Closing Wall Street's Commodity and Swaps Betting Parlors: Legal Remedies to Combat Needlessly Gambling up the Price of Crude Oil Beyond What Market Fundamentals Dictate

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Abstract

The price of crude oil in the futures markets has oscillated wildly during the past five years. Although these price swings may partly be a result of insufficient supply meeting large demand for oil, economic data demonstrate that market fundamentals have in fact remained in equilibrium. An overwhelming number of market participants, financial analysts, and academics have instead shown that unregulated excessive speculation in the oil futures markets is to blame. Such excessive speculation is a result of the financialization of commodities, which has exacerbated price swings in oil because the speculative upward betting causes artificially high prices that do not reflect actual demand. In order to prevent unstable prices in oil and other commodities, the Commodity Futures Trading Commission ("CFTC") and other agencies must strongly enforce measures such as position limits and antimanipulation rules as directed by the Dodd-Frank Wall Street Reform and Consumer Protection Act. Legislative bans on derivative-based gambling on crude oil prices will also help in this regard. These actions will help prevent radically high prices in oil and other commodities and restore those markets to pricing determined by market fundamentals, which will in turn prevent further volatility in crude oil prices that threatens the fragile economic recovery of the United States and the rest of the world.

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INTRODUCTION

West Texas Intermediate ("WTI") is a grade of crude oil that serves as the benchmark for oil pricing in the United States and is the underlying commodity for oil futures contracts on the New York Mercantile Exchange ("NYMEX").¹ The price of WTI determines the price of gasoline and other derivative products such as heating oil,² and this price has oscillated wildly during the past five years. The WTI spot price (the price for immediate delivery)³ was approximately \$70 per barrel in July 2007, after which it reached a record high of \$147 in July 2008 before falling to a record low of \$30 in December 2008.⁴ The price increased to \$69 at the end of July 2009 and reached

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¹ U.S. ENERGY INFO. ADMIN., SHORT-TERM ENERGY OUTLOOK SUPPLEMENT: BRENT CRUDE OIL SPOT PRICE FORECAST 1 (2012), http://www.eia.gov/forecasts/steo/special/pdf/2012_ sp_02.pdf. Brent crude oil serves as the benchmark for oil pricing in Europe. *Id.*

² See id.

³ Glossary, U.S. ENERGY INFO. ADMIN. (last visited Jan. 6, 2013), http://www.eia.gov/tools/glossary/index.cfm?id=S.

⁴ Rebekah Kebede, Oil Hits Record Above \$147, REUTERS (July 11, 2008, 3:58 PM), http:/

\$110 in April 2011, then decreased to approximately\$75 in October 2011, and finally increased again to \$105 in the beginning of April 2012.⁵ Even though there was no shutoff of the U.S. supply of foreign oil, the volatility in oil prices between 2007 and 2012 has been exponentially greater than the oil shocks following the 1973 Organization of Petroleum Exporting Countries ("OPEC") oil embargo, the 1979 Iranian Revolution, and the 1990–91 Persian Gulf War.⁶ Indeed, OPEC has actually increased production over this five-year period to mitigate the wild volatility in crude oil prices.⁷ Furthermore, the fundamentals of supply and demand have not only generally remained in equilibrium over the last five years;⁸ the United States has also become a net exporter of petroleum products for the first time in more than sixty years.⁹

The volatility in crude oil prices and the attendant rise in gasoline prices threaten the fragile economic recovery in the United States and the rest of the world, raising the specter of a renewed recession with a substantial further increase in unemployment.¹⁰ For example, the in-

5 Petroleum & Other Liquids, EIA, supra note 4.

6 DAVID FRENK, BETTER MARKETS, INC., REVIEW OF IRWIN AND SANDERS 2010 OECD REPORTS 3 (2010).

7 See Clifford Krauss, OPEC Opts to Increase its Level of Output, N.Y. TIMES, Dec. 15, 2011, at B10.

⁸ See Ali Naimi, Saudi Arabia Will Act to Lower Soaring Oil Prices, FIN. TIMES (Mar. 28, 2012, 4:30 PM), http://www.ft.com/cms/s/0/9e1ccb48-781c-11e1-b237-00144feab49a.html#axzz215 C3ltN8.

9 See Gas Prices and Speculation (C-SPAN broadcast Apr. 4, 2012), available at http:// www.c-spanvideo.org/clip/2478294 [hereinafter C-SPAN Video]; see also Barbara Powell, U.S. Was Net Oil-Product Exporter for First Time Since 1949, BLOOMBERG (Feb. 29, 2012, 5:52 PM), http://www.bloomberg.com/news/2012-02-29/u-s-was-net-oil-product-exporter-in-2011.html.

10 Christine Lagarde, Managing Director of the International Monetary Fund, has stated that rising energy prices are a greater threat to the worldwide economy than the European sovereign debt crisis. Guy Chazan, Naimi Calls High Oil Prices 'Unjustified', FIN. TIMES (Mar. 20, 2012, 4:01 PM), http://www.ft.com/intl/cms/s/0/f9f8eb00-729e-11e1-9be9-00144feab49a.html#axzz 282dappup [hereinafter Chazan, Prices Unjustified]; see also MARK COOPER, ExcEssive SPECU-LATION AND OIL PRICE SHOCK RECESSIONS: A CASE OF WALL STREET "DÉJÀ VU ALL OVER AGAIN" 3-5 (2011), http://www.consumerfed.org/pdfs/SpeculationReportOctober13.pdf; James D. Hamilton, Historical Oil Shocks, in ROUTLEDGE HANDBOOK OF MAJOR EVENTS IN ECO-NOMIC HISTORY 239, 239 (Randall E. Parker & Robert Whaples eds., 2013) (detailing the role oil shocks play as major contributors to recessions); Javier Blas, Soaring Crude Price Threatens Recovery, FIN. TIMES (Feb. 24, 2012, 9:33 PM), http://www.ft.com/intl/cms/s/0/c198a52a-5f02-11e1a04d-00144feabdc0.html#axzz282dappup; Guy Chazan, Oil's Rise Seen As Threat to Growth, WALL ST. J., Mar. 1, 2011, at C10; High Oil Prices Threaten Global Economy, IEA Warns, GUARDIAN (Dec. 14, 2011, 4:37 AM), http://www.guardian.co.uk/business/2011/dec/14/iea-high-

[/]www.reuters.com/article/2008/07/11/us-markets-oil-idUST14048520080711; Petroleum & Other Liquids: Cushing, OK WTI Spot Price FOB, U.S. ENERGY INFO. ADMIN. (last visited Jan. 4, 2013), http://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=RWTC&f=D [hereinafter Petroleum & Other Liquids, EIA].

creased costs of gasoline, a key derivative of crude oil, saps economic demand for consumer goods because consumers spend more on gas and thus have less money to purchase other necessities and consumer items.¹¹ This, in turn, leads to fewer jobs to produce and distribute such goods. Moreover, small businesses are especially vulnerable to sustained high gas prices because of their limited capital resources.¹²

In short, worldwide changes in crude oil market fundamentals (or perhaps even expectations about threatened disruptions to supply) may be part of the reason for the recent fluctuations in oil prices, but they cannot fully explain the radical oil price oscillations in recent years, especially because global supply has generally met global demand during this time. The recent financialization of crude oil futures and other commodity staples derivatives markets (i.e., betting on the upward direction of these prices) has exacerbated these price swings, causing the prices of oil and other commodities to remain artificially high.¹³ Ending this excessive speculation in commodity futures markets will restore stability to crude oil pricing and facilitate economic

11 The average household in 2011 spent an estimated \$600 more on gasoline than it would have if excessive speculation had not distorted oil prices. COOPER, *supra* note 10, at 3. In other words, the money Americans saved from the congressional payroll tax cut in 2012 goes straight to paying for gas. GENE GUILFORD, INDEP. CONN. PETROL. ASS'N & EDUC. FOUND., CONNECT THE DOTS BETWEEN WALL STREET AND THE LOCAL GAS PUMP (2012), http://www.scribd.com/doc/94819405/Gene-Guilford-Briefing.

Speculation can drive commodities prices too low as well, which would also threaten the world economy. See Gordon Brown & Nicolas Sarkozy, Op-Ed, We Must Address Oil-Market Volatility, WALL ST. J. (July 8, 2009), http://online.wsj.com/article/SB124699813615707481.html ("[W]e as consumers must recognize that abnormally low oil prices, while giving short-term benefits, do long-term damage. They diminish incentives to invest, not only in oil production but also, in our own countries, in energy savings and carbon-free alternatives."); Robert Rapier, *Cutting Through the Rhetoric on Speculators and Oil Prices*, CONSUMER ENERGY REP. (Apr. 16, 2012), http://www.consumerenergyreport.com/2012/04/16/cutting-through-the-rhetoric-on-speculators-and-oil-prices/ ("Speculation can drive prices in either direction.").

¹² COOPER, supra note 10, at 1, 5; see also Energy Speculation: Is Greater Regulation Necessary to Stop Price Manipulation? (Part II): Hearing Before the Subcomm. on Oversight & Investigations of the H. Comm. on Energy & Commerce, 110th Cong. 164–75 (2008) [hereinafter Guilford Statement] (statement of Eugene A. Guilford, Jr., Exec. Dir. & CEO, Indep. Conn. Petrol. Ass'n) (describing, inter alia, the difficulties of consumers and commercial businesses caused by excessively high oil prices).

¹³ See, e.g., Staff of Permanent Subcomm. on Investigations of the S. Comm. on Homeland Sec. & Governmental Affairs, 111th Cong., Excessive Speculation in the Wheat Market 101–02, 146 n.243 (Comm. Print 2009) [hereinafter Wheat Report].

oil-prices-global-economy; Caroline Salas & Steve Matthews, Fisher, Lockhart Say Rising Oil Prices Threaten U.S. Economic Growth, BLOOMBERG (Apr. 18, 2011, 2:20 PM), http://.bloom berg.com/news/2011-04-18/fed-s-fisher-lockhart-say-rising-oil-prices-threaten-growth.html (quoting Federal Reserve Bank of Dallas President Richard Fisher: "'[Rising oil prices are] a double whammy' as '[they] slow[] down our economy' and 'add[] to inflationary pressures.'").

growth by allowing commodity producers and consumers to rely on futures markets to hedge their risks effectively.¹⁴ Strong enforcement of rigorous position limits and anti-manipulation rules by the Commodity Futures Trading Commission ("CFTC") as directed by the Dodd-Frank Wall Street Reform and Consumer Protection Act ("Dodd-Frank"),¹⁵ as well as enforcement of other recent anti-manipulation legislation by a variety of other agencies, will curb excessive speculation in the commodities markets.¹⁶ Moreover, efforts by the federal and state governments to ban gambling on crude oil prices may have an even more direct effect on lowering the cost of these products to consumers.¹⁷ Decreasing excessive speculation will consequently help prevent unnecessarily high prices in oil and other commodities and restore those markets to pricing determined by classic market fundamentals. This will in turn help prevent another global recession or worse.

I. EXCESSIVE SPECULATION SIGNIFICANTLY IMPACTS OIL PRICES

The principal functions of commodity futures markets are to serve as a venue for commercial producers and consumers to hedge against price risks and to provide market participants with guidance

¹⁴ Excessive speculation has also caused volatility in other futures markets, including food staple commodities. See, e.g., id. at 38-40. The volatility in futures prices for food staples has led to increased hunger and malnutrition throughout the world. See Letter from Food Speculation Coal. to President Barack Obama (Mar. 24, 2009), available at http://www.grassrootsonline.org/ news/articles/food-speculation-coalition-letter-president-obama (letter from 184 human rights and hunger relief organizations discussing the harmful impact of excessive speculation in the food commodities markets on hundreds of millions of people around the world); Food & Agric. Org. of the United Nations, Experts Eye Commodities Speculation, Food Price Swings, FAO (July 6, 2012), http://www.fao.org/news/story/en/item/150900/icode/ (quoting President Leonel Fernández Reyna of the Dominican Republic: "Financial speculation is exacerbating market fluctuations and this exacerbation is generating uncertainty-this uncontrolled, unregulated exacerbation is provoking a dramatic impact on countries that are net food importers We are not talking about an abstract concept here, we are talking about something that is having a devastating, dramatic and brutal impact on the lives of people."). Recognizing the destructive social impact that they have on needlessly raising the price of commodity staples, many swaps dealers have abandoned all or some of these bets. Javier Blas, Banks Withdraw Food Commodity Funds, Fin. Times (Aug. 14, 2012, 10:06PM), http://.ft.com///0/-e62f-11e1-ac5f-00144feab49a. html#axzz3oxFzBVk.

¹⁵ Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, 124 Stat. 1376 (2010).

¹⁶ See Prohibition on the Employment, or Attempted Employment, of Manipulative and Deceptive Devices and Prohibition on Price Manipulation, 76 Fed. Reg. 41,398, 41,398–400 (July 14, 2011) (to be codified at 17 C.F.R. § 180).

¹⁷ See, e.g., WHEAT REPORT, supra note 13, at 52 n.76 (discussing Congress's decision in 1958 to prohibit onion futures to prevent wild fluctuations in the price of onions).

on fair spot prices.¹⁸ Because these markets have traditionally operated in accordance with the fundamentals of supply and demand, they serve as "price discovery" mechanisms.¹⁹ That is, the tension between producers and consumers in ensuring fair prices through the futures markets has caused these markets to determine the prices at which the underlying commodities are sold on the spot market.²⁰ For example, when a producer of oil sells oil, the producer looks to the futures market price to determine the sale price of the actual commodity. However, as shown below, when these markets are overrun by excessive speculation—i.e., too many participants betting on price direction (rather than worrying about fair pricing in commercial sales) without ever taking possession of crude oil—the futures price becomes unmoored from market fundamentals.²¹ The excessive betting on price direction in these markets has caused much volatility in the price of oil over the last five years.²²

A. The Role of Futures Markets

Unlike the securities and bond markets, futures markets are not designed to raise capital for, or provide lending to, business interests.²³ The entire rationale of these markets is to provide vehicles for commercial producers and consumers to insure against future unpredictable volatility in pricing.²⁴ Indeed, the classic example of a futures contract begins with the sowing farmer who fears the price of his crop will decline by harvest time such that he incurs significant losses. To hedge against that risk, the farmer sells a contract in the futures market that guarantees delivery at a later date for a price that will likely protect the farmer against the feared drop in price. Likewise, a consumer who fears a later rise in prices may purchase that futures contract, allowing the consumer to receive the crop at a later date for a price that will likely protect the consumer to receive the crop at a later date for a price that will likely protect the consumer against the feared price increase.²⁵

¹⁸ See id. at 52–53.

¹⁹ See, e.g., id. at 142.

²⁰ See id. at 47, 51, 157.

²¹ See, e.g., id. at 12.

²² See id. at 101-02; supra notes 4-6 and accompanying text.

²³ See, e.g., Jill Treanor, Banks Urged to Raise More Capital from Markets Amid Eurozone Crisis, THE GUARDIAN (Sept. 27, 2012, 10:03 AM), http://www.guardian.co.uk/business/2012/sep/ 27/banks-raise-capital-markets-eurozone.

²⁴ See WHEAT REPORT, supra note 13, at 14-15.

²⁵ For descriptions and examples of how commercial producers and consumers can hedge against price risk through the commodity futures markets, see Nick BATTLEY, AN INTRODUC-TION TO COMMODITY FUTURES AND OPTIONS 5–12 (2d ed. 1995); *The Economic Purpose of*

The tension between commercial producers attempting to obtain a reasonably high price and consumers trying to achieve a fair low price for the sale or purchase of physical commodities through the public transparent hedging process anchors these price discovery futures markets to economic fundamentals.²⁶ It also helps ensure fair market prices for the ultimate consumers of these commodities—i.e., the public. As a result of the tension between consumers and producers seeking fair prices, these markets provide price discovery in the "spot" (or "cash") markets.²⁷ Those selling or buying commodities in the spot markets rely almost exclusively on futures prices to determine how much to charge or pay for the delivery of a commodity.²⁸

Since the creation of futures markets in the agricultural context many decades ago, it has been widely understood that without proper regulation, these markets are prone to distortion in the economic fundamentals of price discovery through excessive speculation—in other words, paying unnecessarily high or low prices due to the presence of too many participants in these markets who merely bet on the direction of commodity prices without ever possessing the underlying commodity.²⁹. As one disgruntled farmer lamented to the House Agriculture Committee in 1892: "[T]he man who managed or sold or owned those immense wheat fields has not as much to say with regard to the price of the wheat that some young fellow who stands howling around the Chicago wheat pit could actually sell in a day."³⁰

27 See Economic Purpose, supra note 25. A spot contract is "a contract for immediate delivery of the commodity." Id.

²⁸ See, e.g., Platts, Platts Oil Pricing and MOC Methodology Explained 3 (2010), http://.platts.com/IM.Platts.Content/InsightAnalysis/IndustrySolutionPapers/moc.pdf.

²⁹ See WHEAT REPORT, supra note 13, at 2; Economic Purpose, supra note 25. Some commentators go as far as to say that excessive speculation not only distorts, but also destroys, the price discovery function of the market. Testimony of Michael W. Masters, Managing Member/ Portfolio Manager, Masters Capital Mgmt., LLC, Before the Commodities Futures Trading Association 17 (Mar. 25, 2010), available at http://www.cftc.gov/ucm/groups/public/@newsroom/documents/file/metalmarkets032510_masters.pdf [hereinafter Masters 2010 Testimony].

30 Jonathan Ira Levy, Contemplating Delivery: Futures Trading and the Problem of Commodity Exchange in the United States, 1875-1905, 111 AM. HIST. REV. 307, 307 (2006) (quoting

Futures Markets and How They Work, U.S. COMMODITY FUTURES TRADING COMM'N, http:// www.cftc.gov/ConsumerProtection/EducationCenter/economicpurpose (last visited Jan. 11, 2012) [hereinafter *Economic Purpose*].

²⁶ See, e.g., Anne Peck, The Economic Role of Traditional Commodity Futures Markets, in FUTURES MARKETS: THEIR ECONOMIC ROLE 73–76 (Anne E. Peck ed., 1985) (discussing the benefits of futures markets to both producers and consumers of commodities); see also 7 U.S.C. § 5(a) (2006) (stating that derivatives transactions subject to the Commodity Exchange Act are "affected with a national public interest by providing a means for managing and assuming price risks, discovering prices, or disseminating pricing information through trading in liquid, fair and financially secure trading facilities").

B. The History of Excessive Speculation in the Oil Futures Markets

Speculators have a role to play in the hedging function because they ensure that the futures markets have sufficient liquidity³¹—that is, the commodity producer and consumer will always have enough available market participants to close out a contract when needed.³² In other words, speculators are often needed to ensure that physical hedgers have a ready market to buy or sell their futures contracts, even when actual demand for futures contracts among other commercial hedgers is low. However, when speculation becomes *excessive* i.e., when there is more speculation than necessary to provide commercial hedgers with liquidity—the market becomes unmoored from the competing tensions between consumers and producers described above.³³ Congress passed the Commodity Exchange Act ("CEA")³⁴ of 1936 in order to prevent these effects through regulation.³⁵

The CEA, enacted in 1936 in a format the template of which survives today, authorizes federal commodity regulators to ban excessive speculation in these markets.³⁶ As a report from the House Agriculture Committee commented in 1935:

The fundamental purpose of the [Commodity Exchange Act] is to insure [sic] fair practice and honest dealing on the commodity exchanges and to provide a measure of control over those forms of speculative activity which too often demoralize the markets to the injury of producers and consumers and the exchanges themselves.³⁷

Thus, a chief aim of the CEA was to protect farmers and other futures market participants from the harm that results from excessive specula-

31 See Economic Purpose, supra note 25.

³² See 1 PHILLIP MCBRIDE JOHNSON & THOMAS LEE HAZEN, DERIVATIVES REGULATION § 1.03[4] (2004) (differentiating among speculating, investing, and hedging); *id.* § 1.03[6] ("Yet it is highly unlikely that the commercial world's need for futures contracts at any given time will be exactly balanced between long and short contracts. Commodity investors are admitted access to these markets in order to fill the demand for futures contracts even when no commercial firm has an interest in doing so"); see also BP N. Am. Petrol. v. Solar ST, 250 F.3d 307, 311 n.3 (5th Cir. 2001) (defining speculators and hedgers).

33 See, e.g., WHEAT REPORT, supra note 13, at 12.

³⁴ Commodity Exchange Act ("CEA"), Pub. L. No. 74-675, ch. 545, 49 Stat. 1491 (1936) (codified at 7 U.S.C. §§ 1–17 (2006)).

35 Id. sec. 5, § 4a, 49 Stat. at 1492 (codified as amended at 7 U.S.C. § 6a(a) (2006)).

36 See id.

Fictitious Dealings in Agricultural Products: Hearing Before the H. Comm. on Agric., 52d Cong. 186 (1892) (statement of Charles Pillsbury)) (internal quotations omitted).

³⁷ H.R. REP. No. 74-421, at 1 (1935) (emphasis added).

tive activity, which leads to unreasonable market prices for commodities.

When President Roosevelt introduced what became the CEA in 1934, he said: "[I]t should be our national policy to restrict, as far as possible, the use of these exchanges for *purely speculative* operations."³⁸ Accordingly, section 5 of the CEA grants the CFTC the authority to set maximum position limits:³⁹

Excessive speculation in any commodity . . . causing *sudden* or *unreasonable* fluctuations or *unwarranted* changes in the price of such commodity, is an undue and unnecessary burden on interstate commerce in such commodity. For the purpose of diminishing, eliminating, or preventing such burden, the commission *shall* . . . fix such limits on the amount of trading . . . [relating to] such commodity . . . as the commission finds . . . necessary to diminish, eliminate, or prevent such burden.⁴⁰

These position limits were historically designed to ensure enough speculation to maintain liquidity in the commodities futures markets could take place, while preventing the unmooring of market fundamentals due to *excessive* speculation.⁴¹

The CEA allows exemptions from position limits for businesses to "hedge their legitimate anticipated business needs."⁴² In other words, businesses are exempt from position limits if they need to enter the futures market in order to protect themselves against adverse movement in the prices of commodities that they need to buy or sell.⁴³ Examples include farmers who need to hedge against a future fall in prices for their crops and airlines that need to hedge against future increases in the price of fuel.⁴⁴

³⁸ President Franklin D. Roosevelt, Message to Congress Recommending a Securities Exchange Commission (Feb. 9, 1934), *available at* http://www.presidency.ucsb.edu/ws/index.php? pid=14805 (emphasis added).

³⁹ CEA sec. 5, § 4a(1), 49 Stat. at 1492 (codified at 7 U.S.C. § 6a(1)). The CFTC defines a "speculative position limit" as: "The maximum position . . . in one commodity future (or option) or in all futures (or options) of one commodity combined that may be held or controlled by one person (other than a person eligible for a hedge exemption)" CFTC Glossary: A Guide to the Language of the Futures Industry, COMMODITY FUTURES TRADING COMM'N, http://.cftc.gov/// /index.htm (last visited Jan. 12, 2013) [hereinafter CFTC Glossary].

⁴⁰ CEA sec. 5, § 4a(1), 49 Stat. at 1492 (codified at 7 U.S.C. § 6a(1))(emphasis added). For a discussion of the CFTC's enforcement of position limits in other agricultural commodities and the process of such enforcement, see 1 JOHNSON & HAZEN, *supra* note 32, at § 2.04[9].

⁴¹ H.R. REP. No. 74-421, at 1-3.

⁴² CEA sec. 5, § 4c, 49 Stat. at 1492 (codified at 7 U.S.C. § 6c).

⁴³ See WHEAT REPORT, supra note 13, at 72-73.

⁴⁴ See, e.g., Testimony of Congressman Bart Stupak, U.S. House of Representatives,

In 1991, however, the CFTC authorized a "bona fide hedging" exemption to the swap dealer J. Aron and Company, which was owned by Goldman Sachs.⁴⁵ This company had "no physical commodity exposure, and therefore no legitimate anticipated business need" for purposes of the exemption.⁴⁶ Instead, J. Aron provided swaps bets to its customers, which gave them the ability to bet on commodity price direction without taking possession of those commodities.⁴⁷ J. Aron received this bona fide hedging exemption presumably on the theory that in order to lay off risks from these swaps bets, it had a "commercial" need to buy as many futures contracts as it could to offset its exposure to losses on those bets.⁴⁸ Without this exemption, J. Aron could not operate a de facto "casino" and instead would have had to limit its customers' bets to the restrictions of the position limits.

Since 1991, the CFTC has granted staff exemptions to fifteen different investment banks,⁴⁹ even though these swaps dealer "casinos" had no legitimate anticipated commercial or business need of the nature intended by President Roosevelt and Congress in 1936.⁵⁰ These large institutions argued that they needed to hedge their bets in the then-unregulated swaps market by investing in futures contracts, and so they were secretly and without public notice classified by the CFTC staff as "commercial traders."⁵¹

The resulting "swaps loophole" has led swaps dealers, generally large financial institutions, to take positions in the oil futures and other commodity staples markets that are larger than they would have been if the swaps dealers had merely bought or sold futures contracts, which are subject to speculative position limits.⁵² These larger positions lay off the betting risk assumed by large financial institutions from sales of commodity index swaps,⁵³ exchange traded funds,⁵⁴ and

48 See id.

- 49 Testimony of Congressman Bart Stupak, supra note 44, at 5.
- 50 See President Franklin D. Roosevelt, Message to Congress, supra note 38.

Before the Commodities Futures Trading Commission Hearing on Energy Position Limits and Hedge Exemptions 3 (July 28, 2009), *available at http://www.cftc.gov/ucm/groups/public/@newsroom/documents/file/hearing072809_stupak.pdf*.

⁴⁵ Id. at 5.

⁴⁶ Id.

⁴⁷ See WHEAT REPORT, supra note 13, at 75.

⁵¹ See Kevin G. Hall & Robert A. Rankin, Speculation Explains More About Oil Prices than Anything Else, McCLATCHY NEWSPAPERS (May 13, 2011), http://www.mcclatchydc.com/ 2011/05/13//-more-about.html.

⁵² See Kenneth B. Medlock III & Amy Myers Jaffe, Who Is in the Oil Futures Market and How Has It Changed? 9 (2009).

⁵³ A commodity index swap is a "swap whose cash flows are intended to replicate a commodity index." CFTC Glossary, supra note 39. In other words, the returns of a commodity

exchange traded notes,⁵⁵ all of which allow investors to bet passively on the direction of a synthetic "basket" of energy and food commodities that are heavily weighted toward crude oil.⁵⁶ To make these bets, the customers do not have to, and, in fact, most often do not, own the underlying commodities on which they bet.⁵⁷

Passive investors, who in the aggregate account for the largest share of outstanding commodities futures contracts, include not only banks, but also other institutional investors such as pension funds, endowment funds, and sovereign wealth funds, as well as wealthy individual speculators.⁵⁸ The swaps vehicles and offsetting bets made by

⁵⁵ An exchange traded note ("ETN") is "designed and sold by banks and other financial institutions to permit retail investors to purchase shares of a debt security whose price is linked to that of a commodity index. Upon maturation of the note, the issuer of the ETN promises to pay the holder of each share of the note the value of . . . [the] commodity index." WHEAT REPORT, *supra* note 13, at 86.

⁵⁶ See Ke Tang & Wei Xiong, Index Investment and Financialization of Commodities, 68 FIN. ANALYSTS J. 54, 72 (2012) ("As a result of the financialization process, the price of an individual commodity is no longer determined solely by its supply and demand. Instead, prices are also determined by the aggregate risk appetite for financial assets and the investment behavior of diversified commodity index investors."); Testimony of Michael W. Masters, Managing Member/Portfolio Manager, Masters Capital Mgmt., LLC, Before the Commodities Futures Trading Association 24–26 (Aug. 5, 2009), available at http://www.cftc.gov/ucm/groups/public/ @newsroom/documents/file/hearing080509_masters.pdf [hereinafter Masters 2009 Testimony]; see also id. at 11–12 (describing how investment banks created commodity investment vehicles that only allowed investors to take long positions); Cyrus Sanati, Congress Girds for a Fight on Oil Trading, CNNMONEY (Mar. 26, 2012, 11:48 AM), http://.fortune.cnn.com//03/26/congress-oiltrading/ ("A lot of the speculative money comes from passive investment vehicles, like ETFs and ETNs run by investment management firms like PIMCO. Since those passive funds have a long bias, they tend to skew the market by dampening downswings in the market while augmenting run-ups.").

57 See, e.g., Futures and Options 101, ALTAVEST, http://www.altavest.com//.aspx (last visited Jan. 13, 2013) ("When trading futures, you never actually buy or sell anything tangible; you are just contracting to do so at a future date. You are merely taking a buying or selling position as a speculator, expecting to profit from rising or falling prices. You have no intention of making or taking delivery of the commodity you are trading, your only goal is to buy low and sell high, or vice-versa."). In contrast, speculative investors will soon be able to buy physical copper and keep it off the market to raise prices, even though they have no intention of making productive use of the commodity. See Lina Khan, JP Morgan Gets a Big Holiday Gift from the SEC, NEW REPUBLIC (Dec. 31, 2012), http://www.newrepublic.com/blog/plank/111490/jp-morgan-gets-bigholiday-gift-the-sec#.

⁵⁸ Financial Speculation in Commodity Markets: Are Institutional Investors and Hedge Funds Contributing to Food and Energy Price Inflation?: Hearing Before the S. Comm. on Home-

index swap are "based upon the performance of a specified commodity index.... If the value of the commodity index increases, the value of the swap to the purchaser will increase by a corresponding amount." WHEAT REPORT, *supra* note 13, at 83.

⁵⁴ An exchange traded fund ("ETF") is an "investment vehicle holding a commodity or other asset that issues shares that are traded like a stock on a securities exchange." *CFTC Glossary, supra* note 39. These shares "hold the various futures contracts whose values are used to compute the index value." WHEAT REPORT, *supra* note 13, at 86.

passive investors are now informally recognized as their own class of assets for investment portfolios.⁵⁹ The weight of their record volume of long investments in the oil futures markets⁶⁰ helps explain the fact

land Sec. & Governmental Affairs, 110th Cong. 40 (2008) (statement of Michael W. Masters, Managing Member/Portfolio Manager, Masters Capital Mgmt., LLC); WHEAT REPORT, supra note 13, at 76, 79 (noting that investments in commodity indexes are "purchased mainly by financial institutions, insurance companies, pension funds, foundations, hedge funds, and wealthy individuals"); Energy Market Manipulation and Federal Enforcement Regimes: Hearing on S.R. 253 Before the S. Comm. on Commerce, Sci., and Transport. 2-3 (2008) (testimony of George Soros, Chairman, Soros Fund Management), available at http://commerce.senate.gov/public/ ?a=Files.Serve&File_id=80aebf28-67b8-4c5b-84cd-574291807e98. [hereinafter Soros Testimony] (explaining the role of institutional investors in inflating the oil price bubble); DANIEL YERGIN, The Quest: Energy, Security, and the Remaking of the Modern World 170 (2011) (referring to the investment in commodities as the "massive passives"). Leading up to the record high oil prices in 2008, CalPERS (California's main public-employee pension fund) had invested \$1 billion in commodity index funds believing that "in the coming decades natural resources are going to be where the action is." Steven Mufson, Oil Price Defies Easy Calculation, WASH. POST, Apr. 11, 2008, at D1. In 2012, the amount that CalPERS invested in such assets increased to \$3.6 billion. See John Kemp, CalPERS Fails to Make Money in Commodities, REUTERS (July 23, 2012, 6:10 AM), http://.reuters.com//2012/07/23/column-kemp-commoditiespensions-idUSL6E8IN6IK20120723.

⁵⁹ See DANIEL O'SULLIVAN, PETROMANIA: BLACK GOLD, PAPER BARRELS AND OIL PRICE BUBBLES 109-10 (2009) (explaining the process by which oil futures became investment vehicles and the effect of this process on increasing oil prices); ROBERT POLLIN & JAMES HEINTZ, HOW WALL STREET SPECULATION IS DRIVING UP GASOLINE PRICES TODAY 3 (2011) (describing "energy futures contracts as an alternative to holding stocks, bonds, or other types of derivatives assets, such as mortgage-backed securities"); Gary Gorton & K. Geert Rouwenhorst, *Facts and Fantasies About Commodity Futures*, 62 FIN. ANALYSTS J. 47, 60 (2006) ("Commodity futures returns have been especially effective in providing diversification for stock and bond portfolios."); see also Giulio Cifarelli & Giovanna Paladino, Oil Price Dynamics and Speculation: A Multivariate Financial Approach, 32 ENERGY ECON. 363, 364 (2010) (discussing investment strategies that involve purchasing commodities to diversify a portfolio when a trader is bearish on stocks).

Interestingly, some researchers have categorized commodities such as oil as speculative instruments based on comparisons to gold. Gold is widely known as a highly speculative commodity with a price driven by factors other than demand, and the relationship between the prices of gold and oil were surprisingly close for decades before oil prices started growing at a much higher rate than gold prices in 2002. See INT'L MONETARY FUND, REGIONAL ECONOMIC OUT-LOOK: MIDDLE EAST AND CENTRAL ASIA 28 (2008); MOHSIN S. KHAN, PETERSON INST. FOR INT'L ECON., THE 2008 OIL PRICE "BUBBLE" 5 (2009);; see also John Baffes & Tassos Haniotis, *Placing the 2006/08 Commodity Price Boom into Perspective* 6 (The World Bank Development Prospects Group Policy Research Working Paper No. 5371, 2010), available at http://wwwwds.worldbank.org/servlet//////_20100721110120/Rendered/PDF/WPS5371.pdf (explaining that the "financialization of commodities" was "a role typically reserved for gold" in the past (internal quotation marks omitted)).

⁶⁰ Silla Brush, Energy Speculation at Highest Levels on Record, CFTC's Bart Chilton Says, BLOOMBERG (Mar. 15, 2011, 11:45 AM), http://www.bloomberg.com/news/2011-03-15/hedgefund-energy-speculation-highest-on-record-cftc-s-bart-chilton-says.html ("Hedge funds and other speculators have increased their positions in energy markets by 64 percent since June 2008 to the highest level on record"); see also POLLIN & HEINTZ, supra note 59, at 3 ("These traders entered the market with enormous financial resources, enabling them to influence the that the price of oil increased 85% in 2009, despite the fact that the available supply of crude oil in the United States was at a twenty-year high while the demand for crude oil was at a ten-year low.⁶¹

Again, those institutions and wealthy investors speculating through passive bets are not required to own any commodities,⁶² and therefore by placing the bets do not otherwise put money into energy or agricultural production. As a report from the OPEC Petroleum Studies Department stated:

[N]ew asset management strategies, financial product innovation, and development of new institutional forms of investing (e.g. index and hedge funds) . . . paved the way for greater financialization of the oil industry . . . [This] has resulted in greater . . . depth in the paper-oil market. These developments . . . have given rise to new investment assets that get their reward from price performance of oil futures and derivatives rather than the old-fashioned form of market reward through capital investment into oil exploration and extraction, and the resulting higher production.⁶³

Wall Street banks that issue these investment vehicles hedge against the passive investors' bets by buying long in the corresponding futures markets.⁶⁴ Paper contracts are thereby created that call for the making or taking of delivery of commodities that are far in excess of the world inventory of those products.⁶⁵ By betting on upward price direction and hedging those bets in the physical commercial-oriented futures market, Wall Street banks and large financial institutions send continuous false "demand" signals to the markets, causing both commodity prices and spot prices to rise despite equilibrium between supply and demand.⁶⁶

64 See WHEAT REPORT, supra note 13, at 76, 83-84.

65 See Financial Speculation in Commodity Markets: Are Institutional Investors and Hedge Funds Contributing to Food and Energy Price Inflation?: Hearing Before the S. Comm. on Homeland Sec. & Governmental Affairs, 110th Cong. 41–42 (2008) (statement of Michael W. Masters, Managing Member/Portfolio Manager, Masters Capital Mgmt., LLC).

66 See id. at 40-42.

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.").

⁶¹ Regulatory Reform and the Derivatives Market: Hearing Before the S. Comm. on Agric., Nutrition, & Forestry, 111th Cong. 39 (2009) (statement of Michael W. Masters, Managing Member/Portfolio Manager, Masters Capital Mgmt., LLC).

⁶² See supra note 57 and accompanying text.

⁶³ Ahmad R. Jalali-Naini, The Impact of Financial Markets on the Price of Oil and Volatility: Developments Since 2007 9 (2009).

The ratio between commercial hedgers and speculators in a futures market is ideally 70:30.⁶⁷ Prior to 2002, the average composition of noncommercial speculators in the U.S. oil futures market was 20%, but it rose to approximately 50% in 2009.⁶⁸ Some estimates now place the percentage of these speculators between 70%⁶⁹ and 80%.⁷⁰ The resulting amount of excessive speculation is reflected by the fact that approximately one billion barrels are traded in the synthetic oil futures markets per day, while only approximately eighty-five million barrels of oil are actually produced per day.⁷¹ In other words, less than 10% of what is traded in the oil futures markets consists of actual oil.

C. Enactment of the Dodd-Frank Act

In response to the 2008 financial crisis, Congress enacted the Dodd-Frank Wall Street Reform and Consumer Protection Act ("Dodd-Frank")⁷² to improve and protect the nation's financial system. Section 737 of the Act was written with the clear goal of returning to the kind of hard position limits for noncommercial financial institutions that prevailed before the CFTC granted stealth staff exemptions from the position limits requirements of the CEA.⁷³ Section 737 also strengthened position limits to cover not just classic futures markets, but all derivatives markets, including swaps: "[T]he Commission *shall* by rule, regulation, or order establish limits on the amount of positions, as appropriate, other than bona fide hedge positions, that may be held by any person"⁷⁴

⁶⁷ See Masters 2009 Testimony, supra note 56, at 5 ("I believe that speculators should ideally be in the range of 25%–35% of open interest."); Dennis Kelleher, Speculators Are Driving up Gas Prices, CNNMONEY (Mar. 21, 2012, 5:55 AM), http://money.cnn.com/2012/03/21/markets/oil-gas-prices-speculators/index.htm.

⁶⁸ MEDLOCK III & JAFFE, supra note 52, at 5.

⁶⁹ Joseph P. Kennedy III, Op-Ed., *The High Cost of Gambling on Oil*, N.Y. TIMES, Apr. 11, 2012, at A23; GUILFORD, *supra* note 11; Hall & Rankin, *supra* note 51. Between 1998 and 2008, "[t]he positions of bona fide physical hedgers doubled . . . while the positions of speculators rose by 1200%." MASTERS 2010 TESTIMONY, *supra* note 29, at 4.

⁷⁰ Testimony of Michael Greenberger, Prof. of Law, Univ. of Md., Francis King Carey Sch. of Law, Before the House Democratic Steering & Policy Committee 7 (Apr. 4, 2012), *available at* http://michaelgreenberger.com/files/Greenberger_House_Dem_Policy_Testimony_040412_Final _Draft.pdf.

⁷¹ KHAN, supra note 59, at 4; Kennedy, supra note 69.

⁷² Dodd-Frank Wall Street Reform and Consumer Protection ("Dodd-Frank") Act, Pub. L. No. 111-203, 124 Stat. 1376 (2010).

⁷³ See supra notes 45-51 and accompanying text.

⁷⁴ Dodd-Frank Act § 737, 124 Stat. at 1723 (emphasis added).

During the hearings that led to the passage of Dodd-Frank, Senator Dianne Feinstein (D-Cal.) stated that "[p]osition limits provide an important restriction on market manipulation and the amount of risk that can build up in any one market participant," and that the CFTC would "be able to prevent speculators from assembling massive positions in a particular commodity, such as oil, by assembling large positions in multiple contracts."⁷⁵ Furthermore, Representative Collin Peterson (D-Minn.), then Chairman of the House Committee on Agriculture, stated: "We all remember when we had \$147 oil This conference report includes the tools we authorized and the direction to the CFTC to mitigate outrageous price spikes we saw 2 years ago."⁷⁶

D. Observations on the Effect of Excessive Speculation on Oil Prices

While some have debated and denied it, the great weight of independent authority finds that outsized excessive speculation in the physical derivatives markets has caused unnecessary price volatility in crude oil prices since 2008. This volatility has led to unnecessary and substantial increases in the prices that consumers pay for everyday products such as gasoline and many other energy and food staples.

1. Market Participants

In March 2011, when the price of crude oil in the spot market was more than \$100 per barrel,⁷⁷ the CEO of ExxonMobil testified to the United States Senate Finance Committee that market fundamentals only justified a price of \$60 to \$70 per barrel.⁷⁸ Around the same time, the General Counsel of Delta Air Lines stated that the marginal cost of oil production on March 20, 2011, was \$60 to \$70 per barrel, which deviated drastically from the WTI price at that time.⁷⁹ By October

^{75 156} CONG. REC. S2699 (daily ed. Apr. 27, 2010) (statement of Sen. Dianne Feinstein).

^{76 156} Cong. Rec. H5245 (daily ed. June 30, 2010) (statement of Sen. Collin Peterson).

⁷⁷ Petroleum & Other Liquids, EIA, supra note 4.

⁷⁸ Robert Lenzner, *ExxonMobil CEO Says Oil Price Should Be \$60 to \$70 a Barrel*, FORBES (May 14, 2011, 10:29 AM), http://www.forbes.com/sites/robertlenzner/2011/05/14/exxonmobil-ceo-says-oil-price-should-be-60-70-a-barrel/. Executives from Royal Dutch Shell, Marathon Oil, and the Inland Oil Company also testified that speculation was to blame for rising oil prices in 2008. 154 CONG. Rec. S7101–02 (daily ed. July 23, 2008) (statement of Sen. Jim Webb).

⁷⁹ Jim Spencer & Dee DePass, As We Pay More at the Pump, Oil Trading Curbs Still on Hold, STAR TRIBUNE (Minn.), March 20, 2011, at 1D (quoting Ben Hirst, General Counsel, Delta Air Lines: "[S]peculators try to anticipate what other speculators are going to do, and the market overreacts. It's not as though there's a shortage of product that caused the price to move

2011, the \$100-per-barrel bubble in the oil markets had burst, and the price did in fact drop close to the \$70 range.⁸⁰

These revelations from airline and oil companies were not new. In an "Open Letter to All Airline Customers" in 2008, the CEOs of twelve U.S. airline companies wrote that "normal market forces are being dangerously amplified by poorly regulated market speculation."⁸¹ The CEO of Virgin America, Inc. further characterized the volatile fuel prices as "out of control" and "a kind of silent killer."⁸² The largest airline trade association in the United States has joined other industry associations in echoing these statements.⁸³ The decreased ability of airlines to use futures markets for price risk management has led some commentators to advise the airline industry to abandon hedging entirely and handle volatile fuel prices with passenger ticket surcharges instead.⁸⁴

Gene Guilford, the Executive Director of the Independent Connecticut Petroleum Association, speaking on behalf of the New England Fuel Institute, stated that:

[W]e are no longer confident that the markets are doing their job of providing our industry and consumers with a benchmark for pricing product that is based on economic dynamics of supply and demand, and they no longer function as a risk management tool. They have become completely disconnected from reality.⁸⁵

⁸² Mary Jane Credeur, Mary Schlangenstein & Paul Burkhardt, United, Delta Profit at Risk on 'Silent Killer' Hedges, BLOOMBERG (Jan. 31, 2011, 4:39 PM), http://www.bloomberg.com/ news/2011-01-31/united-delta-profit-at-risk-from-silent-killer-in-fuel-hedges.html.

⁸³ Joint Letter from Airlines for America et al. to Gary Gensler, Chairman, Commodity Futures Trading Comm'n (Mar. 19, 2012), available at http://images.politico.com/global/2012/03/ 120320_eemac.html; see also AIRLINES FOR AMERICA, http://www.airlines.org/Pages/Home.aspx (last visited Feb. 20, 2013). Many other market participants have echoed these statements. Energy Speculation: Is Greater Regulation Necessary to Stop Price Manipulation? (Part II): Hearing Before the Subcomm. on Oversight & Investigations of the H. Comm. on Energy & Commerce, 110th Cong. 100 (2008) (statement of Roger Diwan, Partner & Head of Fin. Advisory, PFC Energy) (stating that if regulatory changes are adopted, "it's clear that prices will reflect closer to marginal cost of producing oil"); id. (statement of Edward Krapels, Dir., Energy Sec. Analysis, Inc.) ("I think the amount of speculation is really substantial [within the crude oil market].").

84 Credeur, Schlangenstein & Burkhardt, supra note 82.

85 Guilford Statement, supra note 12, at 168.

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up. It's a casino process with financial players betting on where the price is going to go. But it has an effect on [current] prices.").

⁸⁰ Petroleum & Other Liquids, EIA, supra note 4.

⁸¹ An Open Letter to All Airline Customers, CNBC (July 9, 2008, 8:47 PM), http://www. cnbc.com/id//_Open_Letter_to_All_Airline_Customers; David Goldman, Airlines: Curb Oil Speculation, CNNMONEY (July 9, 2008, 6:18 PM), http://money.cnn.com/2008/07/09/news/companies/airlines_speculation_letter.

After the price of crude oil reached \$139 in June 2008, Guilford noted that the amount of crude oil traded in the markets that day was fifty-three times the daily U.S. consumption.⁸⁶ And, during the wild swings in crude oil prices since that time, continuous ample supply has existed to meet the demand for oil.⁸⁷

Guilford has also pointed to the situation of heating oil during the unseasonably warm winter of 2011–2012 to show plainly the effects of excessive speculation in a commodities market. Although the volume of heating oil sold by retailers was approximately one-third less than normal during this time, the commodity cost was approximately \$3 per gallon,⁸⁸ which was relatively close to the record high of \$3.71 per gallon.⁸⁹ Furthermore, the price for a barrel of heating oil was \$135 while a barrel of crude oil was \$104.⁹⁰ Guilford noted that there was so little demand during those seventy-degree winter days that retailers could not "give away heating oil."⁹¹ Thus, the market was simply overwhelmed by speculators betting the price up through, for example, commodity index swaps, which required swaps dealers to lay off their risk by buying huge amounts of long heating oil futures unencumbered by any meaningful position limits.⁹²

2. Bankers and Investors

In February 2012, when the price of crude reached \$109 per gallon,⁹³ Goldman Sachs stated in an internal report that each barrel of oil costs approximately\$23 more than it would without the excessive speculation present in the markets today.⁹⁴ Similarly, the Chief Global Investment Officer of J.P. Morgan stated that during the sum-

⁸⁶ Id. Furthermore, the amount of heating oil traded during that summer day equaled half of U.S. consumption for an entire year. Id.

⁸⁷ See id. at 168-69.

⁸⁸ See C-SPAN Video, supra note 9.

⁸⁹ See James Walsh, Home-Heating Oil Prices Near Decade High, TIMES HERALD-RECORD (Middletown, N.Y.) (Dec. 11, 2011, 2:00 AM), http://www.recordonline.com/apps/pbcs.dll/article?AID=/20111211/NEWS/112110323.

⁹⁰ C-SPAN Video, supra note 9.

⁹¹ Id.

⁹² See supra notes 52-66 and accompanying text.

⁹³ Petroleum & Other Liquids, EIA, supra note 4.

⁹⁴ See Robert Lenzner, Speculation in Crude Oil Adds \$23.39 to the Price Per Barrel, FORBES (Feb. 27, 2012, 3:07 PM), http://www.forbes.com/sites/robertlenzner/2012/02/27/speculation-in-crude-oil-adds-23-39-to-the-price-per-barrel/; see also Alain Sherter, When Goldman Sachs Warns that Speculation Drives Oil Prices, Listen Up, CBSNews (Apr. 13, 2011, 2:45 PM), http://www.cbsnews.com/8301-505123_162-43552722/when-goldman-sachs-warns-that-speculation-drives-oil-prices-listen-up/.

mer of 2008 "an enormous amount of speculation ran up the price" and that "140 dollars in July [2008] was ridiculous."⁹⁵

Hedge fund investor George Soros has also maintained that volatility in the price of oil (and other commodities) is a result of excessive speculation, stating in 2008 that the oil futures market was experiencing a bubble fed by too much speculation.⁹⁶ He entered a massive short position in crude oil at \$137 per barrel during the summer of 2008 when oil prices reached record highs and profited when they fell precipitously to \$30 in December 2008.⁹⁷

Michael Masters, a hedge fund manager, has repeatedly testified that passive investments from institutional investors have upset the price discovery mechanisms of crude oil and other commodities futures markets:

[P]assive speculators drain liquidity by buying and holding large quantities of futures contracts—basically acting as consumers who never actually take delivery of goods. Passive speculators "invest" in a commodity or basket of commodities (such as an index), and continuously roll their position, as part of a long-term portfolio diversification strategy. This strategy is completely blind to the supply and demand realities in the market. As such, passive speculators not only undermine, but actually destroy the price discovery function of the market and make way for the formation of speculative bubbles.⁹⁸

3. Financial Analysts

Financial analysts have also spoken out about increased speculation in the oil futures markets. Tim Evans, an energy analyst at Citi Futures Perspective, has stated: "With the latest push to the upside, we see the crude oil market becoming even more completely divorced from any connection to fundamental factors and becoming even more

⁹⁵ 60 Minutes, *Did Speculation Fuel Oil Price Swings?*, CBSNEws (Apr. 14, 2009, 12:03 PM), http://.cbsnews.com/-18560_162-4707770.html [hereinafter 60 Minutes Report] (internal quotation marks omitted).

⁹⁶ Edmund Conway, *George Soros: Rocketing Oil Price Is a Bubble*, TELEGRAPH (May 26, 2008, 12:01 AM), http://www.telegraph.co.uk/finance/newsbysector/banksandfinance/2790539/ George-Soros-rocketing-oil-price-is-a-bubble.html (quoting Soros: "The price has this parabolic shape which is characteristic of bubbles"); see also Soros Testimony, supra note 58, at 233–36.

⁹⁷ Lenzner, supra note 94; see also Petroleum & Other Liquids, EIA, supra note 4.

⁹⁸ Masters 2010 Testimony, *supra* note 29, at 5; *see also* Masters 2009 Testimony, *supra* note 56, at 17.

obsessed with the simple question, 'How high can it go?'"⁹⁹ Furthermore, Evans has also explained that the feelings and whims of investors move the price of oil more than supply and demand fundamentals.¹⁰⁰ Echoing these statements, another Citigroup oil analyst stated that the oil price outlook is "more subjective than ever and hence leaves any long-term oil price assertion equally subjective and somewhat irrespective of traditional 'fundamental' analysis."¹⁰¹ Similarly, a study published by Deutsche Bank Research concludes that speculators' dispersion of beliefs—i.e., the willingness of speculators to engage in trading activity even when a large gap exists between market prices and fundamentally justified prices—has a significant impact on oil prices.¹⁰²

Other financial analysts have spoken more forcefully about the need to address speculation in the oil markets, including the former chair of the Petroleum Marketers Association of America, who has called excessive speculation the fuel that has driven the "runaway train" in crude oil prices.¹⁰³ Likewise, economist Mike Norman has repeatedly argued that speculation plays a key role in volatile oil prices: "Oil prices are high because of speculation, pure and simple. That's not an assertion, that's a fact. Yet rather than attack the speculation and rid ourselves of the problem, we flail away at the symptoms."¹⁰⁴

103 Jonathan Davis, Speculators 'Not to Blame' for Oil Prices, UPSTREAM (Apr. 4, 2008), http://.upstreamonline.com/live/article151805.ece (quoting Sean Cota, head of a heating fuel dealers trade group) (internal quotation marks omitted); see also Molly Moorhead, Who to Blame for the Price at the Pump? Tough to Say, POLITIFACT (Apr. 30, 2012, 4:09 PM), http:// www.politifact.com/florida/article/2012/apr/30/who-blame-price-pump-tough-say/.

104 Mike Norman, The Danger of Speculation, Fox News (Aug. 19, 2005), http://www.

⁹⁹ Tim Evans, PM Energy News & Views, CITI FUTURES PERSP., July 3, 2008, at 2.

¹⁰⁰ See David Sheppard, Oil Boasts Fourth-Biggest Daily Price Gain Ever, GLOBE & MAIL (June 29, 2012, 5:21 PM), http://m.theglobeandmail.com/report-on-business/industry-news/energy-and-resources/oil-boasts-fourth-biggest-daily-price-gain-ever/article4381474/?service=mobile (quoting Evans: "What has changed today is the market sentiment, the fundamentals may evolve at a more glacial pace.").

¹⁰¹ Mufson, supra note 58 (internal quotation marks omitted).

¹⁰² Jochen Möbert, Do Speculators Drive Oil Prices? Dispersion in Beliefs Among Speculators as a Determinant of Crude Oil Prices 3 (Deutsche Bank Research, Working Paper Series, Research Notes 32, 2009), available at http://www.dbresearch.com/servlet/reweb2.ReWEB?Col umnView=0&Function=showPeriOverview(NERESNOT;noTopic;noRegion)&Submit=Show Pdf&rwnode=DBR_INTERNET_EN-PROD\$RSNN000000000136534&rwobj=ReFIND.Re FindSearch.class&rwsite=DBR_INTERNET_EN-PROD&type=callFunction. The fact that the dispersion of beliefs, not speculators themselves, leads to excessively high oil prices demonstrates the need for some speculation to maintain liquidity in the futures markets. See supra notes 31-32 and accompanying text; see also JALALI-NAINI, supra note 63, at 67 (commenting on the effects of "exaggerated high price expectations").

In the same way, Fadel Gheit, a managing director and senior analyst covering the oil and gas sector for Oppenheimer & Co., implores regulators to address the root of this issue:

It is not Exxon ... or BP ... or Shell ... that moves the oil markets. It is the financial players. It is the Goldman Sachs ..., the Morgan Stanley ..., or the other guys. It is a shame on the government that allows them to get away with that.¹⁰⁵

4. International and Domestic Leaders

The minister of petroleum and mineral resources in Saudi Arabia, Ali Naimi, has decried volatile oil prices on numerous occasions, including in March 2012 when the price for a barrel of oil reached \$128.¹⁰⁶ Naimi declared: "I think high prices are unjustified today [on] a supply-demand basis," noting that global supply was exceeding demand by one million to two million barrels per day.¹⁰⁷ Regardless, Naimi offered to increase his nation's output of oil "by as much as 25 per cent [sic] if necessary,"¹⁰⁸ and he has forcefully argued that there has never been a shortage of oil to justify higher prices:

We want to correct the myth that there is, or could be, a shortage. It is an irrational fear, a fear without basis. Saudi Arabia's current capacity is 12.5 [million] barrels per day, way beyond current levels demanded, and a reliable buffer

106 Chazan, Prices Unjustified, supra note 10; see also Ali Naimi, Saudi Arabia Will Act to Lower Soaring Oil Prices, FIN. TIMES (Mar. 28, 2012, 4:30 PM), http://www.ft.com/intl/cms/s/0/ 9e1ccb48-781c-11e1-b237-00144feab49a.html#axzz2IMGyyqNc.

107 Chazan, Prices Unjustified, supra note 10.

108 Id. In fact, Saudi Arabia was already producing oil at thirty-year highs. Id.

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foxnews.com/story/0,2933,166038,00.html; see also Brenda Buttner, Main Street Feeling Price Pinch, Fox News (Feb. 25, 2012), http://www.foxnews.com/on-air/cost-of-freedom/2012/02/27/ main-street-feeling-price-pinch (quoting Mike Norman: "That is outside any of the normal rules of economics. In my opinion, there's only one reason for it and that is speculation rearing its ugly head just as it did in 2008. I don't even know why we have to have this discussion as to whether or not it's contributing. It's absolutely contributing because every economic factor tells you that gas should be coming down, not up.").

¹⁰⁵ Alejandro Lazo, *Energy Stocks Haven't Caught Up with Oil Prices*, WASH. POST, Mar. 23, 2008, at F1 (quoting Gheit: "The largest speculators are the largest financial companies."); Ed Wallace, *Has the U.S. Turned Against Consumers*?, BUSINESSWEEK (July 6, 2011), http://www. businessweek.com/top-news/has-the-us-turned-against-consumers-07062011.html (internal quotation marks omitted); *see also* Kevin G. Hall, *Speculators Blamed for Rising Oil, Gas Prices*, SEATTLE TIMES (Feb. 23, 2012, 6:00 AM), http://.nwsource.com//2017563277.html (quoting Gheit: "Speculation is now part of the DNA of oil prices. You cannot separate the two anymore. There is no demarcation."); *Executive Profile: Fadel Gheit*, BUSINESSWEEK, http://investing.businessweek.com/research/stocks/people/person.asp?personId=29160194&ticker=OPY (last visited Jan. 18, 2013).

against any temporary loss of production. Saudi Arabia has invested a great deal to sustain its capacity, and it will use spare production capacity to supply the oil market with any additional required volumes.¹⁰⁹

With full worldwide reserves of oil and increased oil production among OPEC members and many other nations, "[t]here is no rational reason why oil prices are continuing to remain at these high levels."¹¹⁰

The Secretary General of OPEC, Abdalla Salem El-Badri, has gone a step further and blamed excessive speculation for the unjustified prices in crude oil. Stating that "[a]nything that will reduce this speculation activity... is a step in the right direction,"¹¹¹ he has urged and praised the CFTC's efforts to implement position limits.¹¹² This was not the first time OPEC has taken this stance. As early as 2005, the former acting Secretary General, Adnan Shihab-Eldin, said:

Today, and especially with non-fundamental factors—such as speculation in oil futures markets—playing such a critical role in oil price determination, we feel that leaving such a sensitive trading environment as the oil market to its own devices would surely be a recipe for disaster, both for producers and consumers.¹¹³

President Obama has on at least four occasions attributed the repeated and extreme spikes in crude oil and gasoline prices to speculative activity by large financial players in the oil market: (1) during the summer of his 2008 presidential campaign, when crude oil was ap-

111 OPEC Against 'Excessive' Oil Speculation, OIL & GAS NEWS (Feb. 8, 2010), .oilandgasnewsonline.com//.aspx?aid=28267 (internal quotation marks omitted).

112 Maher Chmaytelli, OPEC Calls for Curbing Oil Speculation, Blames Funds, BLOOM-BERG (Jan. 28, 2009, 12:28 PM), http://www.bloomberg.com/apps/news?pid=newsarchive&sid= aVRKbFhcfdKM.

¹⁰⁹ Naimi, supra note 106.

¹¹⁰ Id. Saudi Arabia has increased oil production during many critical emergencies around the world in the past. Id. The persistent fear and uncertainty about oil supply, however, has remained prime fodder for promoting excessive speculation. Didier Sornette, Ryan Woodard & Wei-Xing Zhou, The 2006–2008 Oil Bubble: Evidence of Speculation, and Prediction, 388 PHYSICA A 1571, 1574 (2009).

¹¹³ Adnan Shihab-Eldin, Speech to the Cosmopolitan Club Vienna: Oil and Development: The Role of OPEC: A Historical Perspective and Outlook to the Future (Mar. 24, 2005), *available at* http://www.opec.org/opec_web/en/press_room/894.htm; *see also* Kenneth N. Gilpin, *OPEC Agrees to Increase Output in July to Ease Oil Prices*, N.Y. TIMES (June 3, 2004), http://www.ny times.com/2004/06/03/business/03CND-OIL.html?pagewanted=all ("There is not a crude shortage, which is why OPEC was so reluctant to raise production. But prices got so high that they had to increase production to quell the speculation and fear that is in the market.").

proaching its world record high of \$147 per barrel;¹¹⁴ (2) April 19, 2011, when crude oil reached \$110 per barrel;¹¹⁵ (3) March 2012, when oil prices spiked to \$106 per barrel;¹¹⁶ and (4) April 17, 2012, when gasoline prices approached \$4 per gallon.¹¹⁷ As he had in April 2011, in March 2012 the President once again convened an interagency task force led by the Department of Justice to investigate illegal manipulation of crude oil prices.¹¹⁸ Meanwhile, congressional investigations (often bipartisan) have uncovered excessive speculation in the oil markets.¹¹⁹

Other international leaders have expressed similar statements. Former British Prime Minister Gordon Brown and former French President Nicolas Sarkozy jointly called for renewed investigations into the effect of trading activity on amplified erratic price movements in crude oil.¹²⁰ Likewise, former Chinese President Jiang Ze-min noted that "the rapid growth of global capital market, virtual econ-

¹¹⁶ Kevin G. Hall & Lesley Clark, *Back to Work for Gas Price Unit*, ST. LOUIS POST-DIS-PATCH (March 9, 2012, 12:00 AM), http://www.stltoday.com/news/national/back-to-work-for-gasprice-unit/article_212a4a50-32f3-5375-973e-74a3beb26924.html; *Petroleum & Other Liquids*, EIA, *supra* note 4.

¹¹⁷ Helene Cooper, As Gas Prices Cast Cloud, Obama Calls for Scrutiny on Market, N.Y. TIMES, Apr. 18, 2012, at A19.

¹¹⁸ See Hall & Clark, supra note 116.

119 See, e.g., Staff of Permanent Subcomm. on Investigations, S. Comm. on Home-LAND SEC. & GOVERNMENTAL AFFAIRS, 110TH CONG., EXCESSIVE SPECULATION IN THE NATU-RAL GAS MARKET 6 (Comm. Print 2007) [hereinafter NATURAL GAS REPORT] (concluding that one company's "actions in causing significant price movements in the natural gas market demonstrate that excessive speculation distorts prices, increases volatility, and increases costs and risks for natural gas consumers . . . who ultimately pass on inflated costs to their customers"); STAFF OF PERMANENT SUBCOMM. ON INVESTIGATIONS, S. COMM. ON HOMELAND SEC. & GOVERNMEN-TAL AFFAIRS, 109TH CONG., THE ROLE OF MARKET SPECULATION IN RISING OIL AND GAS PRICES: A NEED TO PUT THE COP BACK ON THE BEAT 2 (Comm. Print 2006) (concluding that "[t]he large purchases of crude oil futures contracts by speculators have, in effect, created an additional demand for oil, driving up the price of oil to be delivered in the future in the same manner that additional demand for the immediate delivery of a physical barrel of oil drives up the price on the spot market");. Cf. WHEAT REPORT, supra note 13, at 3 (concluding that there is "significant and persuasive evidence that one of the major reasons for the recent market problems is the unusually high level of speculation in the Chicago wheat futures market due to purchases of futures contracts by index traders offsetting sales of commodity index instruments").

120 Brown & Sarkozy, supra note 11.

¹¹⁴ Caren Bohan, Obama Vows to Crack Down on Oil Speculation, REUTERS (June 22, 2008, 5:37 PM), http://www.reuters.com/article/2008/06/22/us-usa-politics-obama-energy-idUSN2 243134220080622; Kebede, *supra* note 4.

¹¹⁵ Jeff Mason, Obama Blames Speculators for Rising U.S. Fuel Prices, REUTERS (Apr. 20, 2011, 6:00 AM), http://www.reuters.com/article/2011/04/20/us-usa-energy-obama-speculators-id USTRE73J1NN20110420; Petroleum & Other Liquids, EIA, supra note 4.

omy, financial derivatives and the overflow of speculation funds have great impacts on the oil market."¹²¹

5. Academics and Economists

Nobel Prize-winning economist Paul Krugman,¹²² who originally remained steadfast in his belief that market fundamentals dictated crude oil prices, ultimately embraced the argument that excessive speculative activity is driving up the price of oil. As Krugman observed: "Last year I was skeptical about claims that speculation was central to the price rise [T]his time there's no question: speculation has been driving prices up."¹²³

Many quantitative studies have demonstrated statistically significant effects of excessive speculation activity on oil prices. Researchers from the Federal Reserve Bank of St. Louis demonstrate in a working paper the effects of speculation shocks, along with oil supply, global demand, and oil inventory demand, on the price of oil.¹²⁴ The researchers define speculation shock as arising from a shift in the expected future spot price that can be disconnected from market fundamentals due to an increase in oil prices driven by trading activity in the oil futures market.¹²⁵ Using a statistical model, they conclude that speculation shocks are the second most important driver of movement in the price of oil behind global demand.¹²⁶

Researchers from the European Central Bank have also found that "destabilizing financial activity," which primarily involves passive investment in oil futures through such vehicles as commodity index funds, significantly impacts oil price swings in the short run.¹²⁷ They further conclude through their statistical model that this inefficient fi-

125 Id. at 3-4.

¹²¹ Jiang Ze-min, *Reflections on Energy Issues in China*, 13 J. SHANGHAI JIAOTONG U. 257, 261 (2008); Edward Wong, *Long Retired, Ex-Leader of China Asserts Sway over Top Posts*, N.Y. Times, Nov. 8, 2012, at A1.

¹²² Press Release, The Royal Swedish Acad. of Scis., The Prize in Economics 2008 (Oct. 13, 2008), *available at* http://www.nobelprize.org/nobel_prizes/economics/laureates/2008/press.html.

¹²³ Paul Krugman, Oil Speculation, N.Y. TIMES (July 8, 2009, 9:01 AM), http://krugman. blogs.nytimes.com//07//oil-speculation/?scp=2&sq=speculative%20trading%20in%20oil&st=cse.

¹²⁴ Luciana Juvenal & Ivan Petrella, *Speculation in the Oil Market* 4 (Fed. Reserve Bank of St. Louis, Working Paper No. 2011-027E, 2011) (revised June 2012), *available at* http://research.stlouisfed.org/wp/2011/2011-027.pdf.

¹²⁶ See id. The researchers found that their speculation shocks variable "pick[ed] up the effects of financialization driven by the rapid growth of commodity index investment." *Id.* at 4; see also supra notes 52–61 and accompanying text (discussing commodity index funds).

¹²⁷ Marco J. Lombardi & Ine Van Robays, *Do Financial Investors Destabilize the Oil Price?* 7–8, 11 (European Cent. Bank Working Paper Series, Paper No. 1346, 2011), *available at* http:// papers.ssrn.com/sol3/papers.cfm?abstract_id=1847503.

nancial activity in the oil futures market caused oil prices to be fifteen percent greater than the level justified by oil fundamentals between 2000 and 2008.¹²⁸ Likewise, country desk economists and mission chiefs from the International Monetary Fund have concluded: "In summary, it appears that speculation has played a significant role in the run-up in oil prices as the U.S. dollar has weakened and investors have locked for a hedge in oil futures "¹²⁹

Kenneth J. Singleton of Stanford University found that growing positions of commodity index investors had significant effects on oil futures market returns during the 2008 boom and bust in oil prices.¹³⁰ He also criticized studies concluding otherwise because those studies measured the effects of investor flows in futures markets over short horizons (such as a few days) rather than weeks or months, as did his investigations.¹³¹ Similarly, another study shows that the hedging trades of the issuers of commodity linked notes in the futures markets significantly raise the underlying futures prices.¹³²

The researchers mentioned above are joined by many other academics and economists who have found that excessive speculation in commodity markets has a significant impact on oil prices.¹³³

¹³² Brian J. Henderson, Neil D. Pearson & Li Wang, New Evidence on the Financialization of Commodity Markets 2 (Nov. 6, 2012) (unpublished manuscript), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1990828 ("For issues with proceeds greater than or equal to \$2 million, \$5 million, and \$10 million, the investor demands for commodity exposure raise the underlying commodity futures prices by an average of 37, 40, and 51 basis points, respectively around the pricing dates of the [commodity linked notes].").

133 See DAVID P. ANDERSON ET AL., AGRIC. & FOOD POLICY CTR., THE EFFECTS OF ETHA-NOL ON TEXAS FOOD AND FEED 3 (2008), available at http://www.afpc.tamu.edu/pubs/2/515/RR-08-01.pdf ("Speculative fund activities in futures markets have led to more money in the markets and more volatility. Increased price volatility has encouraged wider trading limits. The end result has been the loss of the ability to use futures markets for price risk management due to the inability to finance margin requirements."); MEDLOCK III & JAFFE, supra note 52, at 3;; MACHIKO NISSANKE, COMMON FUND FOR COMMODITIES, COMMODITY MARKETS AND EXCESS VOLATILITY: SOURCES AND STRATEGIES TO REDUCE ADVERSE DEVELOPMENT IMPACTS 25-26, 54 (2011); L. RANDALL WRAY, LEVY ECON. INST. OF BARD COLL., THE COMMODITIES MARKET BUBBLE: MONEY MANAGER CAPITALISM AND THE FINANCIALIZATION OF COMMODITIES 9 (2008), available at http://www.levyinstitute.org//_96.pdf; Cifarelli & Paladino, supra note 59, at 371 ("[L]arge daily upward and downward shifts in oil prices do not fit a fundamental-driven market."); Robert Czudaj & Joscha Beckmann, Spot and Futures Commodity Markets and the Unbiasedness Hypothesis—Evidence from a Novel Panel Unit Root Test, 32 ECON. BULL. 1695, 1701 (2012); James D. Hamilton, Causes and Consequences of the Oil Shock of 2007-08, 2009 BROOKINGS PAPERS ON ECON. ACTIVITY 215, 240 (2009) ("With hindsight, it is hard to deny that

¹²⁸ Id. at 25.

¹²⁹ INT'L MONETARY FUND, REGIONAL ECONOMIC OUTLOOK, supra note 59, at 28.

¹³⁰ See Kenneth J. Singleton, Investor Flows and the 2008 Boom/Bust in Oil Prices 17-24,

^{27 (}Mar. 23, 2011) (unpublished manuscript), available at http://ssrn.com/abstract=1793449.

¹³¹ See id. at 15.

E. Rebuttal to Fundamentalist Arguments

Despite the weight of the evidence demonstrating that excessive speculation in commodity futures markets leads to deleterious volatility in the movement of oil prices, some continue to argue that the market fundamentals of supply and demand are the sole contributing factor to that volatility.¹³⁴ The basic argument made by these market fundamentalists is that oil price spikes have occurred because the increasing worldwide demand for oil—especially from China and other developing nations—surpasses the worldwide supply.¹³⁵ This imbalance in supply and demand is the classical cause of rising prices that lead to equilibrium in the market.¹³⁶

Although the absolute demand for oil has grown, what these studies and analyses blaming market fundamentals for price volatility

134 Many "fundamentalists" rely on statistical models based on Granger causality tests, which attempt to predict whether the past histories (or time series data) of variable X and variable Y assist in predicting variable Y. See In re Amaranth Natural Gas Commodities Litig., 269 F.R.D. 366, 384 (S.D.N.Y. 2010) (explaining a Granger causality test); see also, e.g., Scott H. Irwin, Dwight R. Sanders & Robert P. Merrin, Devil or Angel? The Role of Speculation in the Recent Commodity Price Boom (and Bust), 41 J. AGRIC. & APPLIED ECON. 377, 377-78, 385-87 (2009). However, research has shown that Granger tests cannot handle data characterized by high volatility such as oil prices. FRENK, supra note 6, at 2-3, 6-7; Sir Richard Branson, Michael Masters & David Frenk, Letter to the Editor, Swaps, Spots and Bubbles, ECONOMIST, July 31, 2010, at 14.

¹³⁵ See, e.g., Robert J. Samuelson, Op-Ed., *The Fallacy of Blaming Oil 'Speculators'*, WASH. Post, May 2, 2012, at A17.

136 Id.

the price of oil rose too high in July 2008 and that this miscalculation was influenced in part by the flow of investment dollars into commodity futures contracts."); Robert F. Kaufmann, The Role of Market Fundamentals and Speculation in Recent Price Changes for Crude Oil, 39 En-ERGY POL'Y 105, 114 (2011); Tang & Xiong, supra note 56, at 72; Nouriel Roubini, Opinion, The Risk of a Double-Dip Recession is Rising, FIN. TIMES (Aug. 24, 2009, 6:55 PM), http://.ft.com//s/0/ 90227fdc-900d-11de-bc59-00144feabdc0.html#axz21hwna8cxk; R.S. Eckaus, The Oil Price Really Is A Speculative Bubble 1 (Ctr. for Energy & Envtl. Policy Research, Working Paper No. 08-007, 2008) available at http://web.mit.edu/ceepr/www/publications//-007.pdf; Michael Greenberger, The Relationship of Unregulated Excessive Speculation to Oil Market Price Volatility 1 (Jan. 15, 2010) (unpublished manuscript), available at http://www.michaelgreenberger.com/files/IEF-Greenberger-AppendixVII.pdf; Yannick Le Pen & Benoît Sévi, Futures Trading and the Excess Comovement of Commodity Prices 2-4 (Jan. 24, 2013) (unpublished manuscript), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2191659; Akira Yanagisawa, Decomposition Analysis of the Soaring Crude Oil Prices 13 (March 2008) (unpublished manuscript), available at http://eneken.ieej.or.jp///pdf/421.pdf (noting that "current oil prices are quite different from the fundamental prices"); see also Modernizing America's Financial Regulatory Structure: Hearing Before the Cong. Oversight Panel, 111th Cong. 90 (2009) (statement of Joseph E. Stiglitz, Professor, Columbia Bus. Sch.) (arguing that only standardized and regulated products used for hedging against risk, but not gambling, should be permitted); Statement of James K. Galbraith, Chair Gov't/Bus. Relations, Lyndon B. Johnson Sch. Pub. Affairs, Univ. of Tex., to the Commission on Deficit Reduction (June 30, 2010), available at http://.newdeal20.org/////deficitcommissionrv.pdf.

overlook is that the rate of growth in global demand for oil fell during the period from 2004 to 2008 when prices spiked, despite China's large growth in demand, while production kept pace.137 Thus, given that the worldwide supply of oil gained ground on meeting any increase in demand, under supply and demand principles, the price of oil should have dropped. Furthermore, Saudi Arabia has consistently adjusted its oil production, not only to cover drop-offs in oil production elsewhere in the world, but also to meet unusually high increases in demand.¹³⁸ Saudi Arabia increased oil production following the invasion of Iraq, a workers' strike in Venezuela in 2002, Hurricane Katrina, and the tumult from the Arab Spring in 2011.139 Saudi Arabia also boosted oil production in 2004 to meet an unusually steep increase in demand caused by China's surging economy.¹⁴⁰ In the future, Saudi Arabia has promised to boost its production by as much as 25% if needed to meet global demand due to the sanctions on Iranian crude oil 141

Others have argued that uncertainty in world affairs creates fear and expectation of reduced oil supplies in the future, which drives the price of oil upward.¹⁴² Such uncertainty does indeed affect the oil markets, but it does not explain the great volatility in oil prices of recent years. In order to explain the very large oil price spikes in 2004 and 2008 under this theory, a dramatic change in world conditions must have occurred in those years, especially during the record peak in 2008;¹⁴³ however, no great jolt to international stability actually did

138 See Naimi, supra note 106.

141 Chazan, Prices Unjustified, supra note 10.

¹³⁷ See FRENK, supra note 6, at 5; POLLIN & HEINTZ, supra note 59, at 3-4; Kaufmann, supra note 133, at 105-06; Eckaus, supra note 133, at 6-8; see also The Fallacy of Blaming the Market as the Sole Cause of High Gas Prices, RON WYDEN SENATOR FOR OREGON (May 9, 2012), http://www.wyden.senate.gov/news/blog/post/the-fallacy-of-blaming-the-market-as-thesole-cause-of-high-gas-prices (responding to and countering Samuelson, supra note 135, by revealing that in the beginning of 2012 supply exceeded demand and there was significant spare capacity, yet the price of oil counterintuitively rose by more than twenty percent in the first quarter).

¹³⁹ See id.

¹⁴⁰ See id.

¹⁴² See, e.g., Grant Smith, Brent Oil Rises a Second Day as Iran Risk Counters U.S. Supply Increase, BLOOMBERG (Mar. 1, 2008, 8:02 AM), http://www.bloomberg.com/news/2012-03-01/ brent-oil-rises-a-second-day-as-iran-risk-counters-u-s-supply-increase.html ("From a fundamental point of view, prices should be much lower. There's at least \$15 priced in from the Iran factor.") (internal quotation marks omitted).

¹⁴³ See Eckaus, supra note 133, at 6 ("Short of a virtually complete shutdown of Middle East oil production, no plausible price elasticity of demand would justify the quadrupling of oil prices.").

occur during those periods.¹⁴⁴ Indeed, evidence shows that uncertainty, rather than driving up the price of oil, is the "fertilizer of speculation," causing oil prices to "increasingly decouple[] from fundamental valuation (the hallmark of a bubble)" due to the actions of speculators.¹⁴⁵

More recently, some have argued that uncertainty in current world affairs, particularly expectations of disruptions in oil due to the events of the Arab Spring and Iran's threat to close the Strait of Hormuz, have caused price spikes in oil.¹⁴⁶ However, Saudi Arabia has promised in both instances to make up any oil differential,¹⁴⁷ and the United States is now a net exporter of refined petroleum products.¹⁴⁸ Thus, the claim that the price of oil is volatile due to uncertainty in global conditions affecting supply and demand is without merit.

II. THE ENFORCEMENT OF STRONG POSITION LIMITS AND ANTI-MANIPULATION RULES CONTEMPLATED BY DODD-FRANK WILL DAMPEN EXCESSIVE SPECULATION

Recent history has shown that even just the threat of action by the federal government has had a significant impact in curbing excessive speculation. With an array of regulations at its disposal as authorized by Dodd-Frank, the CFTC, along with other regulatory agencies, will be able to decrease the excessive speculation that so significantly affects the oil futures markets.

A. Enforcement (or Threatened Enforcement) Against Excessive Speculation Has Forced down Prices

Congressional Democrats have repeatedly and successfully intervened to blunt the adverse impact of excessive speculation on the crude oil markets. On June 26, 2008, as oil prices approached their world record high, the House Democratic leadership and then-Chairman of the House Agriculture Committee, Collin Peterson, intro-

¹⁴⁴ Id. at 5-6 (noting that there were no serious threats to stability during the relevant time period).

¹⁴⁵ Sornette, Woodard & Zhou, *supra* note 110, at 1576; *see also* YERGIN, *supra* note 58, at 170–71 ("With [economic growth and financialization] came more volatility, more fluctuations in the price, which was drawing in the traders."); F. William Engdahl, *Perhaps 60% of Today's Oil Price Is Pure Speculation*, GLOBAL RES. (May 2, 2008), http://www.globalresearch.ca/perhaps-60-of-today-s-oil-price-is-pure-speculation/ ("Speculators trade on rumor, not fact.").

¹⁴⁶ See Jill Schlesinger, Gaza Crisis Boosts Oil Prices, CBSNEws (Nov. 20, 2012, 1:49 PM), http://www.cbsnews.com/8301-505123_162-57552466/gaza-crisis-boosts-oil-prices/; Smith, supra note 142.

¹⁴⁷ See Naimi, supra note 106.

¹⁴⁸ See supra notes 8-9 and accompanying text.

duced legislation aimed at curbing excessive speculation,¹⁴⁹ which passed the House by a bipartisan vote of 402–19.¹⁵⁰ The bill required the CFTC to act pursuant to its authority under the CEA and declare an "emergency" in the oil market, thereby triggering CFTC authority to impose special limits on excessive speculative activity in crude oil futures markets.¹⁵¹ Subsequently, on September 28, 2008, then-Chairman Peterson brought another bill to the House floor that would impose tough speculative position limits.¹⁵² That bill also passed the House, with a vote of 283–133.¹⁵³

On July 15, 2008, Senate Majority Leader Harry Reid introduced legislation that would have imposed tough, congressionally driven limits on excessive speculative activity in the crude oil futures markets.¹⁵⁴ On July 25, 2008, that bill received fifty votes in favor with ninety-three Senators present, representing a majority of the Senate but not enough to invoke cloture.¹⁵⁵ Despite the bill's defeat, certain Republican senators voted for cloture, and others indicated that they might support the legislation in the future.¹⁵⁶ Shortly thereafter, on July 31, 2008, Senators Wyden (D-Or.) and Grassley (R-Iowa) circulated a widely publicized discussion draft bill that would have taxed profits from passive speculative crude oil futures as ordinary income.¹⁵⁷

¹⁴⁹ Energy Markets Emergency Act of 2008, H.R. 6377, 110th Cong. (2008).

See David Cho, House Passes Bill Bolstering Oil Trade Regulator, WASH. POST (June 27, 2008), http://www.washingtonpost.com/wp-dyn/content/article/2008/06/26/AR2008062604005.
 httpl.

¹⁵¹ See H.R. 6377 § 2(b); see also House Passes Legislation Requiring CFTC to Curb Oil Market Speculation, WIS. AGRIC. CONNECTION (June 27, 2008), http://www.wisconsinagconnection.com/story-national.php?Id=1516&yr=2008.

¹⁵² See Commodity Markets Transparency and Accountability Act of 2008, H.R. 6604, 110th Cong. § 8 (2008).

¹⁵³ Press Release, H. Comm. on Agric., House of Representatives Approves Bill to Strengthen Oversight of Futures Markets. (Sept. 18, 2008), *available at* http://agriculture.house. gov/press-release/house-representatives-approves-bill-strengthen-oversight-futures-markets.

¹⁵⁴ Stop Excessive Energy Speculation Act of 2008, S. 3268, 110th Cong. (2008); see ATA Applauds Senator Reid and Other Sponsors of S. 3268, THOMASNET.COM (July 21, 2008), http:// news.thomasnet.com/companystory/ATA-applauds-Senator-Reid-and-other-sponsors-of-S-3268-547049.

¹⁵⁵ See On the Cloture Motion S. 3268, GOVTRACK.US, http://www.govtrack.us/congress/votes/110-2008/s184 (last visited Jan. 25, 2013).

¹⁵⁶ See id. (noting that two Republicans voted in favor of the motion); Martin Kady II, McConnell Hedges on Oil Speculation, POLITICO (July 21, 2008, 4:02 PM), http://www.politico. com/blogs/thecrypt/0708/McConnell_hedges_on_oil_speculation_bill.html.

¹⁵⁷ Press Release, Ron Wyden Senator for Or., Wyden-Grassley Staff Proposes Level Playing Field for Oil Trade (July 31, 2008), available at http://www.wyden.senate.gov/news/press-releases/wyden-grassley-staff-proposes-level-playing-field-for-oil-trade; see, e.g., Ryan J. Donmoyer, Grassley, Wyden Eye Tax on Hedge Fund Oil Speculators, BLOOMBERG (July 31, 2008, 5:35 PM), http://www.bloomberg.com/apps/news?pid=newsarchive&sid=aDdrpcl91lco.

The combination of all of these congressional efforts led speculators to fear that Congress would take immediate action to limit speculation in commodities markets, so they abandoned these markets in droves.¹⁵⁸ The mass exodus of passive bettors from the crude oil market precipitated a radical drop in the price of a barrel of crude oil the price dropped from its July 2008 world record high of \$147 per barrel to \$30 per barrel by December of that year.¹⁵⁹

In the winter of 2009, when financial institutions realized that Congress would not pass legislation stopping excessive speculation, the price of oil once again spiked.¹⁶⁰ Gas prices rose fifty-four days in a row in the spring of 2009, and by July 2009, the price of a barrel of crude oil reached \$69.161 During this period of high oil and gas prices, the legislation that later became the Dodd-Frank Act began making its way through Congress.¹⁶² President Obama and Democratic leaders made clear that the legislation aimed to impose tough new limits on excessive speculation in commodity derivatives markets and to strengthen the hand of the CFTC by allowing the agency to pursue market manipulation cases more easily.¹⁶³ The message was apparently received. By the time Dodd-Frank was signed into law, crude oil prices had stabilized for almost eighteen months, with prices fluctuating between \$75 and \$85 per barrel.¹⁶⁴ However, as shown below, the CFTC in January 2011 barely mustered enough votes to report out a very weak proposed position limit rule.¹⁶⁵ In response to these signs that Dodd-Frank would not be properly implemented, the price of crude oil immediately soared to \$95 per barrel by February 2011.166 Similarly, when the CFTC promulgated the still-weak final position limit rule in October 2011, the price of crude oil shot back up in November from \$75 to more than \$100.167

167 See id.

¹⁵⁸ See 60 Minutes Report, supra note 95.

¹⁵⁹ See id.; supra note 4 and accompanying text.

¹⁶⁰ Cf. Edmund L. Andrews, U.S. Considers Curbs on Speculative Trading of Oil, N.Y. TIMES, July 8, 2009, at A1 (noting that oil prices "bounced back to more than \$60" after the dramatic fall to "\$33 a barrel" in December).

¹⁶¹ Petroleum & Other Liquids, EIA, supra note 4.

¹⁶² See Baird Webel et al., Cong. Research Serv., R40975 Financial Regulatory Reform and the 111th Congress 1 (2010).

¹⁶³ See Ben Lilliston, Wall Street Reform Bill Signed Today Will Limit Excessive Speculation in Agriculture, IATP (July 20, 2010), http://www.iatp.org/documents/wall-street-reform-billsigned-today-will-limit-excessive-speculation-in-agriculture.

¹⁶⁴ See Petroleum & Other Liquids, EIA, supra note 4.

¹⁶⁵ See infra notes 174-89 and accompanying text.

¹⁶⁶ See Petroleum & Other Liquids, EIA, supra note 4.

On April 19, 2011, President Obama stated that the oil price spikes in February and April 2011 did not result from market fundamentals, but from crude oil market manipulation by noncommercial speculators.¹⁶⁸ He subsequently convened an interagency task force led by the Department of Justice to investigate manipulation in the crude oil market.¹⁶⁹ Presumably as a result of the threatened prosecutions for market manipulation, the price of crude oil was, by October 2011, back down to around \$75.¹⁷⁰ According to statements made by the CEO of ExxonMobil in April 2011, this price accurately reflected market fundamentals.¹⁷¹ Yet when the CFTC issued its final weak position limit rule in October 2011,¹⁷² the price of crude oil again increased significantly from \$75 to more than \$100 in November, leading the President to reconvene the interagency task force in March 2012.¹⁷³

B. Legal Weapons Against Excessive Speculation

1. Position Limits

As required by Dodd-Frank,¹⁷⁴ the CFTC approved by a 3–2 vote its final rule for position limits on futures and swaps on October 18, 2011.¹⁷⁵ The rule establishes speculative position limits for twentyeight commodity futures contracts, including NYMEX WTI Light Sweet Crude Oil.¹⁷⁶ It establishes that no trader may hold or own a position in "Referenced Contracts" in the same commodity if the position exceeds a spot-month position limit of 25% of the "estimated spot-month deliverable supply."¹⁷⁷ Furthermore, the non-spot-month

¹⁶⁸ See supra notes 114-18 and accompanying text.

¹⁶⁹ See supra notes 114–18 and accompanying text.

¹⁷⁰ See Petroleum & Other Liquids, EIA, supra note 4.

¹⁷¹ See supra notes 76-78 and accompanying text.

¹⁷² See Deconstructing Dodd-Frank, N.Y. TIMES (Dec. 11, 2012), http://www.nytimes.com/ interactive/2012/12/11/business/Deconstructing-Dodd-Frank.html.

¹⁷³ See Cooper, supra note 117; Hall & Clark, supra note 116; Kevin G. Hall, Whatever Happened to Task Force on Oil Speculation?, McCLATCHY NEWSPAPERS (Mar. 1, 2012 7:43 AM), http://www.mcclatchydc.com/2012/03/01/140564/whatever-happened-to-task-force.html; Petroleum & Other Liquids, EIA, supra note 4.

¹⁷⁴ See Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, § 737, 124 Stat. 1376, 1722–23 (2010) (codified at 7 U.S.C. § 6a(a)(2)).

¹⁷⁵ Position Limits for Futures and Swaps, 76 Fed. Reg. 71,626, 71,626, 71,699 (Nov. 18, 2011) (codified at 17 C.F.R. §§ 1, 150, 151).

¹⁷⁶ See id. at 71,635, 71,686 (codified at 17 C.F.R. § 151.2). The position limits rule also applies to futures and swaps that are economically equivalent to those contracts. *Id.* at 71,626.

¹⁷⁷ Position Limits for Futures and Swaps, 17 C.F.R. § 151.4(a) (2012). This rule becomes effective for oil futures contracts on "January 1st of the second calendar year after the term 'swap' is further defined." See id. § 151.4(d)(2).

position limits rule establishes that no trader may hold or control positions that exceed 10% of the first 25,000 contracts and 2.5% thereafter in all months combined (including the spot-month) or in a single month.¹⁷⁸

Unfortunately, market observers, academics, and commercial users of commodity staples futures and swaps markets have raised substantial questions as to whether these position limits are strong enough to satisfy the Dodd-Frank mandate.¹⁷⁹ In particular, many believe that the 25% spot-month deliverable supply limit per speculator is far too high.¹⁸⁰ Recognizing this, Senator Maria Cantwell has likened the "broad rule" to "setting the speed limit at 125 miles per hour" and further expressed her disappointment that the rule "is simply too weak to meaningfully protect consumers."¹⁸¹

The general counsel of Delta Air Lines also believes that this limit on speculative positions is far too high. He maintains that "[the CFTC is] not proposing to adopt rules that will have any effect on speculation . . . They are only making sure no one can corner the market."¹⁸² In other words, the position limits levels may be effective to prevent extreme forms of market manipulation, but they are insufficient to fulfill the separate statutory objectives of: (1) stopping excessive speculation, which requires no showing of intent to manipulate the market, but in the aggregate constrains market fundamentals;¹⁸³ and (2) reducing speculative participation in these markets down from

¹⁷⁸ Id. 151.4(b)(1). This rule becomes effective for oil futures contracts after twelve months of collection of swap positional data. Id. 151.4(d)(3).

¹⁷⁹ See, e.g., Sanati, supra note 56.

¹⁸⁰ See id. ("Wall Street could swallow a 25% limit on the prompt month given the immense volume on that contract").

¹⁸¹ Press Release, Maria Cantwell, U.S. Senator for Wash., Cantwell: Weak Wall Street Speculation Rule is 'Like Setting Speed Limit at 125 MPH' (Oct. 18, 2011), available at http:// www.cantwell.senate.gov/news/record.cfm?id=334518. Likewise, Senator Bernie Sanders has stated that the 25% spot-month deliverable supply rule is "not enough." See Ben Geman, Regulators Impose Limits on Oil Speculation, THE HILL (Oct. 18, 2011, 2:45 PM), http://.com//-wire/ e2-wire/188239-market-regulators-impose-oil-speculation-curbs.

¹⁸² Spencer & DePass, *supra* note 79, at 10 (quoting Ben Hirst) (internal quotation marks omitted).

¹⁸³ See supra notes 72–76 and accompanying text; see also Dan M. Berkovitz, Position Limits and the Hedge Exemption, Brief Legislative History, COMMODITIES FUTURES TRADING COMM'N (July 28, 2009), http://www.cftc.gov/PressRoom/SpeechesTestimony/berkovitzstatement072809 (describing administrative reports that conclude that "large speculative positions, even without manipulative intent, can cause 'disturbances' and 'wild and erratic' price fluctuations").

its current level of 70% to 80% to around 20%, which was the norm prior to the CFTC staff stealth exemptions discussed above.¹⁸⁴

For example, in order to corner the market, one might need to control the majority of the available supply for that commodity. However, one would not need to control the majority of available supply to engage in excessive speculation. Aggregate betting on the price direction of commodities by speculators (who compose a majority of a market) can destabilize market fundamentals, even when they do not intend to do so.¹⁸⁵

The CEA defines "excessive speculation" as any commodity under contracts of sale "causing sudden or unreasonable fluctuations or unwarranted changes in the price of such commodity."¹⁸⁶ Therefore, prohibited speculative betting is that which exceeds the need to create liquidity for commercial handlers and thus causes price changes that defy market fundamentals of supply and demand.¹⁸⁷ Because the relevant crude oil futures market now has 80% speculative participation (with no one speculator likely to control more than 25% of the market), the new position limits, rather than restoring the market to 70:30 in favor of commercial entities, will likely just preserve the market as one for speculators instead of commercial users.

It is important to note that manipulation of markets that results from intentional wrongdoing is completely different from excessive speculation, which can occur through the destructive flooding of the market with thousands of passive price directional bettors who lack any intent to cause harm.¹⁸⁸ To prevent this unintentional harm, some have called for the CFTC to set the position levels at 5% of open interest up to the first 25,000 contracts, and 2.5% thereafter across all markets. For example, Michael Masters has suggested: "No single non-commercial entity should ever be allowed to represent more than 5% of a market's total open interest under any circumstances."¹⁸⁹

Yet, some hope still exists that the position limits, even in their lax present form, may prove strong enough to dampen speculation and thus bring down commodity prices, including that of crude oil.

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¹⁸⁴ See supra notes 67-70 and accompanying text.

¹⁸⁵ See, e.g., supra notes 64-71 and accompanying text.

¹⁸⁶ Commodity and Exchange Act, Pub. L. No. 74-675, ch. 545, sec. 5, § 4a(a), 49 Stat. 1491,
1492 (1936) (codified at 7 U.S.C. § 6a(a)).

¹⁸⁷ Cf. Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, § 737, 124 Stat. 1376, 1723 (2010) (codified at 7 U.S.C. § 6a(a)(3)(B)(iii)) (stating that position limits should "ensure sufficient market liquidity for bona fide hedgers").

¹⁸⁸ See Masters 2009 Testimony, supra note 56, at 19.
189 Id. at 5.

This hope is perhaps most evident in the reaction to the CFTC's new position limits rules by the big bank speculators themselves. On December 2, 2011, Wall Street-dominated trade associations challenged the CFTC's final position limits rule in federal district court.¹⁹⁰ The plaintiffs argued that the Commission had not conducted the required cost-benefit analysis before enacting the position limits, which they believe would show that the position limits will decrease market liquidity and increase volatility.¹⁹¹ The plaintiffs further noted that the final position limits rule passed by a mere 3–2 vote, with Commissioner Dunn voting in favor of the rule but stating on the record that he thought the rule would do more harm than good.¹⁹² On September 28, 2012, the plaintiffs prevailed at the district court level, when the district judge invalidated the position limits rule as not mandated by Congress under Dodd-Frank.¹⁹³ The CFTC has decided to appeal this ruling.¹⁹⁴

2. Legislative Ban on Commodity Investment Vehicles

As the CFTC encounters difficulty in substantially limiting excessive speculation under section 737 of Dodd-Frank as Congress intended, Congress should immediately, and on an emergency basis, enact legislation that bans the use of commodity index swaps and exchange traded funds. These investment vehicles are the most damaging to commodity staples derivatives markets because they are premised on synthetic bets on commodity futures price directions.

¹⁹³ Tom Schoenberg, *CFTC Rule Restraining Speculation Rejected by U.S. Judge*, BLOOM-BERG (Sept. 28, 2012, 4:37 PM), http://www.bloomberg.com/news/2012-09-28/cftc-rule-restraining-speculation-rejected-by-u-s-judge.html.

194 Press Release, Commodity Futures Trading Comm'n, CFTC Approves Position Limit Appeal (Nov. 15, 2012), *available at* http://www.cftc.gov/PressRoom/PressReleases/pr6413-12.

¹⁹⁰ See Complaint, Int'l Swaps & Derivatives Ass'n v. U.S. Commodity Futures Trading Comm'n, No. 1:11-cv-02146 (D.D.C. Dec. 2, 2011); see also Christopher Doering, Wall St. Sues CFTC over Commodity Trading Crackdown, REUTERS (Dec. 2, 2011, 6:16 PM), www.reuters. com/article/2011/12/02/us-financial-limits-lawsuit-idUSTRE7B11XJ20111202.

¹⁹¹ See Doering, supra note 190.

¹⁹² See Complaint, supra note 190, at 2, 4; see also U.S. COMMODITY FUTURES TRADING COMM'N, OPEN MEETING ON TWO FINAL RULE PROPOSALS UNDER THE DODD-FRANK ACT 12–13 (Oct. 18, 2011), available at http://www.cftc.gov/ucm/groups/public/@swaps/documents/dfsubmission/dfsubmission7_101811-trans.pdf; Asjylyn Loder & Silla Brush, CFTC Votes 3-2 to Approve Limits on Commodity Speculation, BLOOMBERG (Oct. 18, 2011), http://www.businessweek.com//-10-18/cftc-votes-3-2-to-approve-limits-on-commodity-speculation.html; Brian Scheid, A Position Limits Rule No One Likes, Partisan Fighting, and a Song, PLATTS (Oct. 20, 2011, 12:45PM), http://blogs.platts.com/2011/10/20/a_position_limi/.

In this respect, H.R. 5186, the Halt Index Trading of Energy Commodities Act ("HITEC"),195 introduced by Representative Ed Markey on April 27, 2012, and co-sponsored by Representatives Barney Frank and Rosa DeLauro,¹⁹⁶ represents a bold and important first step toward ending excessive speculation in commodities markets. The bill would prevent commodity index funds that trade in crude oil, natural gas, or derivatives thereof, from engaging in transactions with investors who are not bona fide hedgers.¹⁹⁷ Importantly, HITEC identifies commodity index funds as the main cause of speculative activity in staple commodities markets¹⁹⁸ and asserts that speculative activity has added nearly \$1.00 to the per gallon price of gasoline.¹⁹⁹ The bill appears to have already had a significant impact on speculative activity-oil prices dropped from \$105 to \$98 per barrel in the days after the legislation was introduced and within weeks dropped further to approximately\$80.200 This decline mimics the drop from the world record high of \$147 per barrel of crude oil in July 2008 to \$30 per barrel in December 2008²⁰¹ in the wake of the strong legislative efforts to curb excessive speculation during the fall of 2008 as discussed above.202

A comprehensive legislative ban on commodity index swaps and exchange traded funds would only stop passive betting on the upward direction of commodity staples, including oil futures. Those who wish to place price directional bets will still have other less deleterious investment avenues to pursue: they can buy or short stocks in companies that produce the commodities, they can buy the actual commodities, or they can buy long or short contracts in the futures markets. Of course, these alternative and traditional avenues of investment require financial sophistication. Using them is not as simple as walking up to the commodity staples betting window and placing a

¹⁹⁵ Halt Index Trading of Energy Commodities Act, H.R. 5186, 112th Cong. (2012).

¹⁹⁶ Press Release, H. Comm. on Natural Res., Markey, Frank, DeLauro Go After Wall Street Oil Inv. Prods. (Apr. 30, 2012), *available at* http://democrats.naturalresources.house.gov/ press-release/markey-frank-delauro-go-after-wall-street-oil-investment-products.

¹⁹⁷ See id.

¹⁹⁸ H.R. 5186 \S 2(3) ("Almost all of this increase in speculation has been caused by a surge in trading of commodity index funds.").

¹⁹⁹ Id. § 2(7).

²⁰⁰ Petroleum & Other Liquids, EIA, supra note 4.

²⁰¹ See supra note 4 and accompanying text.

²⁰² See supra notes 149-59 and accompanying text.

bet with a big Wall Street bank that a basket of synthetic commodities will rise in value.²⁰³

Regulation by individual states may provide another possible means to prevent excessive speculation because states may now employ their gaming and bucket-shop laws to regulate commodity index vehicles and exchange traded funds. The Commodity Futures Modernization Act of 2000²⁰⁴ had expressly preempted state gaming and anti-bucket-shop laws from regulating commodity-based swaps.²⁰⁵ Dodd-Frank eliminated this preemption, however, for swaps that are not based on securities.²⁰⁶ This allows state regulators to act under their gaming and anti-bucket shop laws for the first time in many years to regulate or terminate betting on commodity staples prices, thus serving as another potential regulatory check on highly speculative and systemically risky "bets" by large U.S. financial institutions.

3. Anti-Manipulation Rules

In light of the weak CFTC position limit rules, anti-manipulation remedies may prove to be a better route to dampen excessive speculation in the futures markets. Section 753 of Dodd-Frank directs the CFTC to enact regulations that prohibit market participants from using or employing "any manipulative or deceptive device or contrivance" to affect commodities prices.²⁰⁷ Also known as the "Cantwell Amendment," section 753 enhances the CFTC's anti-manipulation authority by lowering the standard of proof that the CFTC must satisfy in order to prove market manipulation.²⁰⁸ Prior to the passage of the amendment, the CFTC had to prove market manipulation by establishing, inter alia, that the accused acted with the specific intent to

²⁰³ See, e.g., CME GROUP, A TRADER'S GUIDE TO FUTURES 19 (2011), available at http:// www.cmegroup.com/education/files/ED-004_IntroToFuturesBrochure.pdf.

²⁰⁴ Commodity Futures Modernization Act of 200, Pub. L. No. 106-554, app. E, 114 Stat. 2763A-365.

²⁰⁵ Id. § 408(c), 114 Stat. at 2763A-461; see also 2 JOHNSON & HAZEN, supra note 32, at 975.

²⁰⁶ Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, §§ 725(g), 767, 124 Stat. 1376, 1685, 1800 (2010) (codified at 7 U.S.C. § 27f; 15 U.S.C. § 78bb(a)) (removing preemption against covered swap agreements by amending the CEA, while preempting state and local regulations and prohibitions related to gaming and bucket shops by amending the Securities Exchange Act of 1934).

²⁰⁷ Id. sec. 753(a), § 6(c), 124 Stat. at 1750 (codified at 7 U.S.C. § 9, 15) (amending the CEA).

²⁰⁸ See Press Release, Maria Cantwell, U.S. Senator for Wash., Senate Passes Cantwell Anti-Manipulation Amendment (May 6, 2010), *available at* http://cantwell.senate.gov/news/record.cfm?id=324761 (observing that section 753 "strengthen[s the CFTC's] enforcement powers over commodity and derivatives trading" and provides the agency with "a more effective legal tool to enforce prohibitions on market manipulation in futures and derivatives markets").

create an artificial price.²⁰⁹ The difficulty of successfully pursuing actions under this rule is reflected by the fact that the Commission won only one anti-manipulation case in thirty-five years.²¹⁰

Under Dodd-Frank, the CFTC may prove manipulation by establishing that the accused recklessly employed a manipulative scheme to affect commodity prices.²¹¹ As one former CFTC general counsel explained: "It won't be a defence to say that you didn't specifically intend to manipulate the market, if the actions you took were reckless in having that impact or effect"²¹² In this respect, the anti-manipulation authority provided by section 753 offers "a strong and clear legal standard that allows regulators to successfully go after reckless and manipulative behavior."²¹³

The CFTC published its final market manipulation rule on July 14, 2011.²¹⁴ The rule prohibits the use of "fraud and fraud-based manipulative devices and contrivances employed intentionally or recklessly, regardless of whether the conduct in question was intended to create or did create an artificial price."²¹⁵ The CFTC defines "recklessness" as "an act or omission that departs so far from the standards

(1) that the accused had the ability to influence market prices; (2) that the accused specifically intended to create or effect a price or price trend that does not reflect legitimate forces of supply and demand; (3) that artificial prices existed; and (4) that the accused caused the artificial prices.

COMMODITY FUTURES TRADING COMM'N OFFICE OF PUBLIC AFFAIRS, Q & A-ANTI-MANIPU-LATION AND ANTI-FRAUD FINAL RULES 1, *available at* http://www.cftc.gov/ucm/groups/public/ @newsroom/documents/file/amaf_qa_final.pdf [hereinafter Q&A: ANTI-MANIPULATION RULES].

210 Jamila Trindle, CFTC Expands Its Power to Pursue Fraud, Manipulation, WALL ST. J. (July 8, 2011), http://.wsj.com/article/SB10001424052702303544604576431814190513164.html.

211 See Gensler, supra note 209 ("Under the new law and one of the rules before us today, the Commission's anti-manipulation reach is extended to prohibit the reckless use of fraudbased manipulative schemes. This closes a significant gap, as it will broaden the types of cases we can pursue and improve the chances of prevailing over wrongdoers.").

212 Alexander Osipovich, Law and Order, RISK, June 2012, at 19 (internal quotation marks omitted).

²¹³ Press Release, Maria Cantwell, U.S. Senator for Wash., Federal Regulators Finalize Tough New Market Manipulation Rule Required by Cantwell (July 7, 2011), *available at* http:// cantwell.senate.gov/news/record.cfm?id=333423 (internal quotation marks omitted).

²¹⁴ Prohibition on the Employment, or Attempted Employment, of Manipulative and Deceptive Devices and Prohibition on Price Manipulation, 76 Fed. Reg. 41,398 (July 14, 2011) (codified at 17 C.F.R. § 180) [hereinafter Prohibition on Manipulative Devices]; *see also* Trindle, *supra* note 210.

215 Q&A: ANTI-MANIPULATION RULES, supra note 209.

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²⁰⁹ See Gary Gensler, Chairman Gensler's Statements of Support on Five Dodd-Frank Final Rules, U.S. COMMODITY FUTURES TRADING COMM'N (July 7, 2011), http://www.cftc.gov/Press-Room/SpeechesTestimony/genslerstatement070711b (explaining that "[i]n the past, the CFTC . . . had to prove the specific intent of the accused to create an artificial price"). The Commission was previously required to prove:

of ordinary care that it is very difficult to believe the actor was not aware of what he or she was doing."²¹⁶ Furthermore, proof of knowledge is not required.²¹⁷ The CFTC's new scienter standard is in line with the standard required of other regulatory agencies to prove manipulation in other markets, including the Securities and Exchange Commission ("SEC"),²¹⁸ the Federal Energy Regulatory Commission ("FERC"),²¹⁹ and the Federal Trade Commission ("FTC").²²⁰

The positive effect of anti-manipulation enforcement on excessive speculation has been evident in the natural gas market. The pricing crisis in natural gas led the Republican-controlled Congress to pass the Energy Policy Act of 2005.²²¹ Since the passage of that Act, FERC has made stopping market fraud and manipulation in the natural gas markets "an enforcement priority."²²² It has passed regulations that ensure market transparency²²³ and has sought considerable fines from

216 Prohibition on Manipulative Devices, *supra* note 214, at 41,404 (internal quotation marks and citations omitted).

²¹⁸ A recklessness scienter standard is sufficient for the Securities Exchange Commission to pursue market manipulation cases under SEC Rule 10b-5, codified at 17 C.F.R. § 240.10b-5 (2011). See, e.g., Graham v. S.E.C., 222 F.3d 994, 1000 (D.C. Cir. 2000); S.E.C. v. U.S. Envtl., Inc., 155 F.3d 107, 111 (2d Cir. 1998); cf. Osipovich, supra note 212, at 22 (quoting a former FERC economist who draws parallels between the more stringent insider trading laws in the 1980s and the new anti-manipulation rules for futures markets).

²¹⁹ See Energy Policy Act of 2005, Pub. L. No. 109-58, sec. 315, § 4a, 119 Stat. 594, 691 (codified at 15 U.S.C. § 717c-1); *id.* sec. 1283, § 222, 119 Stat. at 979 (codified at 16 U.S.C. § 824v).

²²⁰ Energy Independence and Security Act of 2007, Pub. L. No. 110-140, §§ 811-12, 121 Stat. 1492, 1723-24 (codified at 42 U.S.C. §§ 17301-02). The FTC has chosen to enforce the statute under the scienter requirement of "extreme recklessness," a higher standard than ordinary recklessness, but lower than intent. Prohibitions on Market Manipulation, 74 Fed. Reg. 40,686, 40,696 (Aug. 12, 2009) (codified at 16 C.F.R. § 317).

221 Energy Policy Act of 2005, Pub. L. No. 109-58, 119 Stat. 594; see also Lindsay Renick Mayer, Big Oil, Big Influence, PBS (Aug. 1, 2008), http://www.pbs.org/now/shows/347/oil-politics.html; NATURAL GAS REPORT, supra note 119, at 130. When Representative Graves co-sponsored another bill with Representative Barrow in July 2007 to require traders who hold large positions in the natural gas market to report those positions to the CFTC, he stated that natural gas prices were "being driven by speculation and manipulation of the market" and that Congress needed to act to prevent consumers from paying more for natural gas. See Lawmakers See Need to Put Limits on U.S. Electronic Energy Markets, PUB. POWER WKLY., July 23, 2007, at 5.

222 Prohibition of Energy Market Manipulation, FED. ENERGY REGULATORY COMM'N, http://www.ferc.gov/enforcement/market-manipulation.asp (last visited Jan. 25, 2013); see also Scott DiSavino & Jonathan Leff, Insight: Energy Regulators in New Push to Quash Manipulation, REUTERS (Apr. 12, 2012, 1:58 AM), http://www.reuters.com/article///12/us-regulations-energy-us-idUSBRE83B06Z20120412.

223 See CLEARY GOTTLIEB, FERC'S NEW FOCUS ON TRANSPARENCY AND PROTECTING AGAINST MANIPULATION OF NATURAL GAS MARKETS 1–2 (2008), http://www.cgsh.com/files/ News/c30a1328-e321-4d45-a060-5d6a0bf6c3c6/Presentation/NewsAttachment/2c55bc4e-18c3-4e6e-a3db-6061618857c8/10-2008%20Natural%20Gas%20Alert%2020080117.pdf [hereinafter

²¹⁷ Id.

traders who allegedly manipulated natural gas prices. In 2007, FERC sought penalties and disgorged profits of over \$290 million in connection with the alleged manipulation of natural gas markets by traders at Amaranth Advisors LLC.²²⁴ FERC settled with Amaranth but continued proceedings against Brian Hunter, a former Amaranth trader, eventually fining him \$30 million for his involvement in the manipulation scheme.²²⁵ In 2011, FERC brought a manipulation case against Atmos Energy for attempting to avoid FERC's posting and bidding requirements in order to create a long-term, noncompetitive discounted rate release.²²⁶ Also in 2011, FERC pursued BP for "fraudulently trading physical natural gas" and for trading points in order to increase the value of its financial positions.²²⁷ FERC's aggressive stance against manipulation in the natural gas market has helped bring natural gas prices from record highs of around \$15 per million British thermal units ("BTU") in 2005 to ten-year lows of less than \$2 per million BTU in April 2012.228

CLEARY GOTTLIEB REPORT] (commenting that FERC regulations require a broad range of market participants to annually report specified information related to their natural gas trades, such as the total volume of transactions for the previous year and the volume of transactions priced according to a particular pricing mechanism); *see also* Statement of Philip D. Moeller, Comm'r, Fed. Energy Regulatory Comm'n, Open Commission Meeting (Apr. 19, 2007), *available at* http:// .ferc.gov/////04-19-07-moeller-M-1.pdf ("I am confident that the proposed daily postings by the intrastate carriers will allow the Commission and other market observe[r]s to identify and remedy potentially manipulat[iv]e activity more actively by tracking price movements.").

224 See CLEARY GOTTLIEB REPORT, supra note 223, at 2; see also John R. Morris, FERC Changes Its Approach in Two Price Manipulation Cases, ECONOMISTS INK, Dec. 2009, at 2, available at http://www.ei.com/vieweconink.php?id=238 (explaining that FERC reached a \$7.5 million settlement with Amaranth Advisors LLC after initially pursuing \$259 million in civil penalties and disgorged profits).

225 See Press Release, Fed. Energy Regulatory Comm'n, FERC Orders \$30 Million Fine Against Former Amaranth Trader (Apr. 21, 2011), available at http://www.ferc.gov/media/newsreleases/2011/2011-2/04-21-11-G-1.asp (explaining that traders at Amaranth allegedly amassed large amounts of natural gas futures contracts, which they then sold all at once in order to increase the value of the significantly larger short positions maintained by Amaranth in natural gas swaps).

²²⁶ See STAFF NOTICE OF ALLEGED VIOLATIONS, U.S. FED. ENERGY REGULATORY COMM'N 1–2 n.3 (Aug. 12, 2011), *available at* http://www.ferc.gov/enforcement/alleged-violation/ notices/atmos.pdf (noting alleged violations by Atmost Energy Corp.).

²²⁷ See STAFF NOTICE OF ALLEGED VIOLATIONS, U.S. FED. ENERGY REGULATORY COMM'N 1 (July 28, 2011), *available at* http://www.ferc.gov/enforcement/alleged-violation/notices/ bp-america.pdf (noting alleged violations by BP North America Inc.).

²²⁸ Arkansas Natgas Tax Collections Down More than 33%, CITY WIRE (Ft. Smith, Ark.) (Dec. 19, 2012, 11:14 AM), thecitywire.com/node/25603#.UQMUzqF2EZg; Steve Hargreaves, Big Oil Sees Energy Bonanza Ahead, CNNMONEY (Dec. 6, 2011, 1:59 PM), http://money.cnn. com/2011/12/06/news//_gas_supply/index.htm; Dan Strumpf, Natural Gas Slides to 10-Year Low, WALL ST. J. (Mar. 29, 2012, 6:00 PM), http://online.wsj.com/article/SB10001424052702303816504 577311911947295928.html; ; see also Rapier, supra note 11; Ken Silverstein, Oil and Natural Gas This experience in the natural gas market demonstrates the effectiveness of regulatory agency enforcement of anti-manipulation rules in bringing market prices under control. The CFTC can expect to decrease volatility and bring prices under control in the commodity futures markets in the same way by aggressively pursuing conduct that violates its new anti-manipulation rules. Furthermore, FERC's antimanipulation enforcement experience in the natural gas markets suggests that, given the close relationship between the natural gas markets and the crude oil markets, similar instances of manipulation may be occurring in the oil futures market as well.

In contrast, the FTC has exercised very little of its authority to enforce the prohibition against price manipulation of crude oil gasoline or petroleum distillates at wholesale, which was granted by Congress through the Energy Independence and Security Act of 2007.²²⁹ The FTC launched a probe in June 2011 to investigate whether oil companies and refineries have engaged in price fixing,²³⁰ but nothing has emerged from this effort.²³¹

Unlike the FTC, the CFTC has recently aggressively pursued manipulation cases in the crude oil futures markets under its own antimanipulation rules. In April 2012, the Commission reached a settlement and received \$13 million in penalties and \$1 million in disgorged profits from Optiver Holding BV, whose subsidiaries and traders had allegedly manipulated crude oil, gasoline, and heating oil prices.²³²

²³¹ See Hall, supra note 173; Roberta Rampton, Democrat Senator Urges FTC to Wrap up Gasoline Probe, REUTERS (Mar. 1, 2012, 12:24 PM), http://www.reuters.com/article/2012/03/01/ usa-oil-ftc-idUSL2E8E188W20120301; Press Release, Maria Cantwell, U.S. Senator for Wash., Cantwell: Won't Support FTC Nominee Who Doesn't Aggressively Police Oil Market Manipulation (Dec. 4, 2012), available at www.cantwell.senate.gov/public/index.cfm/press-releases?ID=a6 7a0ad0-b73c-45e8-a215-b309e6f38b94.

232 See David Sheppard & Jonathan Stempel, *High-Frequency Trader Optiver Pays \$14 Million in Oil Manipulation Case*, REUTERS (Apr. 20, 2012, 12:54 AM), http://www.reuters.com/ article/2012/04/20/us-optiver-settlement-idUSBRE83J01220120420. The defendants had allegedly been involved in a manipulative tactic called "banging the close," which involves "acquiring a substantial position leading up to the closing period, followed by taking offsetting positions in a

Part Ways, FORBES (May 14, 2012, 10:50 AM), http://www.forbes.com/sites/kensilverstein///14/ oil-and-natural-gas-part-ways/ (quoting Valerie Wood, the president of an energy consulting firm: "I think prices have reached an interim low and therefore some of the speculators are willing to come back into natural gas");.

²²⁹ Energy Independence and Security Act of 2007, Pub. L. No. 110-140, §§ 811-15, 121 Stat. 1492, 1723-24.

²³⁰ See Ben Geman, FTC Probes Possible Oil Market Manipulation, THE HILL (June 20, 2011, 4:54 PM), http://thehill.com//-wire/-wire/-federal-trade-commission-opens-probe-of-possible-oil-market-manipulation; Ayesha Rascoe & Roberta Rampton, FTC Probes Possible Oil Market Manipulation, REUTERS (June 20, 2011, 7:03 PM), http://www.reuters.com/article/2011/06/20/us-oil-ftc-probe-idUSTRE75J6J020110620.

In May 2011, the Commission charged Parnon Energy and its affiliates with pursuing an oil manipulation scheme in 2008 that resulted in profits of \$50 million.²³³ Two traders from the company had allegedly amassed very large positions in the Cushing, Oklahoma physical market in order to create the impression of a shortage and to push up the price of WTI futures on NYMEX.²³⁴ The traders made money by purchasing futures that would profit from the rise in price.²³⁵ The judge in the federal case has denied a motion to dismiss.²³⁶

Notably, the CFTC pursued its actions against Optiver and Parnon Energy under the old manipulation rules which required a showing of the defendants' intent.²³⁷ Thus, the new anti-manipulation rules should enable the Commission to bring many more actions with an even greater record of success.²³⁸

The Commission has demonstrated through these cases (along with its widely publicized anti-manipulation investigations of LIBOR interest rates)²³⁹ that it is more than willing to combat manipulation in commodity staples markets, including crude oil. However, Wall Street

²³³ Jack Farchy & Javier Blas, *CFTC Charges Traders over Oil Price*, FIN. TIMES, May 25, 2011, at 1.

²³⁴ Complaint for Injunctive and Other Equitable Relief and Civil Monetary Penalties Under the Commodity Exchange Act at 2, U.S. Commodity Futures Trading Comm'n v. Parnon Energy, Inc., No. 1:11-cv-3543 (S.D.N.Y. May 24, 2011) [hereinafter Parnon Complaint], *available at* http://www.cftc.gov/ucm/groups/public/@lrenforcementactions/documents/legalpleading/. pdf; *see also* Farchy & Blas, *supra* note 233, at 1; Ayesha Rascoe & Christopher Doering, *CFTC Charges Arcadia, Oil Traders with Manipulation*, REUTERS (May 24, 2011, 4:13 PM), http://www. reuters.com///05/24/us-cftc-oil-manipulation-idUSTRE74N6S720110524.

235 See Parnon Complaint, supra note 234, at 2.

²³⁶ See Bob Van Voris, Parnon, Arcadia Loses Bid Dismiss Oil Manipulation Case, BLOOM-BERGBUSINESSWEEK (Apr. 26, 2012), http://www.businessweek.com/news/2012-04-26/parnon-arcadia-loses-bid-dismiss-oil-manipulation-case.

Cf. Complaint for Injunctive and Other Equitable Relief and Civil Monetary Penalties Under the Commodity Exchange Act at 18, U.S. Commodity Futures Trading Comm'n v. Optiver US, LLC, No. 08-cv-6560 (S.D.N.Y. July 24, 2008), *available at* http://www.cftc.gov/ucm/ groups/public/@lrenforcementactions/documents/legalpleading/.pdf (noting that many of the defendants' conversations "reflect[ed] their manipulative intent"); Parnon Complaint, *supra* note 234, at 11 ("[Defendants] intended to and did acquire a dominant [position]").

238 See supra notes 211-16.

²³⁹ See, e.g., Press Release, U.S. Commodities Futures Trading Comm'n, CFTC Orders Barclays to Pay \$200 Million Penalty for Attempted Manipulation of and False Reporting Concerning LIBOR and Euribor Benchmark Interest Rates (June 27, 2012), *available at* http://www. cftc.gov/PressRoom/PressReleases/pr6289-12.

manner intended to push prices in the manipulator's favor." Press Release, Commodity Futures Trading Comm'n, Federal Court Orders \$14 Million in Fines and Disgorgement Stemming from CFTC Charges Against Optiver and Others for Manipulation of NYMEX Crude Oil, Heating Oil, and Gasoline Futures Contracts and Making False Statements (Apr. 19, 2012), available at http://www.cftc.gov///-12.

and Republican opposition to its mission has created difficulties for the CFTC in exercising its full authority, due to a tremendous deficiency in sufficient resources to oversee the \$300 trillion notional value futures and swaps markets now under its jurisdiction after the passage of Dodd-Frank.²⁴⁰ In this light, President Obama's strategy of deploying an interagency task force led by the Department of Justice presents the best chance to address manipulation in the crude oil futures markets.²⁴¹ This interagency task force combines the expertise of the understaffed CFTC along with the vast investigatory resources of the Department of Justice.²⁴² Just as FERC uncovered manipulation in the natural gas markets, this combination of the CFTC and the Department of Justice, if pursued aggressively, should uncover and turn back manipulation in the crude oil futures markets, thereby driving down the price of crude oil to a point consistent with market fundamentals.

CONCLUSION

A wide range of experts, observers, and market participants make it clear that speculation in the oil futures markets exceeds what is required for proper liquidity, and that this excessive speculation has led to overwhelming volatility in oil prices, often driving the price of a barrel of crude oil \$25 to \$30 above what market fundamentals dictate. It is widely understood that increasing volatility increases the expense for producers and consumers of using futures as a hedge. If commercial interests cannot hedge in a fair and orderly market, they and their ultimate consumers (the public at large) are left to the mercy of volatile markets that undercut the hedging function.

Position limits and other enforcement mechanisms are necessary in commodities of finite supply to curb excessive speculation. The current CFTC position limit rules should therefore be strengthened and strictly enforced, and the CFTC must take advantage of the new anti-manipulation rules that empower it to pursue more strongly those futures market speculators who cause the price of oil and other commodities to become unmoored from economic fundamentals.

²⁴⁰ See COMMODITY FUTURES TRADING COMM'N, STRATEGIC PLAN FY 2011-2015, at 3 (2011); Testimony of Michael Greenberger, *supra* note 70, at 7–8; Bruce Edwards, Op-Ed, *Taking Aim at Speculators*, RUTLAND HERALD (Mar. 11, 2012), http://www.rutlandherald.com/article/20120311/BUSINESS03/703119968/0/OPINION03.

²⁴¹ See supra notes 114-18 and accompanying text. But see Hall, supra note 173.

²⁴² See Hall, supra note 173.

The enforcement of strong position limits and other rules that limit excessive speculation has no meaningful adverse effect on the real economy. Position limits are designed to permit sufficient speculation to provide liquidity to commercial users of derivatives markets. They also limit the scope of placing bets for gambling's sake on upward price movements of energy and food staples worldwide. Stopping *excessive* gambling will not undercut production of commodities one whit because passive betting does not provide any assistance to the production of those commodities. The cost benefit analysis here is quite simple. By stopping unproductive gambling by passive investors and institutions that exceeds the provision of liquidity, consumers in the U.S. and worldwide will pay fairer, lower, and market-driven prices for their everyday needs.