumitomo had been established for wholly "non-commercial and manipulative reasons." These accounts included the RADR transactions, the GMMC transactions and the Merrill Lynch B Account transactions. Gilbert included all transactions from these accounts in his "non-commercial position" variable, which is the "single most important variable" for determining whether the price of copper was influenced by defendants' alleged manipulation. Gilbert used a multiple regression model to determine whether a relationship existed between the price of copper and a number of variables, including the non-commercial position and various competitive forces in the market.

In constructing the model, Gilbert chose to employ a two-step technique known as the Engle-Granger model. The first step of the model is called the equilibrium equation; the second step of the model is the adjustment equation. Used together, these equations are designed to test whether a relationship exists between non-commercial positions and the price of copper and, if so, the degree to which the non-commercial positions affected the price. Gilbert estimated that the alleged conspiracy raised the price of copper by 12-16 cents a pound during the period of the alleged conspiracy.

The equilibrium equation in Gilbert's model exhibits serial correlation. Defendants' expert, Duncan Cameron, asserts that if the equilibrium equation is adjusted to correct for serial correlation, the model shows that the alleged conspiracy had no effect on the price of copper. However, Gilbert asserts that one would expect to see serial correlation in the equilibrium equation and that the adjustment equation corrects for any errors in his model. Gilbert maintains that no further adjustment for serial correlation is necessary.

Unlike Cameron's model, Gilbert's model does not use the price of aluminum as a variable that may have affected the price of copper during the period of the alleged conspiracy.

b. Admissibility of the testimony

In both their motion in limine and motion for summary judgment, defendants contend that Gilbert's testimony is inadmissible under Fed. R. Evid. 702 and Daubert v. Merrell Dow Pharmaceuticals, 509 U.S. 579 (1993), because the foundation for his testimony is unreliable.

Rule 702 of the Federal Rules of Evidence provides:

If scientific, technical, or other specialized knowledge will assist the trier of fact

> to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise, if (1) the testimony is based upon sufficient facts or data, (2) that testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.

In Daubert, 509 U.S. at 583, the Supreme Court held that Rule 702 imposes a special obligation upon a trial judge to "ensure that any and all scientific testimony . . . is not only relevant, but reliable." The trial judge's gate keeping obligation "applies not only to testimony based on 'scientific' knowledge, but also to testimony based on 'technical' and 'other specialized' knowledge" such as the economic testimony Gilbert has proffered in this case. Kumho Tire Co., Ltd. v. Carmichael, 526 U.S. 137, 141 (1999).

When determining whether expert testimony is admissible, district courts employ a two-step inquiry. E.g., United States v. Hall, 165 F.3d 1095, 1101-02 (7th Cir. 1999); Ancho v. Pentek, 157 F.3d 512, 515 (7th Cir. 1998). First, the court examines the expert's testimony to determine whether it is reliable, that is, whether it is grounded in scientific evidence or in subjective belief or unsupported speculation. Porter v. Whitehall Laboratories, Inc., 9 F.3d 607, 614 (7th Cir. 1993). Second, the court must determine whether the testimony will assist the trier of fact in understanding the evidence or in determining a fact in issue. Id. at 616.

Defendants contend that Gilbert's econometric model fails the first prong of the

Daubert inquiry because it contains methodological flaws so pervasive they render the model wholly unreliable. According to defendants, the econometric model upon which Gilbert's testimony rests suffers from three key defects: (1) the model includes *all* transactions from designated "non-commercial" accounts, instead of only transactions that can be characterized as non-commercial; (2) the first stage of the model (the equilibrium equation) exhibits serial correlation; and (3) the price of aluminum is not included as a variable that may have affected the price of copper.

Before turning to defendants' specific critiques of Gilbert's work, several "meta-points" bear mentioning. When an expert proposes to give testimony that is scientific (whether derived from the natural or social sciences), courts engage in "a preliminary assessment of whether the reasoning or methodology underlying the testimony is scientifically valid and of whether that reasoning or methodology properly can be applied to the facts in issue." Daubert, 509 at 592-93. A number of factors bear on the scientific validity of the expert's testimony, including whether the theory or technique can be and has been tested; whether the theory or technique has been subjected to peer review or scientific scrutiny within the scholarly community; and the reliability of the technique, including the potential rate of error and the general acceptance it enjoys. Id. at 593-94. The evidentiary inquiry is meant to be flexible and fact specific, and a court should use, adapt, or reject Daubert factors as the particular case demands. Kumho Tire Co, 526 U.S. at 141-42. There is no single requirement for admissibility as long as the proffer indicates that the expert evidence is reliable and relevant. Unrein v. Timesavers, Inc., 394 F.3d 1008, 1011 (8th Cir. 2005).

Significantly, defendants do not question Gilbert's credentials or the model upon which he based his expert opinions. They do not suggest that the Engel-Granger model is not accepted among economists. Therefore, it does not appear that they take issue with the scientific model that forms the foundation of Gilbert's opinion. Rather, they question Gilbert's decision to include and exclude specific factors from his model and the effect of those choices on the reliability of his ultimate conclusions.

i) inclusion of all transactions from designated non-commercial accounts

Defendants assert first that in calculating the non-commercial position variable, Gilbert erred in deeming whole accounts of individual trades either manipulative or legitimate without considering whether the individual trades were manipulative. By doing so, defendants contend, Gilbert's calculations are overinclusive, unreliable and not on a par with the standards demanded in his professional work.

In deciding whether an expert's opinion is admissible under Daubert, a district court "must determine whether the evidence is genuinely scientific, as distinct from being unscientific speculation offered by a genuine scientist." Rosen v. Ciba-Geigy Corp., 78 F.3d

316, 318 (7th Cir. 1996); see also Zenith Electronics Corp. v. WH-TV Broadcasting Corp., 395 F.3d 416, 419 (7th Cir. 2005) ("The supposed 'uniqueness' of a market does not justify substituting a guess for careful analysis."). Essentially, an expert must "adhere to the same standards of intellectual rigor that are demanded in their professional work." Id. The expert's work must be reasoned and founded on data, Lang v. Kohl's Food Stores, Inc., 217 F.3d 919, 924 (7th Cir. 2000), and the expert must explain his conclusions, Zenith, 395 F.3d at 419.

Plaintiffs argue that after investigating and analyzing the market, Professor Gilbert used his professional judgment to make a conservative determination whether certain accounts were manipulative. As plaintiffs note, Gilbert devoted several pages of his report to explaining his rationale for deeming certain accounts non-commercial or manipulative. In his deposition, Gilbert stated that although he could have analyzed the accounts on a transaction-by-transaction basis (as he has done in other prior work), it would have been impossible to determine the individual intent behind the large number of daily transactions in this case. Further, he explained that although certain transactions in manipulative accounts may appear to have legitimate commercial purposes, he proceeded on the assumption that the overall account was set up for a non-commercial (or manipulative) purpose, and any transaction undertaken within it was in furtherance of the manipulation. Gilbert's methods are well articulated and do not rest on mere speculation.

In serving its gatekeeping function, the court must be careful not to cross over into the role of factfinder. It is not the job of the court to insure that the evidence heard by the jury is error-free, but to insure that it is not wholly unreliable. Smith v. Ford Motor Company, 215 F.3d 713, 719 (7th Cir. 2000) ("[W]hether the expert is credible or whether his or her theories are correct given the circumstances of a particular case is a factual one that is left for the jury to determine after opposing counsel has been provided the opportunity to cross-examine the expert. . ."). Gilbert's decision to include all transactions within the accounts that he conservatively estimated to be non-commercial was an exercise of professional judgment subject to cross-examination. It is not a ground for excluding his testimony altogether.

ii) serial correlation

Defendants' second contention is their most adamant: they argue that because Gilbert concedes that the equilibrium equation in his model exhibits serial correlation (the cumulative effect of unexplained price variations over time), he cannot show that the alleged conspiracy caused inflated prices within the physical market for copper during the relevant period. Defendants contend that if Gilbert had used the correction technique employed by their expert, Dr. Cameron, his model would have revealed that defendants' alleged misconduct had no discernible effect on copper prices.

At his deposition (and in his report), Gilbert conceded that the equilibrium equation he used exhibits serial correlation. However, despite defendants' assertions to the contrary, that is not the end of the story. Gilbert used the Engel-Granger error correction form of a multiple regression model. The Engel-Granger form uses two equations to estimate the effect of various factors on the price of copper: the equilibrium equation and the adjustment equation. According to Gilbert, serial correlation is always present in the residuals of the equilibrium equations; this is expected and accounted for in the adjustment equations. Given that Gilbert accounted for the existence of serial correlation and the need to correct for it, his method is not so inherently flawed as to preclude him from establishing whether defendants' alleged wrongdoing had any effect on the price of copper. Defendants will have ample opportunity to cross-examine Gilbert at trial and present competing expert evidence on whether defendants' alleged misconduct had any discernible effects on the price of copper in the physical market. In the end, however, whether Gilbert erred in applying his model and whether he failed to properly correct for serial correlation are jury questions not amenable to resolution on summary judgment.

iii) aluminum variable

Finally, defendants contend that Gilbert's model is unreliable because it does not include aluminum as a variable affecting the price of copper. Defendants argue that aluminum is comparable to copper and can serve as a proxy for otherwise omitted variables in measuring the impact of defendants' alleged wrongdoing on the price of copper futures. In support of their argument, defendants point to the report of their expert, Dr. Cameron, who found that the effects of the alleged misconduct diminished significantly when the price of aluminum was included as an explanatory variable. Defendants argue that Gilbert's failure to capture this salient explanatory variable makes his opinion unreliable. See, e.g., People Who Care v. Rockford Board of Education, School District No. 205, 111 F.3d 528, 537-38 (7th Cir. 1997) ("A statistical study that fails to correct for salient explanatory variables, or even to make the most elementary comparisons, has no value as causal explanation and is therefore inadmissible in a federal court.").

In his revised affirmation, Gilbert states that he used a multiple regression model to estimate the overcharge and considered several factors that may have affected the price of copper. Dkt. #802, exh. C at 31-35, ¶¶65-73 and 41. Gilbert explained in the supplement to his report that he rejected the inclusion of aluminum as a proxy for a number of reasons: 1) aluminum and copper are produced under different conditions and have different cost structures; 2) the aluminum market was flooded with exports in 1991-1993, skewing the normal relationship between copper and aluminum; and 3) the comparison is not valid given the type of informational manipulation that occurred because demand for aluminum may also have been affected by the alleged misconduct. Id. at 65-66, ¶3.

Although some regression analyses may be so incomplete as to be inadmissible, in most cases, "failure to include variables will affect the analysis' probativeness, not its admissibility." Bazemore v. Friday, 478 U.S. 385, 400 (1986); see also Cullen v. Indiana University Board of Trustees, 338 F.3d 693, 702 n. 4 (7th Cir. 2003) (citing Bazemore, 478 U.S. at 400). A "statistical study is not inadmissible merely because it is unable to exclude all possible causal factors other than the one of interest." People Who Care, 111 F.3d at 537-38. Because Gilbert considered and rejected the use of aluminum as a proxy and factored in other explanatory variables, his method is not so incomplete or lacking in foundation as to be unreliable. Although Gilbert's judgment may not be correct, his errors are fodder for cross-examination, not summary judgment. Consequently, I will deny defendants' motion in limine to exclude Gilbert's testimony and deny their motion for summary judgment with respect to defendants' claim that Gilbert's testimony is insufficient to establish a causal link between the alleged conspiracy and the price of copper in the physical market.

2. Testimony of Roy Henry and Marianne DeMario

Plaintiffs have employed three damage experts in this lawsuit: Roy Henry (for the

Marmon plaintiffs), Marianne DeMario (for the Asarco plaintiffs) and David Hoffman (for the Southwire plaintiffs). Defendants do not challenge the admissibility of Hoffman's testimony; however, they contend that Henry and DeMario's testimony is inadmissible on several grounds.

Before assessing whether Henry's and DeMario's testimony meets the requirements of Fed. R. Evid. 702, I note as an initial matter, plaintiffs' contention that Henry's and DeMario's tabulations of copper purchases are admissible under Fed. R. Evid. 1006. Although Rule 1006 permits a party to introduce in the form of a chart, summary, or calculation "[t]he contents of voluminous writings, recordings, or photographs which cannot conveniently be examined in court," such evidence remains subject to all evidentiary objections. United States v. Milkiewicz, 470 F.3d 390, 396 (1st Cir. 2006) ("Evidence admitted under Rule 1006 must be otherwise admissible and remains subject to the usual objections under the rules of evidence and the Constitution.") In this case, defendants are challenging the foundation for Henry's and DeMario's decision to include the records they did in their summary. Therefore, it is not the summaries themselves, so much as the conclusions being drawn from them, that are the subject of defendants' attack. Because Henry and DeMario are qualified to draw those conclusions only by virtue of their specialized training and experience, defendants' challenge to their testimony falls under Rule 702, not Rule 1006.

a. Summary of relevant testimony

i) Henry

Roy Henry has an undergraduate degree in accounting and a masters degree in business administration. After several years of working in finance and as a president-general manager for metal fabricating businesses, Henry joined Marmon in 1993 as corporate controller. In 2000, Henry became the Vice President of Finance for Cerro Wire & Cable and Vice President of Finance and Controller for Marmon Wire and Cable Companies. As a result of his tenure with Marmon, Henry is generally familiar with the copper purchasing and use patterns, document management systems and document retention policies of all of the Marmon plaintiffs. From his work in the industry, Henry possesses an understanding of how integrated producers operate and how copper is priced.

The Marmon plaintiffs (plaintiffs Cerro Wire & Cable, Inc., Cerro Flow Products, Inc., Cerro Metal Products Company, Comtran Corporation, The Kerite Company, Owl Wire and Cable, Inc. and Rockbestos-Suprenant Cable Corp.) asked Henry to calculate the amount of copper cathode, rod, ingot and billet that they purchased between 1993 and 1996 from integrated producers. Henry supervised the collection and review of all documents relating to the Marmon plaintiffs' purchases during the relevant period. He provided guidance to the

Marmon employees on what qualified as a purchase according to the guidelines set by plaintiffs' counsel and oversaw the record gathering process and insured that the purchase documents were relevant.

Invoices and other documents reflecting purchases of copper were separated from other documents, and duplicate invoices were removed. In addition, non-invoice documents, including contracts and purchase summaries, were reviewed to insure that the best available documentation was used to determine the pounds purchased by the Marmon plaintiffs. Copper purchases were assigned to the month best representing the month in which the copper was priced, based on the pricing month as noted on the invoice, the shipment date, the date the shipment was received, the invoice date or other available dates. The results were tabulated to create several spreadsheets. Henry verified personally more than 10% (400-500 documents) of the roughly 3600 documents used to calculate the total purchase volumes contained in the tabulations attached to his declarations.

Although Henry stated in his deposition that he identified which vendors were integrated producers in reliance on information from Marmon employees and his own knowledge of the vendor's operations, in some instances he relied on plaintiffs' discussions with Bill Rickher for this information. Henry explained that Rickher is an expert in the copper buying field, who was helpful in determining the relevancy of more unique copper purchases made by a number of companies that no longer had a management team in place.

Henry concluded that the Marmon plaintiffs purchased 1.16 billion pounds of copper from integrated producers during the period of the conspiracy; defendants' damage expert, Paul Wazzan, concluded that the Marmon plaintiffs had purchased 1.04 billion pounds during the relevant period.

Although Henry's short declarations were drafted by plaintiffs' counsel, he reviewed the documents before signing them and believes they express his findings accurately.

ii) DeMario

Marianne DeMario is a certified public accountant with more than fifteen years of substantial experience in complex forensic accounting investigation. She is the managing director of Spectrum Consulting Partners LLC, a financial and economic consulting firm. Her assignment was twofold: to compile an accounting of the Asarco plaintiffs' copper purchases and to determine, on behalf of all plaintiffs, the percentage of cathode and rod sales from integrated producers that were first-time sales of those products.

DeMario calculated copper cathode purchases made by the following Asarco plaintiffs between September 1, 1993 and May 31, 1996: American Insulated Wire Corporation; ASARCO Incorporated; Kennecott Utah Copper Corporation; Leviton Manufacturing

Company, Inc.; Mueller Copper Tube Products, Inc.; Mueller Copper Tube Company; Superior TeleCom, Inc. and Essex Electric, Inc. This work was a continuation and completion of work initiated by Grant Thornton LLP, a large, well-known public accounting firm.

DeMario and her staff obtained 130,000 pages of invoices, vendor statements and other business records from the Asarco plaintiffs, which they reviewed and analyzed. In addition, she and her staff reviewed vendor statements and other business records to find relevant and sufficient information regarding the purchases by the Asarco plaintiffs and extracted the relevant information regarding the number of pounds of copper purchased, the month the purchases were made and from whom the copper was purchased. DeMario independently verified 88% of the data entries performed by her staff.

In calculating the percentage of sales from integrated producers that could be considered first time sales of cathode and rod (a number the parties call the "integrated producer percentage"), DeMario identified seven integrated producers for whom she was able to calculate an integrated production percentage: Asarco, Codelco, Cyprus, Kennecott, Phelps Dodge, Cominco, Inco and Magma/BHP. To calculate an average integrated producer percentage for remaining integrated producers for whom no records were available (Mexicana de Cananea, Minera Mexico, Noranda, Minera Escondida, Compania Minera Quebrada

Blanca, Cox Creek Refining and Empresa Minera de Mantos Blancos), DeMario calculated an average integrated production percentage by taking the simple average of the other producers, excluding Kennecott, because she thought that its unusual production problems during the Damages Period . . . increased its reliance on third party purchases" and made it an "outlier."

Defendants' expert relied on much of the same data as DeMario did in calculating his version of the integrated producer percentage. Although Wazzan (1) used a weighted average rather than a straight average to calculate the average percentage; (2) did not exclude data from Kennecott when calculating the average integrated producer percentage; and (3) did not calculate an integrated production percentage for Cominco because he could not identify any invoices for it, he agreed with DeMario that Asarco, Codelco, Cyprus, Inco, Kennecott, Magma and Phelps Dodge are each integrated producers who produced more than half of the copper they provided to plaintiffs.

b. Admissibility of the testimony

When assessing the admissibility of Henry's and DeMario's testimony, it is important to remember the purpose of the experts' reports. Neither purports to be a legal specialist. Although Henry attempted to distinguish between integrated producers and other vendors in his calculation of purchases made by the Marmon plaintiffs, DeMario made no similar distinction when tabulating the purchases made by the Asarco plaintiffs. DeMario and Henry have offered their testimony for the limited purpose of (1) quantifying how much copper cathode and rod the Asarco and Marmon plaintiffs purchased from 1993-1996 and (2) determining from whom they purchased it. In addition, DeMario has provided an opinion regarding the percentage of sales from each producer from whom plaintiffs purchased copper that can be labeled a first-time sale of cathode or rod. Because the experts are offering their testimony for no purpose other than the accuracy of those calculations, it is with respect to those matters only that the testimony's admissibility must be assessed.

Defendants raise several Daubert challenges to the admissibility of Henry's and DeMario's testimony. First, they contend that Henry's report should be excluded because he relied too heavily on plaintiffs' counsel. Second, they contend that both Henry's and DeMario's testimony should be excluded because the experts relied on others to assist them in collecting and analyzing data and because the reports are "riddled with errors." (In addition, defendants raise several other challenges to the data included in the reports that are relevant to determining how much plaintiffs may recover in damages but not to the admissibility of the reports. I will address those matters separately in section C, below.)

i) reliance on others

First, defendants contend that Henry relied improperly on plaintiffs' counsel in forming his opinions and preparing his expert reports. Defendants assert that Henry relied on counsel to draft his reports and to define the parameters of his inquiry into plaintiffs' purchases during the relevant time period, resulting in a work product that is effectively not his own.

Despite defendants' assertions to the contrary, the fact that plaintiffs' counsel drafted Henry's initial and revised declarations is not a ground for excluding his report and testimony. As plaintiffs note, "Rule 26(a)(2)(B) does not preclude counsel from providing assistance to experts in preparing the reports, and indeed . . . this assistance may be needed." Fed. R. Civ. P. 26(a)(2)(B) advisory committee's note (1993). Although an expert report "should be written in a manner that reflects the testimony to be given by the witness and. . . must be signed by the witness," it need not be drafted by him.

Henry's revised declaration is quite short, describing the process used to collect the purchase information. Apart from incorporating by reference several summary tables of copper purchases, the report does not express opinions or conclusions. Instead, the conclusions are contained in the summary data, which were prepared under Henry's direct supervision. Moreover, Henry testified in his deposition that he reviewed both declarations before signing them. Henry did not merely parrot the arguments of counsel; he reached his own conclusions after a lengthy process of collecting and reviewing purchase documents. Indiana Insurance v. Hussey Seating Co., 176 F.R.D. 291, 293 (S.D. Ind. 1997) (expert report not excluded where expert had prepared the attachments, consisting of the expert's opinions and work papers). Consequently, his report will not be excluded as the work of anyone other than himself.

Defendants assert that both Henry and DeMario deferred too much to plaintiffs' counsel by allowing counsel to set the parameters for their reports by specifying the relevant date range, product type and vendor classification for the purchases to be calculated. Under Fed. R. Evid. 703, the "facts or data in the particular case upon which an expert bases an opinion or inference may be those perceived by or made known to the expert at or before the hearing." See also Dura Automotive Systems of Indiana, Inc. v. CTS Corp., 285 F.3d 609, 613 (7th Cir. 2002) (citing Fed. R. Evid. 703); Tuf Racing Products, Inc. v. American Suzuki Motor Corp., 223 F.3d 585, 591 (7th Cir. 2000) (expert relied on financial information supplied by plaintiff and assumptions given by counsel). With respect to both Henry and DeMario, plaintiffs' counsel provided information to limit the scope of the experts' analysis; however, the lawyers did not formulate the experts' ultimate opinions. DeMario and Henry both supervised the collection of data they themselves determined were relevant to calculating the amount of copper plaintiffs purchased from 1993-1996. They verified a portion of the data that were collected and concluded that the end product was a reliable compilation of the data they were asked to assess. Although defendants remain free to argue that counsel set improper parameters, there was nothing improper about Henry's and DeMario's decision to perform the work they were asked to do in the manner they were asked to do it.

Next, defendants contend that in constructing their expert testimony, Henry and DeMario relied on the ad hoc judgments of others to determine the relevancy of purchase documents, without setting any objective guidelines. Specifically, defendants assert that Henry farmed out all of his work to Marmon employees, who determined on a document-by-document basis which transactions to include and then relied on plaintiffs' counsel to tabulate the data and to determine for him which vendors should be classified as integrated producers. Defendants contend that DeMario relied solely on data collected by another accounting firm and documents determined relevant and provided by plaintiffs. Plaintiffs argue that the opinions of Henry and DeMario are based on reliable methods and their reliance on others in preparing their reports is permissible.

As explained above, experts may rely on data and other information supplied by third parties. Dura Automotive Systems, 285 F.3d at 609 ("An expert witness is permitted to use assistants in formulating his expert opinion, and normally they need not themselves testify."); NutraSweet Company v. X-L Engineering Company, 227 F.3d 776, 789-90 (7th Cir. 2000);

Tuf Racing, 223 F.3d at 591. Analyzing data assembled by others is neither illicit nor unusual, even if the data were prepared for litigation by an interested party. Loeffel, 372 F. Supp. 2d at 1119. Unless the expert's opinion is too speculative, it should not be rejected as unreliable merely because the expert relied on the reports of others. Walker v. Soo Line Railroad Co., 208 F.3d 581, 588 (7th Cir. 2000). Defendants argue that "[a]nalysis becomes more complicated if the assistants aren't merely gofers or data gatherers but exercise professional judgment that is beyond the expert's ken." Dura Automotive Systems, 285 F.3d at 613. Here, however, both experts were positioned to supervise and independently evaluate the data collection being done by others who assisted them.

Henry had extensive experience working in the industry, including personal knowledge of many copper vendors. He personally coordinated the collection of documents by asking his financial staff members to gather relevant purchase documents and provided guidance on what qualified as a purchase according to the guidelines set by plaintiffs' counsel. In light of his continued oversight and experience, the fact that Henry relied in part on plaintiffs' counsel and another consultant to identify certain integrated producers does not render his report inadmissible. Given his expertise in the copper industry, it was permissible for him to assess the information provided to him by others in formulating his opinion. NutraSweet, 227 F.3d at 789-90; Walker, 208 F.3d at 588-89.

Once again, defendants remain free to question the weight that should be given to Henry's testimony. They have not shown, however, that the testimony is inherently unreliable. Loeffel Steel Products, Inc. v. Delta Brands, Inc., 372 F. Supp. 2d 1104, 1119-20 (N.D. Ill. 2005) (citation omitted) ("As a general rule, questions relating to the bases and sources of an expert's opinion affect only the weight to be assigned that opinion rather than its admissibility.").

With respect to DeMario, the Asarco plaintiffs provided her with business records detailing their copper cathode, rod and ingot purchases, including accounting records, purchase contracts, invoices and vendor statements. Although the accounting firm of Grant Thornton LLP was initially responsible for the data collection, DeMario continued and completed its work. She and her staff tested Grant Thornton's initial compilations for accuracy by comparing them with the supporting documentation. DeMario stated in her deposition that she reviewed the method used by Grant Thornton and reached her own conclusion, asserting that she would have gone back and changed what Grant Thornton had done if she had disagreed with its approach. For those purchases not yet calculated by Grant Thornton, DeMario reviewed the business records to determine which records contained relevant and sufficient information; noted the number of pounds, month and vendor for each purchase; and verified the existence, accuracy and completeness of the records by comparing them to other records or summary schedules provided by plaintiffs.

Defendants have not shown that the opinions of Henry and DeMario are based on unreliable methods or amount to unsupported speculation. Hall, 165 F.3d at 1101-02; Ancho, 157 F.3d at 515. Henry and DeMario explained the methods that they used to collect and summarize the documents. Although these methods may not be the most rigorous, they are not obviously flawed either. Whether the experts employed competent assistants, properly instructed them or ultimately relied on faulty judgments of others goes to the weight and not the admissibility of their opinions. Therefore, I decline to grant defendants' motion in limine with respect to their assertion that in forming their expert opinions Henry and DeMario relied impermissibly on the opinions and assistance of others.

---

ii) compilation errors

In a final attempt to exclude the testimony of Henry and DeMario, defendants point to numerous alleged miscalculations and errors in the work of both experts to show that their resulting opinions are unreliable. Defendants assert that Henry's report includes purchases by non-Marmon entities, double-counts purchases by using the provisional and final invoice for the same purchase and improperly includes unrefined copper purchases and non-purchase transactions in his calculations (such as tolling arrangements to turn copper into wire, wire purchases, shipping costs, amounts listed in credit memos, and swap transactions). According to defendants, DeMario includes in her calculation copper purchases from non-integrated producers and includes duplicate purchases totaling millions of pounds.

Certainly, the alleged errors and inconsistencies are grounds for impeaching the credibility of the experts and the reliability of their ultimate findings; however, mistakes and miscalculations are not grounds for excluding evidence. E.g., Daubert, 509 U.S. at 596 ("Vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence."). Defendants do not challenge the methods employed by plaintiffs' experts. Instead, they allege that mistakes were made in implementing the experts' chosen methods. Whether certain types of transactions should have been included as purchases or how well the experts checked their work and the work of others can be explored fairly through cross-examination.

As I will discuss in more detail below, it is true that plaintiffs may not recover damages for any purchases that were not first time purchases of copper from an integrated producer. That point should have been clear to plaintiffs from the time the court of appeals issued its decision in Loeb Industries, 306 F.3d 469. Given that fact, it is difficult to understand why plaintiffs chose to have their experts go through the fruitless task of tabulating many purchases for which they will not be able to recover damages and failed to take more care in separating out qualifying purchases from nonqualified ones (more on that later). However, the fact that *some* of the purchases itemized by plaintiffs' Henry and DeMario cannot be recovered does not mean that *all* of the purchase information itemized in the reports is useless or inadmissible.

Both Henry and DeMario utilized well-recognized methods for tabulating the quantities of copper plaintiffs purchased from 1993-1996. Assuming the jury finds them to be credible witnesses, their calculations will assist the jury in determining how much damages, if any, to award plaintiffs for their alleged antitrust injuries. Because I find that Henry's and DeMario's testimony meets the basic requirements of Fed. R. Evid. 702, defendants' motion in limine to exclude their testimony will be denied.

3. Evidence of antitrust injury

In their motion for summary judgment, defendants suggest that without the testimony of Gilbert, Henry and DeMario, plaintiffs would be unable to show that they were harmed by defendants' alleged conspiracy. Because I have found that the expert testimony is admissible, the next question is whether the experts' testimony, if believed, would permit a jury to find that plaintiffs suffered any antitrust injury for which they could recover damages under antitrust law.

Although the parties' proposed facts are less than clear on this point, defendants do not appear to contend that any one plaintiff failed to make at least one first-time purchase of cathode or rod from an integrated producer. Therefore, even if it is true that plaintiffs will be unable to recover damages for many of the purchases their experts have tabulated because those purchases do not qualify as first-time purchases under Loeb Industries, each plaintiff has demonstrated that it has antitrust standing to bring suit against defendants. Consequently, defendants' motion for summary judgment will be denied with respect to defendants' contention that plaintiffs lack antitrust standing to pursue their claims.

C. Damages

Having established that the reports and calculations of plaintiffs' damage experts are admissible and that those reports, if believed, are sufficient to establish plaintiffs standing to bring suit, I turn to several remaining questions. Although the answers to these questions do not affect the disposition of defendants' pending motions, they will affect the duration and organization of the trial and therefore must be addressed at this time.

In their motion for summary judgment, defendants identify three problems with plaintiffs' experts' reports. First, each of plaintiffs' experts failed to distinguish clearly between purchases made from integrated producers and from other vendors, complicating the assessment of potential damages. Second, although plaintiffs are barred as a matter of law from recovering for any purchases they made through copper merchants, they have nevertheless included such purchases in their damage assessment. Finally, plaintiffs' experts failed to apply a reduction to purchases of cathode and rod from integrated producers to account for the portion of those purchases that were not first-time sales. In response to these objections, plaintiffs assert that it is the jury's job to determine which purchases are first purchases, whether purchases made through merchants are recoverable and what percentage reduction should be applied to plaintiffs' purchases from integrated producers. I am not persuaded that plaintiffs' laissez faire approach to damages is fair to defendants, the court or the jury.

1. Identity of integrated producers

From the parties' proposed findings of fact and the reports of their damages experts, it appears the parties agree that Asarco, Codelco, Cyprus, Kennecott, Phelps Dodge, Inco, Magma/BHP, Cominco, Empresa Minera de Mantos Blancos, Minera Mexico Internacional, Noranda, Mexicana de Cananea SA Minera Escondida Limitada, Compania Minerva Quebrada Blanca S.A. and Cox Creek Refining are each integrated producers of copper that refined at least a portion of the cathode and rod they sold to plaintiffs between 1993 and

1996. It is entirely unclear whether there are additional integrated producers from whom plaintiffs purchased cathode or rod during the relevant period.

Having studied the parties' proposed findings, briefs and expert reports, I remain uncertain whether the parties have identified all integrated producers. It is difficult to imagine that the lay jury will not find itself confused as well. Rather than wait until trial to sort out the identity of integrated producers, I will hold a hearing on May 16 to address this and other matters. The parties to produce a list of the vendors who qualify as integrated producers and, at the hearing, plaintiff should be prepared to make a proffer of proof with respect to any vendor whose status as integrated producer is disputed.

2. Role of merchants

In Loeb Industries, 306 F.3d 469, the court of appeals made it explicit that plaintiffs could recover damages only for first-time purchases of cathode and rod from integrated producers. The reason behind this rule is simple: in an antitrust action, the stakes are too high to permit plaintiffs to recover damages that may duplicate damages awarded to other plaintiffs. Therefore, the best-situated plaintiff is the plaintiff closest to the antitrust injury. Id. at 481 (citing Illinois Brick Co. v. Illinois, 431 U.S. 720, 729 (1977) ("[T]he direct purchaser from the alleged antitrust violator(s) is the one with the right of action; those further removed from the illegal arrangement may not (under the federal antitrust laws, at least) bring their own actions.").

In Loeb Industries, 306 F.3d at 490, the court held that in this case the proper plaintiffs are those who first-purchased cathode or rod at an inflated price as a result of defendants' alleged conspiracy. Implicit in the decision was the finding that all purchases of non-scrap copper could be classified either as (1) purchases of an original product manufactured by an integrated producer for direct sale or (2) purchases of a product previously sold by an integrated producer or reseller to a buyer "downstream" from the original vendor. Under that framework, only initial sales are properly compensable as antitrust injuries; money expended on the purchase of previously sold copper cannot be recouped in damages.

Now, however, plaintiffs have identified a third category of sales not mentioned in the court of appeals' decision: sales arranged through vendors known as merchants. According to plaintiffs, merchants are neither producers nor resellers. Instead, they are service providers who arrange for the order and delivery of products from an original producer directly to plaintiffs. Plaintiffs contend that they should be permitted to recover treble damages for all copper they purchased through merchants. (The merchants identified by the parties include AICO Corp., BAL Metals International, Inc., Billiton Metals Inc., Brandeis Ltd., Cerro Sales

Corp., Conversion Resources, Inc., Exeon, Gerald Metals, Glencore Ltd., Heisei Minerals Corp., International Metals, J. Aron & Co., Kataman Metals, Inc., Kobe Copper Products, Kojemi Corp., Manitoba Corp., Metal Commodities, MG Metal and Commodity Co., Miles Metal Company, Minemet Inc., Minorco, Mitsubishi Materials America Corp., Mitsui & Co., Outokumpu, Pechiney World Trade Inc., PMX Industries, Inc., Samsung America, Inc. and Southwire Company.)

As explanation why they should be permitted to recover damages for purchases made through vendors, plaintiffs have invoked the "control/agency" and "cost-plus" exceptions to the direct purchaser rule established in Illinois Brick and reiterated in Loeb Industries. Even if the exceptions on which plaintiffs rely were viable in this circuit (and there is serious reason to doubt that they are, see, e.g., State of Illinois, ex rel. Burris v. Panhandle Eastern Pipe Line Co., 935 F.2d 1469, 1478 (7th Cir. 1991) (noting "questions about the viability of the cost-plus exception in *any* context") (citing Calkins, The October 1989 Supreme Court Term and Antitrust: Power, Access, and Legitimacy, 59 Antitrust L.J. 339, 363 n. 135 (1991)) plaintiffs' reliance on those theories is misguided.

As the court of appeals explained in Loeb Industries, 306 F.3d at 482, when "Party A, the antitrust violator, sells to Party B, and then Party C, a down-stream purchaser from B, seeks to recover the implicit overcharges that B passed on to C," C has no standing to bring an antitrust claim. Party B does. In this case, if the merchants stood in the place of Party B, they would have standing to bring their own claim and plaintiffs would be barred under the antitrust laws from recovering damages for cathode purchased from the merchants.

At its root, then, the question before the court is a simple one: Did the merchants *purchase* the cathode they passed along to plaintiffs? If so, it is they who have standing to recover for those purchases, not plaintiffs. However, if the arrangement between the merchants and plaintiffs was nothing more than a service contract in which the merchants merely placed orders on plaintiffs' behalf and arranged for delivery while plaintiffs paid the bill, then plaintiffs are the first purchasers and may recover for the cathode purchases they made from the integrated producers with the assistance of the merchants.

Unfortunately, the facts the parties have proposed do little to assist the court in determining the answer to this dispositive question. The facts proposed by plaintiffs are disputed by defendants and relate only to the generalities of how merchant purchases "typically" and "often" work. Once again, I am concerned that the jury not be presented with unnecessarily complicated information regarding the peripheral question whether the merchants or plaintiffs were the actual first purchasers of the cathode and rod in question. Therefore, I will take up this matter in advance of trial, together with the question of identification of the integrated producers. At the May 16 hearing, plaintiff should be prepared to make a detailed proffer of proof with respect to the role played by each merchant with respect to each purchase for which plaintiffs are seeking damages.

3. “Integrated Producer Percentage” reduction

In Loeb Industries, 306 F.3d 469, the court of appeals reversed this court’s finding that the complexity of apportioning damages in this case counseled against finding that plaintiffs had standing to bring suit under the antitrust laws. In doing so, the court explained that

> tracking every pound of cathode refined or purchased by [plaintiffs’] suppliers, and locating every cathode contract Viacom entered into over a six-year span will not be easy. But complex litigation is hardly new for the federal courts, whether it is in the field of antitrust, environmental clean-ups, pension law, or accounting frauds . . . . [O]ne need only determine through available records what percentage of cathode bought by [plaintiffs] represents first purchases. This is not speculative or complex, only time-consuming, and we are confident that the parties and their counsel are up to the task.

Id. The court reinstated plaintiffs’ claims and reiterated its holding that plaintiffs would “have the burden of ascertaining what percentage of the cathode sold by these [integrated] producers was refined by them and not purchased from third parties,” id. at 495, in order to prove their damages.

Plaintiffs do not deny that their damages are subject to reduction by the “integrated producer percentage" referred to in the court of appeals' decision. In fact, as mentioned in Section B, above, DeMario calculated an integrated producer percentage for each integrated producer identified to her by plaintiffs. Wazzan, defendants' damage expert, has done the same. Nevertheless, for reasons that are not entirely clear, defendants object strenuously to the failure of plaintiffs' experts to apply their integrated producer percentage reduction to the final tally of the damages they are seeking.

In their defense, plaintiffs point out that DeMario and Wazzan calculated the integrated provider percentage in slightly different ways. (DeMario used a straight average and Wazzan used a weighted average; DeMario excluded Kennecott's percentages when calulating the "average"percentage; Wazzan did not.) Recognizing that the dispute regarding percentages needs to be resolved before any final damages estimate can be reliable, plaintiffs' experts have provided their underlying damages figures without applying the integrated producer percentage reduction. Plaintiffs assert that once the jury has determined which purchases qualify as first purchases and which percentage reductions are more reliable, the court or the parties need only engage in a "simple arithmetic calculation" to determine the ultimate damages due them. I agree.

At trial, the jury will undoubtedly hear testimony from DeMario and Wazzan regarding their reasons for calculating the initial producer percentage in the manner they did.

The jury will have to weigh the credibility of the experts and determine which approach is the more reasonable one. Once it has chosen a set of figures on which to rely (DeMario's or Wazzan's, or some amalgamation of the two), applying the percentage reductions to the qualifying purchases will be a simple matter.

ORDER

IT IS ORDERED that

1. The motion for summary judgment of defendants J.P. Morgan Chase & Company and Morgan Guaranty Trust Company of New York is DENIED;

2. Defendants' motion in limine to exclude the reports and testimony of Roy Henry and Marianne DeMario is DENIED.

3. Defendants' motion in limine to exclude the report and testimony of Christopher Gilbert is DENIED.

FURTHER, IT IS ORDERED that

4. Plaintiffs Aetna Insulated Wire, Cerro E.M.S. Limited, Cerro Fabricated Products, Inc. and Hendrix Wire & Cable, Inc. are DISMISSED from this lawsuit.

5. A hearing will be held on Wednesday, May 16, 2007, at 7:30 a.m. At that time,

plaintiff should be prepared to make a detailed proffer of proof with respect to (1) any vendor whose status as integrated producer is disputed; and (2) the role played by each merchant with respect to each purchase for which plaintiffs are seeking damages.

Entered this 24th day of April, 2007.

BY THE COURT:

/s/

BARBARA B. CRABB

District Judge