

**International
Association of
Machinists and
Aerospace Workers**



9000 Machinists Place
Upper Marlboro, MD 20772-2687

301/967-4500

OFFICE OF THE INTERNATIONAL PRESIDENT

June 28, 2012

Subj: Notice of Proposed Rulemaking
17 CFR Part 151 RUN: 3038-AD82

David A. Stawick, Secretary
Commodity Futures Trading Commission
Three Lafayette Center
1155 21st Street, NW
Washington DC 20581

Dear Mr. Stawick,

Thank you for giving the International Association of Machinists and Aerospace Workers (IAMAW) the opportunity to comment on your Notice of proposed rulemaking: COMMODITY FUTURES TRADING COMMISSION 17 CFR Part 151 RUN: 3038-AD82 AGGREGATION UNDER PART 151, POSITION LIMITS FOR FUTURES AND SWAPS.

The proposed rule would amend the rules establishing speculative position limits for physical commodity futures and option contracts traded on a designated contract market and economically equivalent swaps, which were published in the Federal Register on November 18, 2011.

The proposed rules would permit any market participant with an ownership interest of 10% up to 50% in a separately organized entity (an "owned entity") to make a notice filing of exemption from aggregation by demonstrating independence in decision making. The owned entity could be a financial or a nonfinancial entity that has passive ownership interests.

By loosening the ownership of interest up to 50%, the proposed rule can potentially spark additional "herd-like" behavior, thus causing another commodities futures boom-bust cycle. The IAMAW believes that without strong regulations including position limits established by the Dodd Frank Act, excessive speculation in the futures markets will continue. Therefore, the IAMAW recommends that Commodity Futures Trading Commission (CFTC) adhere to its existing formula of setting position limits such that no single investor can constitute more than 10% of a market, as measured by open interest, up to 25,000 contracts of open interest, and 2.5% thereafter. However, if CFTC's existing position limit formula is considered not to be feasible,

then we suggest CFTC give Pollin and Heintz (2011) and CME group (2009) position limits proposals serious consideration.¹

Our views are based on the analysis of the empirical literature on position limits, excessive speculation, price volatility and the financialization of commodities.² The literature reviewed shows that institutional investors in its attempts find “safe havens” and increase their profits entered into the commodity markets en masse. As a result, prices became inflated beyond the fundamentals of supply and demand (boom) and subsequent drop in prices when many institutional investors exited the commodities market (bust).

With the increasing presence of institutional investors in the commodities market, it appears that index traders (institutional investors) primarily hold long positions (buyers). Several economists show that from a sheer size perspective the number of index traders tend to be small, however, “their average long positions is very large...sometimes more than 10 times the size of an average long positions held by either commercial or non-commercial traders.” A direct consequence is that index traders can have strong financial power to influence prices. As a result, speculative bubbles may form and price changes can no longer be interpreted as reflecting fundamental supply and demand signals” (Mayer 2009).

A policy response to guard against excessive speculation is for the CFTC “to exercise its authority to ensure that the policy tools provided by Dodd Frank are implemented in ways that protect the interests of ordinary people and small businesses throughout the United States” (Pollin and Heintz 2011:5). Specifically, Section 737 of the Dodd Frank Act mandates that CFTC institute position limits in order to “diminish, eliminate, or prevent excessive speculation.” Thus, from the existing studies, reports and articles cited, it is clear that position limits are needed in the commodities market.³

As mentioned previously, the IAMAW believes that the existing rules are reasonable and sound. The proposed rule as written deviates from the intended purpose as instructed in the Dodd Frank Act. Although not a panacea to end all excessive speculation, position limits can be another tool in the tool box.

We appreciate this opportunity to comment on proposed rules. If you have any questions, please contact Legislative and Political Director Matthew McKinnon at (301) 967-4575.

Respectfully submitted,



R. Thomas Buffenbarger
International President

¹ Robert Pollin and James Heintz (2011), "How Wall Street Speculation is Driving Up Gasoline Prices Today," Research Briefs, Political Economy Research Institute, University of Massachusetts at Amherst. CME Group, 2009, "Excessive Speculation and Position Limits in Energy Derivatives Markets"

² See our analyses in Appendix A.

³ See Appendix B.

Appendix A.

I. The Financialization of Commodities and Price Volatility

The influx of institutional investors in the commodities market has been attributed to the run up of commodity prices (peaking by mid-2008), which many economists and policy makers deemed as another example of the boom-bust cycles of asset markets.¹ For instance, at the conclusion of the most recent boom-bust cycles in equity and real estate markets in 1999 and 2004 respectively, institutional investors were looking to diversify their portfolios while seeking a highest return on their investments.² Empirically, Phillips and Yu (2010) show that bubbles moved from the equity market to the housing market and on to the subprime mortgage derivative market before the financial downturn. Once the crisis “erupted into the public arena, the pricing bubbles migrated to selected commodity markets...suggesting a flight-to-quality or perceived safe haven phenomena (2010:35-36).

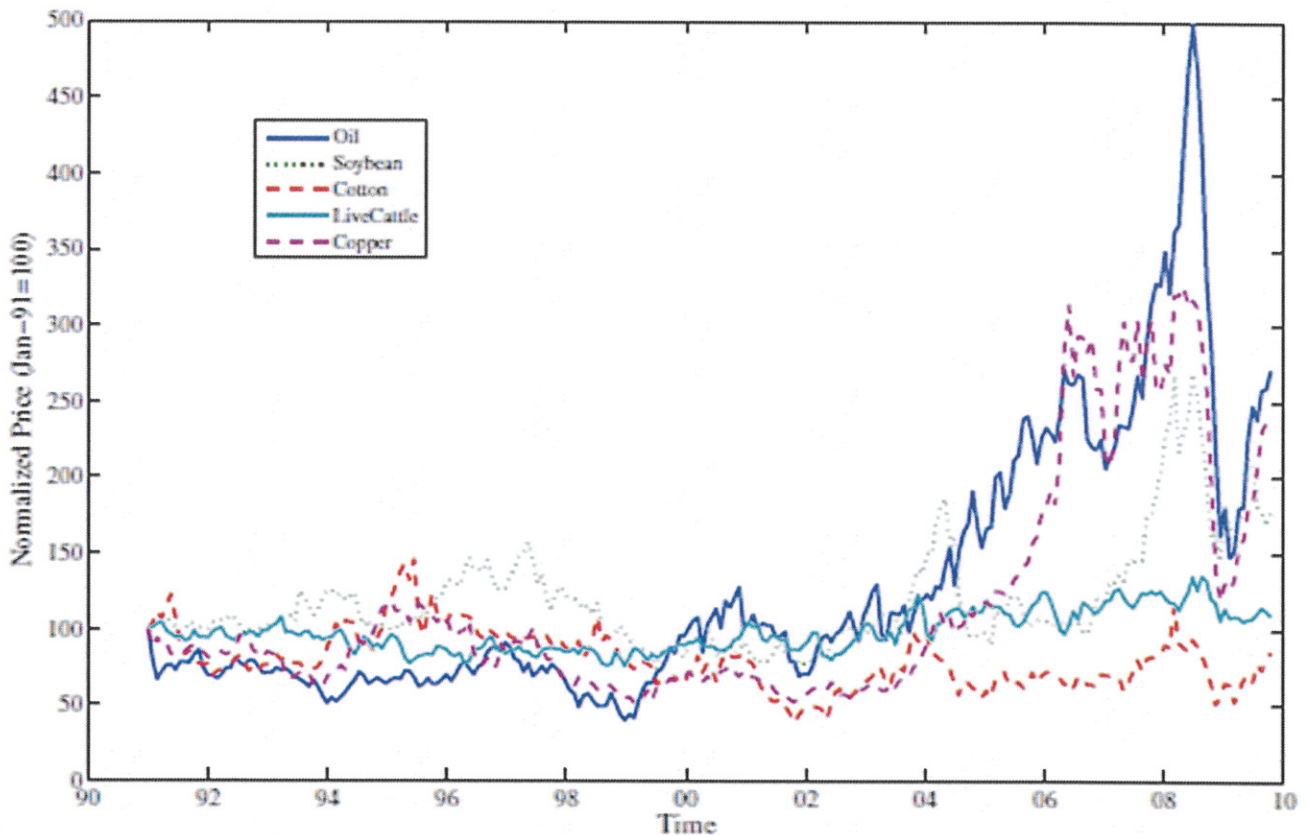
As in other asset price bubbles, it is believed by many that this “herd” like behavior increased commodity prices and created excessive volatility beyond the “fundamentals” of supply and demand. Accordingly, there is a direct correlation (not necessarily causation) between the inflow (exist) of institutional investment in the commodities market and soaring (falling) prices.

¹ Phillips and Yu (2010), Caballero et al., Wray (2008), Masters (2008), US Senate Permanent Subcommittee on Investigations (2009) Schulmeister (2009), Mayer (2009)

² Mayer (2009) states that institutional investors were active in the commodity futures and options markets since the early 1990s, but their presence rose in the in the aftermath of the dot-com crash on equity markets in 2000, and increased dramatically in early 2005. According to Mayer, the number of futures and options contracts outstanding on commodity exchanges worldwide rose more than threefold between 2002 and mid-2008, and, during the same period, the notional value of commodity-related contracts traded over the counter (OTC) (i.e. contracts traded bilaterally, and not listed on any exchange) increased more than 14-fold. Financial investments in commodities fell sharply starting in mid-2008 before picking up again in 2009.

In Figure 1 below, Tang and Xiong (2010) illustrate the influx of hundreds of billions of dollars of investments flowed into specific commodities markets (oil, soybean, cotton, live cattle and copper). Overall, total value of commodity index-related instruments purchased by institutional investors had increased from an estimated \$15 billion in 2003 to at least \$200 billion by mid-2008.³

Figure 1. Commodity prices



Source Tang and Xiong (2010)

³ Since 2009 futures contracts have fluctuated but not at the level of the mid-2008 price boom. For instance, the Brent Crude Oil traded at a high of \$145.55 a barrel on July 14, 2008. On June 18, 2012 Brent Oil traded at a high of \$99.570. The lowest price in the aftermath of the post commodity boom was \$47.33 on December 29, 2008.

Although speaking primarily on the crude oil market but it is apropos to most of the commodities futures market, Pollin and Heintz (2011) explain that the explosion in crude oil futures market is because of commodity index investor has come to dominate the futures market.

These traders entered the market with enormous financial resources, enabling them to influence the ups and downs of market prices to an unprecedented degree. To a large extent, these traders are affiliated with major investment banks, such as Goldman Sachs or UBS. They became involved in this market to buy energy futures contracts as an alternative to holding stocks, bonds, or other types of derivative assets, such as mortgage backed securities. But when these traders came to hold dominant positions in the market, they also gained the power to move prices up or down through their own trading decisions. Among other strategies, they can make large profits by staying ahead of other market participants. For example, when market prices are rising, they can buy large numbers of futures contracts, aiming to push prices up further upward, then sell their contracts at market peaks (2011:3).

Ghosh, Hentz and Pollin (2011) argue that their empirical results indicate that recent increase in market liquidity in commodity markets correspond with increased levels of price volatility and therefore there is sufficient amount of evidence to support the need to limit increases in trading volume in futures markets.⁴ Further, examining open interest as a measure of liquidity for selected commodities futures markets (maize, rice, petroleum, soy and wheat), Ghosh et al., show that prices increased noticeable during 2004-2008 period. Correspondingly, volatility increased significantly during the mid-2007 period while peaking by mid-2008. Overall, they find that there is a direct link between market liquidity and volatility. They explain that

...all evidence points to the conclusion that the recent sharp increase in market liquidity is associated with high levels of price volatility. The liquidity of the food commodities futures market that we have observed increased dramatically starting in the early 2000s and especially from 2007 onward. This rapid increase in liquidity was associated with a similarly rapid increase in average prices; and, [b]y one common measure of volatility, the rise in liquidity was also associated with a rapid increase in volatility. But even considering alternative measures of volatility, there is no evidence that the rise in

⁴ Ghosh, Heintz and Pollin examined open interest of certain commodities from 1986-2011, global commodity price indices from 1990-2011, twelve month moving standard deviation in commodity price indices from 1991-2011, and price volatility in global commodity markets from 1991-2011.

liquidity is associated with a dampening of volatility, and there is still strong evidence that the rise in liquidity is associated with higher levels of volatility (Ghosh, Hentz and Pollin 2011).

So it appears that market liquidity increased when institutional investors bought significant amounts of commodity future contracts between 2004 and 2008 which lead to a rise in commodity prices, and as a result higher market volatility. However, the recent financial crisis (from 2008 to early 2009) sparked institutional investors to exit from some commodities market therefore causing a fall in prices. Recently, institutional investors re-entered into commodity markets but not at the magnitude as in the 2004-2008 boom period.

Similar to previous asset price bubbles, Wray (2008, 2009), Toporowski (1999a, 1999b), and Evans (2003, 2007) proposed ‘investor inflow theory’ indicates that commodity prices became inflated beyond the “fundamentals” in this boom-bust cycle. Thus, it is clear that this cycle can be attributed to a large extent to the decisions made by institutional investors to enter and exit out of the commodities markets.

II. Critique of Efficient Markets Hypothesis and Price Discovery as it relates to the Commodities Market

There are at least two reasons why the efficient market hypothesis may fail in relation to commodity markets, at least in the short run, so that the value of futures contracts will not serve this price discovery purpose. First, changes in market positions may occur in response to factors other than information about market fundamentals. Second, individual market participants may make position changes that are so large relative to the size of the market that they move prices (the so-called “weight-of-money” effect). Significant impacts of these two factors will cause mechanisms that would prevent prices from moving away from levels determined by fundamental supply and demand factors – the efficient absorption of commodity-related information and sufficiently strong price elasticity of supply and demand – to be relatively weak on commodity markets (Mayer 2009:6).

Further, some have attributed institutional investors or commodity index traders (CIT) activities are impairing the price discovery function of futures markets. For example,

commodities index funds such as the Standard and Poors GSCI and the Dow Jones-UBS Commodity Indices are structured by swap dealers in order to mimic the conditions associated with the condition of owning and storing physical commodities for institutional investors.

Therefore, the signals generated are consistent with the synthetic investment. As a result, behavior by other participants in the market is influenced by these practices as to be consistent with hoarding, which then induces *actual* hoarding behavior by other market participants in order to take advantage of perceived rising prices (as reflected in the forward commodities futures price curve).

In fact, there are no transparent mechanisms for other market participants (especially those not privy to customer-specific Roll requirements) to discern that the bias towards contango is only generated by Roll-related trading activity, rather than some supply and demand force. As a result, the futures markets now provide information that is derived from an artificial financial source.

Unfortunately, this false signal becomes misinterpreted by many market participants...While market participants undoubtedly sense that the CITs cause price distortion, many strong advocates of the belief in efficient markets, functioning in the context of widely shared information, continuously opine that prices are *only* affected by fundamentals. This falsehood then serves to *reinforce* the artificial and misleading price signals generated around the Roll Cycle.

As shown in the Commodity Futures Trading Commission (CFTC) weekly Commitments of Traders (COT) weekly reports data, index traders “take virtually only long positions and that they take positions across many commodities in proportions that depend only on the weighting formula of the particular index independent of the specific market conditions for the individual commodities contained in the index”. Mayer shows the net long positions of index traders in agricultural products on United States commodity exchanges more than doubled between January 2006 and May 2008. Further, index trader positions recorded sharp rises in the quarter of 2006 and between the fourth quarter of 2007 and the second quarter of 2008. Prices fell sharply in the third and fourth quarters of 2008 but, starting in March 2009, prices have rebounded to their levels of end-2006 (Mayer 2009:9).

III. The Case for Position Limits

In accord with the public comments made by Pollin and Heintz on position limits, we agree that “a primary mission of the CFTC is to foster fair, open, and efficient functioning of the commodity derivatives markets and to protect market users and the public from undue burdens that could result from ‘excessive speculation.’”⁵ The Commission may impose position limits prophylactically, based on its reasonable judgment that such limits are necessary for the purpose of eliminating such burdens” (Pollin and Heintz 2011).

Pollin and Heintz (along with several authors mentioned previously) indicate that there is a link between market liquidity and high levels of price volatility, therefore uniform CFTC established position limits are warranted.

Specifically, over the periods mentioned, the relative shares of index traders in total long positions in live cattle, lean hogs, and wheat traded on the Chicago Board of Trade (CBOT) were significantly larger than the positions of commercial traders in those commodities and exceeded speculative limits set by Sanders, Irwin and Merrin (2008). Although Mayer writes prior to the proposed rule changes in Dodd Frank, his assessment continues to be relevant. Currently, “[E]xceeding speculative limits is perfectly legal for index traders, as they are generally classified as commercial traders, and therefore are not subject to speculative position limits set by the CFTC. But, as noted by Sanders, Irwin and Merrin (2008: 8), it does provide some indirect evidence that speculators or investors are able to use ... [existing] instruments and commercial hedge exemptions to surpass speculative limits” (Mayer 2008).

⁵ *Comment Regarding Position Limits for Derivatives* By Robert Pollin and James Heintz, Political Economy Research Institute, University of Massachusetts, Amherst

Agreeing with Pollin and Heintz, the initial position limits formula set by the CFTC appears reasonable.⁶ However, given the recent challenges to the existing rules, an alternative position limit formula as outlined by Pollin and Heintz may be warranted. They proposed the following formula:

...we can simply set limits relative to the median trading level of *all* traders in the market. The total number of index traders is small relative to other traders, even though their average positions are much larger. As such, to set position limits relative to the *median* for the overall market will accomplish the same outcome as attempting to set limits only after having distinguished commercial from index traders. In addition, to prevent the position limits from moving excessively based on possible large swings in the levels of market activity, this approach could be adjusted by, for example, defining the median position as a moving average of actual positions over, say, a three year period.

Another alternative that may warrant consideration is provided by CME where they believe that although position limits in energy markets are unnecessary, they realize that interpretations of speculation could diminish confidence in the futures markets. CME Group suggests that “efforts to increase confidence in the futures markets by imposing hard limits on energy products must be balanced with ensuring that such limits do not have a detrimental effect on the price discovery and hedging functions of futures markets or drive trading to unregulated markets.” For this reason, CME Group has proposed the following recommendations:

- Each regulated exchange should set position limits for all months combined, single months and the delivery period based on traditional considerations, focusing on its open interest and, at or near the delivery period, the deliverable supply. The CFTC may alter or amend the limits set by an exchange based on factors pertinent to its market if it finds that the exchange’s rules are inadequate to prevent the effects of excessive speculation
- Each exchange shall be responsible for administering its hedge exemption program for its markets subject to its existing exemption standards until such time as common exemption standards are established by the CFTC. Each exchange will continue to funds will remain eligible for risk management to

⁶ The formula initially proposed by CFTC is meant to make sure that no single speculator can make up more than 10 percent of a market, as measured by open interest

exemptions to hedge bona fide exposure but be subject to position limits for their speculative proprietary trading.

- The CFTC will establish a system for reporting of end-user OTC positions and, after gaining authority to impose aggregate limits that include OTC positions, be responsible for ensuring an end-user's combined on-exchange and OTC speculative positions do not exceed the aggregate total market position limit. The CFTC may grant exemptions for OTC positions that represent hedging rather than speculative activity.

The specific suggestion they give for single-month limits is 10 percent of the first 25,000 contracts of open interest with a 5 percent marginal increase for open interest in excess of 25,000. The all-months-combined limit is suggested at 150 percent of the single-month limit. They claim these restrictions will limit excess concentration so that a market can handle itself without risk to the integrity of the market (2009:3).

References

CME Group, 2009. "Excessive Speculation and Position Limits in Energy Derivatives Markets"

Evans, Lawrence, L (2003). *Why the Bubble Burst: US Stock Market Performance Since 1982*. Cheltenham, MA Edward Elgar

Evans, Lawrence, L (2007). "An Analysis of the Shrinking Supply of Equity and the U.S. Stock Market Boom: Does Supply Matter" in *Empirical post Keynesian Economics: Looking at the Real World*. - Armonk, NY: Sharpe, ISBN 9780765613288. - 2007, p. 237-274

Ghosh, Jayati, James Heintz and Robert Pollin, 2011. "Speculation on Commodities Futures Markets and Destabilization Of Global Food Prices: Exploring the Connections," Working Papers wp 269, Political Economy Research Institute, University of Massachusetts at Amherst.

Phillips, Peter C. B. and Jun Yu, 2010. "Dating the Timeline of Financial Bubbles During the Subprime Crisis" Cowles Foundation Discussion Paper No. 1770, Cowles Foundation for Research in Economics, Yale University.

Pollin, Robert and James Heintz, 2011. "How Wall Street Speculation is Driving Up Gasoline Prices Today," Research Briefs, Political Economy Research Institute, University of Massachusetts at Amherst.

Mayer, Jörg, 2009. "The Growing Interdependence Between Financial And Commodity Markets," UNCTAD Discussion Papers 195, United Nations Conference on Trade and Development.

Sanders, Dwight R., Irwin, Scott H., and Merrin, Robert P., 2008. "The Adequacy of Speculation in Agricultural Futures Markets: Too Much of a Good Thing?" Marketing and Outlook Research Reports 37512, University of Illinois at Urbana-Champaign, Department of Agricultural and Consumer Economics.

Schulmeister, Stephan. (2009), Trading Practices and Price Dynamics in Commodity Markets and the Stabilising Effects of a Transaction Tax WIFO Working Paper, 2009.

Schulmeister, Stephan. "Trading Practices and Price Dynamics in Commodity Markets." Syngenta & ELO Conference on Food & Environmental Security. Austrian Institute of Economic Research. Vienna University. 18 Mar. 2008.

Tang, Ke and Wei Xiong, 2010. "Index Investment and Financialization of Commodities," NBER Working Papers 16385, National Bureau of Economic Research, Inc.

United States Senate Permanent Subcommittee on Investigations. Excessive Speculation in the Natural Gas Market. 25 June 2007.

United States Senate Permanent Subcommittee on Investigations. Excessive Speculation in the Wheat Market. 24 June 2009.

Wray, L. Randall, 2008. "The Commodities Market Bubble: Money Manager Capitalism and the Financialization of Commodities," Economics Public Policy Brief Archive ppb_96, Levy Economics Institute, The.

Wray, L. Randall, 2009. "Money Manager Capitalism and the Global Financial Crisis," Economics Working Paper Archive wp_578, Levy Economics Institute, The.

Appendix B.

Listed below are references cited by CFTC Commissioner Bart Chilton in his “Speculators and Commodity Prices—Redux” testimony on February 24, 2012:

Agriculture and Food Policy Centre. The Effects of Ethanol on Texas Food and Feed. Texas A&M University. 10 Apr. 2008.

Aliber, R.Z. Interview by Michael Patterson and Elizabeth Stanton. “Oil Rally Topped Dot-Com Craze in Speculators’ Mania.” Bloomberg. 13 June 2008.

el-Badri, Abdalla. Interview by Maher Chmaytelli. “OPEC Calls for Curbing Oil Speculation, Blames Funds.” Bloomberg. 28 Jan. 2009.

Baffes, John and Tassos Haniotis. Placing the 2006/08 Commodity Price Boom into Perspective. The World Bank Development Prospects Group. July 2010.

Basu, Parantap and William T. Gavin. “What Explains the Growth in Commodity Derivatives?”. Federal Reserve Bank of St. Louis Review. Jan./Feb. 2011.

Berg, Ann. Agricultural Futures: Strengthening Market Signals for Global Price Discovery. United Nations Food and Agriculture Organization. 2010.

Branson, Richard, Michael Masters and David Frenk. Letter. The Economist. 29 July 2010. Print.

Braun, Joachim von. “Time to regulate volatile food markets.” Financial Times. 9 Aug. 2010.

Eckaus, R.S. The Oil Price Really is a Speculative Bubble. MIT. 13 June 2008.

Evans, Tim. Interview by David Gaffen. “The Official Demise of the Oil Bubble.” Wall Street Journal. 10 Oct. 2008.

Frenk, David. “Review of Irwin and Sanders 2010 OECD Report.” Better Markets Inc. 30 June 2010.

Gheit, Fadel and Daniel Katzenberg. Surviving Lower Oil Prices. Oppenheimer & Co. 2008.

Gilbert, Christopher L. “How to Understand High Food Prices.” Journal of Agricultural Economics. 23 Apr. 2010.

Ghosh, Jayati. Commodity Speculation and the Food Crisis. The World Development Movement. Oct. 2010.

Hernandez, Manuel and Maximo Torero. Examining the Dynamic Relationship between Spot and Future Prices of Agricultural Commodities. International Food Policy Research Institute. June 2010.

Institute for Agriculture and Trade Policy. Betting Against Food Security: Futures Market Speculation. Trade and Global Governance Program. Jan. 2009.

International Monetary Fund. Regional Economic Outlook: Middle East and Central Asia. Washington, D. C. May 2008.

Kemp, John. "Crisis Remakes the Commodity Business." Reuters. 29 Oct. 2008.

Khan, Mohsin S. "The 2008 Oil Price "Bubble." Policy Briefs PB09-19. Peterson Institute for International Economics. Aug. 2009.

Krugman, Paul. "Oil Speculation". The Conscience of a Liberal. The New York Times Blog. 8 July 2009.

Lines, Thomas. Speculation in Food Commodity Markets. World Development Movement. Apr. 2010.

Masters, Michael W. Testimony of Michael W. Masters Managing Member/Portfolio Manager Master Capital Management, LLC before the Commodities Futures Trading Commission. 5 Aug. 2009.

Masters, Michael W. and Adam K. White. The Accidental Hunt Brothers: How Institutional Investors Are Driving up Food and Energy Prices. 31 July 2008.

Mayer, Jörg. The Growing Interdependence between Financial and Commodity Markets. United Nations Conference on Trade and Development. No. 195. Oct. 2009.

Medlock, Kenneth B. and Amy Myers Jaffe. Who is in the Oil Futures Market and How Has It Changed?. Rice University. 26 Aug. 2009.

Molen, M. van der. "Speculators Invading the Commodity Markets: a Case Study of Coffee." Utrecht: Science Shop of Law, Economics and Governance. Utrecht University. 2009.

Morse, Edward and Michael Waldron. "Oil Dot-com." Energy Special Report. Lehman Brothers. 29 May 2008.

Newell, J. "Commodity Speculation's "Smoking Gun" Probalytics: Probability Analytics Research. 17 Nov. 2008.

Nissanke, Machiko. "Commodity Markets and Excess Volatility: Sources and Strategies to Reduce Adverse Development Impacts." Common Fund for Commodities. University of London. Nov. 2010.

Phillips, Peter C.B. and Jun Yu. "Dating the Timeline of Financial Bubbles During the Subprime Crisis." Cowles Foundation Discussion Paper No. 1770. Yale University. Singapore University. 13 Sept. 2010.

Ray, Daryll E. and Harwood D. Schaffer. "Index funds and the 2006-2008 run-up in agricultural commodity prices." Policy Pennings. Agricultural Policy Analysis Center. University of Tennessee. 7 Jan. 2011.

Roubini, Nouriel. "The Risk of a Double-dip Recession Is Rising." Financial Times. 23 Aug. 2009.

Sachs, Jeffrey. Interview by Ian Katz and Ari Levy. "Corn Futures Spark Riots as Speculators Take Trading to Limit." Bloomberg. 14 Dec. 2008.

Schulmeister, Stephan. "Trading Practices and Price Dynamics in Commodity Markets." Syngenta & ELO Conference on Food & Environmental Security. Austrian Institute of Economic Research. Vienna University. 18 Mar. 2008.

Schutter, Olivier de. Food Commodities Speculation and Food Price Crises: Regulation to reduce the risks of price volatility. United Nations. Sept. 2010.

Shiller, Robert J. Interview by Clifford Krauss. "Commodity Prices Tumble." The New York Times. 13 Oct. 2008.

Silvennoinen, Annastiina and Susan Thorp. Financialization, Crisis and Commodity Correlation Dynamics. Quantitative Finance Research Centre. University of Technology Sydney. Jan. 2010.

Singleton, Kenneth J. "Investor Flows and the 2008 Boom/Bust in Oil Prices." Graduate School of Business, Stanford University. SSRN 1793449. 23 Mar. 2011.

Tanaka, Nobuo. Interview by Ayesha Rascoe and Roberta Rampton. "IEA says speculation amplifying oil prices moves." Reuters. 30 June 2009.

Tang, Ke and Wei Xiong. "Index Investment and Financialization of Commodities." NBER Working Paper no. w16385. Princeton University. Renmin University. Sept. 2010.

Trostle, Ronald. Global Agricultural Supply and Demand: Factors Contributing to the Recent Increase in Food Commodity Prices. United States Department of Agriculture Economic Research Service. July 2008.

Tudor Jones, Paul. "Price Limits: A Return to Patience and Rationality in U.S. Markets." Speech presented at the CME Global Financial Leadership Conference, Naples, FL. 18 Oct. 2010.

Turbeville, Wallace C. "Consumers, the Food Crisis, and Index Funds." New Deal 2.0: A Project of the Franklin and Eleanor Roosevelt Institute. 18 Aug. 2010.

United Nations Conference on Trade and Development. The Global Economic Crisis: Systemic Failures and Multilateral Remedies. Report by the UNCTAD Secretariat Task Force on Systemic Issues and Economic Cooperation. 2009.

United Nations Conference on Trade and Development Geneva. Trade and Development Report, 2009: Chapter II, The Financialization of Commodity Markets. 2009.

United Nations Conference on the World Financial and Economic Crisis and Its Impact on Development. Report of the Commission of Experts of the President of the United Nations General Assembly on Reforms of the International Monetary and Financial System. 24-26 June 2009.

United Nations Food and Agricultural Organization. Extraordinary Joint Intersessional meeting of the Intergovernmental Group (IGG) on Grains and the Intergovernmental Group on Rice. Committee on Commodity Problems. 24 Sept. 2010.

United Nations High Level Task Force. The High Level Task Force on the Global Food Security Crisis Progress Report. 2008.

United States Senate Permanent Subcommittee on Investigations. Excessive Speculation in the Natural Gas Market. 25 June 2007.

United States Senate Permanent Subcommittee on Investigations. Excessive Speculation in the Wheat Market. 24 June 2009.

Wray, L. Randall. "The Commodities Market Bubble: Money Manager Capitalism and the Financialization of Commodities." Public Policy Brief No. 96. The Levy Economics Institute of Bard College. 2008.