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To
Josef Ackermann
Head of the Institute of International Finance, Inc. (IIF)
1333 H St NW
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United States

Berlin, 29 September 2011

IIF's Commodities Task Force Submission to the G20

Dear Mr Ackermann:

We write to you because of the recent report by the IIF's Commodities Task Force Submission to the G20 on "Financial Investment in Commodity Markets: Potential Impact on Commodity Prices & Volatility". We think that the report seriously understates the negative impact of financial investment, particularly of Over the Counter derivatives, on price discovery and risk management for bona fide hedgers. Having understated and sometimes misstated the causes of excessive speculation, your report then gives misleading policy recommendations to the G20. – The main flaws and shortcomings of the report are as follows:

1. Neglect of evidence for negative impact of financial investments in commodities markets:
The IIF report repeatedly states that there is "little" or "no convincing" evidence about the negative impact of excessive financial investments in commodities and that "most empirical studies" find that it "does not have a significant effect". However, the report itself contains a long list of academic studies which provide such evidence (Mayer, Büyüksahin/Robe, Tang/Xiong, Gilbert, Singleton, US Senate PSI, Kaufmann, Hamilton, Petzel). There are a smaller number of studies referenced that give a "fundamentals only" explanation, mainly consisting of Büyüksahin/Harris and two studies (co)authored by Irwin/Sanders who are members of the IIF taskforce, and another study by Headey/Fan which, however, is missing in the references. Given this clear majority of studies demonstrating the financial investment drivers of price levels and volatility, the IIF's summary of the academic evidence is not even supported by its own assessment. Furthermore, the IIF neglected to review numerous other studies which counter its defense of excessive speculation, amongst others released by the World Bank, many universities, and the European Central Bank. Also the recent interagency report of FAO, IMF, the World Bank, OECD and others concludes: "While analysts argue about whether financial speculation has been a major factor, most agree that increased participation by non-commercial actors such as index funds, swap dealers and money managers in financial markets probably acted to amplify short term price swings and could have contributed to the formation of price bubbles in some situations." For detailed references for the mentioned studies and many more evidence please see the annex to this letter.

2. Neglect of evidence that fundamental factors do not fully explain price developments:
While we accept that fundamental factors are still of importance for price volatility, and that issues such as biofuels, underinvestment and rising demand deserve attention, there are serious doubts about the extent with which the IIF attributes volatility only to such factors. The IIF report assumes that "even the strongest proponents of the view that financial flows drive commodity prices acknowledge that the primary price drivers are fundamental supply and demand factors". This is not true or it is a flawed interpretation. As one example, we quote from the World Bank research paper by

Baffes/Haniotis: "We conjecture that index fund activity … played a key role during the 2008 price spike. Biofuels played some role too, but much less than initially thought. And we find no evidence that alleged stronger demand by emerging economies had any effect on world prices." Emerging economies, especially China, have been emerging for decades now, but commodity prices declined in the 1980s and 1990s. The biofuels and emerging markets boom was almost unabated in 2008/2009 when prices fell sharply.

3. Neglect of evidence for a relation between price distortions and commodity index funds:
Regarding index funds, the report alleges – without any reference – that commodity markets "that have similar levels of index trader positioning do not necessarily experience similar pressure on prices; similarly, markets with the highest levels of index trader positioning do not experience the highest pressure on prices". However, the probably best study so far with an academically sound comparison of indexed and non-indexed markets, by Tang and Xiong (2010, see annex), came to the conclusion that "futures prices of non-energy commodities in the US became increasingly correlated with oil and this trend was significantly more pronounced for commodities in the two popular SP-GSCI and DJ-UBS commodity indices." The IIF report also makes contradictory statements about the index funds' motives. While first contending in general that "many would argue that financial investors do indeed take fundamentals into account" the report later on admits that index funds "generally take long-only positions, as a hedge against inflation and for portfolio diversification".

4. Neglect of evidence for the role of speculators for divergence between cash and futures prices:
Divergence problems between cash and futures prices, another consequence of financial speculation, are explained away in terms of deficient future contract specifications by the report, without providing a specific reference. However, the US Senate Permanent Subcommittee on Investigations, in its 2009 report on "Excessive Speculation in the Wheat Market," has a very different assessment: "In previous investigations conducted by the Subcommittee into the operation of the commodity markets, there usually has been a range of views on the causes of particular price movements. Typically, different traders with different market perspectives have had differing views on the behavior of the market. In contrast, during this investigation, there has been a striking unanimity of perspective. Virtually all of the traders and analysts contacted by the Subcommittee stated that the large presence of commodity index traders in the Chicago market was the primary factor contributing to the pricing problems in the wheat market." No amount of Chicago Mercantile Exchange contract design tinkering can fix the distortion of price levels and price volatility caused by index fund trading under exchange self-regulated "position accountability" and no position limits whatsoever for OTC swaps dealers and participants.

5. Misleading statements about the regulatory discussion at G20 level and in the US:
Regarding the regulatory discussion, the IIF report states that there is disagreement within the G20 about the imposition of tighter regulation, including position limits. Even though we do not want to allege that there are no divergences at all within the G20, the IIF report is not able to provide any convincing evidence for this allegation apart from the UK's position which is obviously driven by the protection of its financial industry. The report itself notes that there is broad agreement between the EU and the US on the core issues, including the imposition of position limits. The IIF report also gives a misleading interpretation of the CFTC's position by quoting just one commissioner while the mandate of the CFTC is to impose limits. Finally, the threat by the IIF report that banks might evade regulation by going to the physical markets or unregulated markets, for us is not a reason to renounce regulation but, to the contrary, for better and more harmonized regulation to prevent any such evasion.

Given these fundamental flaws in the IIF report, we cannot but conclude that the IIF apparently is simply pursuing its own 'private sector interest' in favour of deregulation. This, however, as well as de-supervision through withdrawal of enforcement, and the disastrous exemption from capital reserve requirements obtained in September 2004 for seven IIF members, have been among the factors that have made commodity markets disorderly, opaque and ill-regulated. The facts are that since 2004 financial speculation in commodities markets has risen in a dramatic and unprecedented way, changing fundamentally the structure of commodity derivative markets. For instance, in the Chicago wheat futures market the share of financial speculators has grown from 12% in 1996 to currently 61%. In these years

price volatility has gone up and price movements unrelated to any changes in supply and demand have increased. Commodity derivative markets therefore have been less useful to commercial parties in hedging price risks and discovering prices. Given the devastating impact of price rises of commodities on the most vulnerable people of this world – a recent World Bank study puts the number of people pushed into extreme poverty due to rising food prices in the second half of 2010 at 44 million – now is the time to act against the excessive speculation in commodity derivative markets.

We urge the IIF to reassess and change its G20 recommendations before the meeting of the G20 Finance Ministers in mid-October in the light of the IIF report's shortcomings and flaws raised in this letter. The sustainability of your member institutions should depend not on regulatory exemptions and government bailouts, but on cooperating with regulatory authorities to ensure that commodity markets have adequate liquidity, rules and infrastructure to serve the trading of bona fide hedgers.

Yours sincerely,

Markus Henn, Financial Markets Officer,
World Economy, Ecology & Development (WEED), Germany

Steve Suppan, Senior Policy Analyst,
Institute for Agriculture and Trade Policy (IATP), United States

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World Development Movement (WDM), United Kingdom

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Maryknoll Office for Global Concerns (MOGC), United States

Yaneer Bar-Yam, Professor and President,
New England Complex Systems Institute, United States

Antonio Gambini, Secretary General,
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Nick Hildyard, Senior Researcher,
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Sigrun Zwanzger, Project Officer,
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Benedikte Pryneid Hansen, Chair Person,
Attac Norge, Norway

Tracy Worcester, Director,
Farms Not Factories, United Kingdom

Carlos Ruiz, Vice-President,
Attac España, Spain

Gildas Jossec, Finance and Development Officer,
Association internationale des techniciens, experts et chercheurs (AITEC), France

Paul de Clerck, Coordinator Economic Justice Programme,
Friends of the Earth Europe (FoEE)

Laust Leth Gregersen, Head of Secretariat,
Concord, Denmark

Rens van Tilburg, Senior Researcher,
Centre for Research on Multinational Corporations (SOMO), Netherlands

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Copies** of this letter go to the **G20-sherpas, Annex

ANNEX

Evidence on the Negative Impact of Commodity Speculation by Scientists, Analysts and Public Institutions

29 September 2011

Compiled by Markus Henn, WEED, markus.henn@weed-online.org, www.weed-online.org

1) Agriculture and food policy centre (Texas University) (2008): The effects of ethanol on Texas food and feed: "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."

2) Aliber, Robert Z. (University of Chicago) (2008): Oil Rally Topped Dot-Com Craze in Speculators' Mania (Bloomberg article): "You've got speculation in a lot of commodities and that seems to be driving up the price. (…) Movements are dominated by momentum players who predict price changes from Wednesday to Friday on the basis of the price change from Monday to Wednesday."

3) Baffes, John (The World Bank) / Haniotis, Tassos (European Commission) (2010): Placing the 2006/08 Commodities Boom into Perspective. World Bank Research Working Paper 5371: "We conjecture that index fund activity (one type of "speculative" activity among the many that the literature refers to) played a key role during the 2008 price spike. Biofuels played some role too, but much less than initially thought. And we find no evidence that alleged stronger demand by emerging economies had any effect on world prices."

4) Bass, Hans H. (Univ. Bremen) (2011): Finanzmärkte als Hungerverursacher? Studie für Welthungerhilfe e.V.: „Das Engagement der Kapitalanleger auf den Getreidemärkten führte nach unseren Berechnungen in den Jahren 2007 bis 2009 im Jahresdurchschnitt zu einem Spielraum für Preisniveauerhöhungen von bis zu 15 Prozent."

5) Basu, Parantap / Gavin, William T. (Federal Reserve Bank of St. Loius) (2011): What explains the Growth in Commodity Derivatives?: "Banks argue that they need to use commodity derivatives to help customers manage risks. This may be true, but the recent experience in commodity futures did not reduce risks but exacerbated them just at the wrong time."

6) Berg, Ann (former CME trader and director, now FAO advisor) (2010): Agricultural Futures: Strengthening market signals for global price discover. Paper to the FAO's Committee on Commodity Problems Extraordinary meeting: "…over 150 years of futures trading history demonstrates that position limits are necessary in commodities of finite supply to curb excessive speculation and hoarding."

7) Berg, Ann (former CME trader and director, now FAO advisor) (2011): The rise of commodity speculation: from villainous to venerable: "Structural changes in global commodity markets have greatly contributed to rising prices and increased price variability. These fundamental trends toward higher prices have been a key lure for increased speculative activity on the major futures exchanges."

8) Branson, Richard (Virgin Group), Masters, Mike (Masters Capital) and Frenk, David (Better Markets Inc.) (2010): Letter to the Economist: "There is strong evidence that speculation exacerbated the last oil and food bubble. Speculation will fuel the next one too, unless meaningful speculative position limits are established."

9) Büyüksahin, Bahattin (IEA) / Robe, Michel A (American University) (2010): Speculators, Commodities and Cross-Market Linkages: "We then show that the correlations between the returns on investable commodity and equity indices increase amid greater participation by speculators generally and hedge funds especially."

10) Chevalier, Jean-Marie (ed.) (Ministère de l'Economie, de l'Industrie et de l'Emploi) (2010): Rapport du groupe de travail sur la volatilité des prix du pétrole: "On peut raisonnablement avancer en conclusion que le jeu de certains acteurs financiers a pu amplifier les mouvements à la hausse ou à la baisse des cours, augmentant la volatilité naturelle des prix du pétrole…"

11) Deutsche Bank Research (2009): Do speculators drive crude oil prices? Dispersion in beliefs as price determinants. Research Notes 32: "(..) a regulatory measure could be aimed at preventing the non-commercials in the futures market from displaying too wide a dispersion in beliefs, measured via the difference between long and short contracts. Constraining this difference by temporarily restrict trading or higher trading costs could possibly prevent a soaring crude oil price and elevated price volatility."

12) Dicker, Dan (former NYMEX trader) (2011): "I wrote Oil's Endless Bid to show how the treatment of oil as a stock by investors, far more than any number of globally significant competing factors, causes the dramatically higher prices that we've seen in recent years. I've witnessed seismic changes to the oil markets during my many years as a trader, and it's the everyday consumer who shoulders the burden."

13) Du, Xiaodong / Yu, Cindy L. / Hayes, Dermott J. (Iowa State University) (2009) , Speculation and Volatility Spillover in the Crude Oil and Agricultural Commodity Markets: A Bayesian Analysis. Working Paper No. 09-WP 491, 2009: "Speculation, scalping, and petroleum inventories are found to be important in explaining oil price variation."

14) Eckaus, R.S. (MIT) (2008): The Oil Price Really Is A Speculative Bubble: "Since there is no reason based on current and expected supply and demand that justifies the current price of oil, what is left? The oil price is a speculative bubble."

15) Einloth, James T. (FDIC) (2009): Speculation and Recent Volatility in the Price of Oil: "The paper finds the evidence inconsistent with speculation having played a major role in the rise of price to $100 per barrel in March 2008. However, the evidence suggests that speculation did play a role in its subsequent rise to $140."

16) El-Badri, Abdalla (OPEC secretary-general) (2009): OPEC Calls for Curbing Oil Speculation, Blames Funds (Bloomberg article): "The speculators are still there. (…)

Before, they were playing a supply shortage, now they are playing too much supply. They are delaying a recovery in prices."

17) Evans, Tim (Citigroup energy analyst) (2008): The Official Demise of the Oil Bubble (Wall Street Article): "This is a market that is basically returning to the price level of a year ago which it arguably should never have left. (…) We pumped up a big bubble, expanded it to an impressive dimension, and now it is popped and we have bubble gum in our hair."

18) Frenk, David (Better Markets Inc.) (2010): Review of Irwin and Sanders 2010 OECD report: 1) The statistical methods applied are completely inappropriate for the data used. 2) The study is contradicted by the findings of other studies that apply more appropriate statistical methods to the same data. 3) The overall analysis is superficial and easily refuted by looking at some basic facts."

19) Gheit, Fadel / Katzenberg, Daniel (2008) (Oppenheimer & Co.): Surviving lower oil prices: "The investment banks that hyped oil prices using voodoo economics have suddenly reversed their position and now expect much lower oil prices. They helped cause excessive speculation, create the oil bubble, and contributed to the global financial crisis. They have changed their tune in exchange for a government bailout, not because of changes in market fundamentals."

20) Gilbert, Christopher (Trento University) (2010): How to understand high food prices: "By investing across the entire range of commodity futures, index-based investors appear to have inflated food commodity prices."

21) Gilbert, Christopher (Trento University) (2010): Speculative Influences on Commodity Futures Prices: "The results ... indicate that index-based investment in commodity futures may have been responsible for a significant and bubble-like increase of energy and non-ferrous metals prices, although the estimated impact on agricultural prices is smaller."

22) Ghosh, Jayati (Jawaharlal Nehru University) (2010): Commodity speculation and the food crisis: "Thus international commodity markets increasingly began to develop many of the features of financial markets, in that they became prone to information asymmetries and associated tendencies to be led by a small number of large players. Far from being 'efficient markets' in the sense hoped for by mainstream theory, they allowed for inherently 'wrong' signalling devices to become very effective in determining and manipulating market behaviour. The result was the excessive price volatility that has been displayed by important commodities over the recent period – not only the food grains and crops mentioned here, but also minerals and oil."

23) Goldman Sachs (2011): Global Energy Weekly March 2011: "We estimate that each million barrels of net speculative length tends to add 8-10 cents to the price of a barrel of oil."

24) Greenberger, Michael (University of Maryland) (2010): The Relationship of Unregulated Excessive Speculation to Oil Market Price Volatility. Paper for the International Energy Forum: "When speculators make up too large a share of the futures market, they have the potential to upset the healthy tension between consumers and producers and resulting adherence of prices to market fundamentals. The resulting volatility makes it more difficult for commercial consumers and producers to successfully hedge risk, because prices do not reflect market fundamentals, and so they abandon the futures market and risk shifting—thereby further destabilizing the price discovery influence of these markets."

25) Hamilton, James (Department of Economics, UC San Diego) (2009) Causes and Consequences of the Oil Shock of 2007-08: „With hindsight, it is hard to deny that the price rose too high in July 2008, and that this miscalculation was influenced in part by the flow of investment dollars into commodity futures contracts."

26) Hernandez, Manuel / Torero, Maximo (IFPRI) (2010): Examining the Dynamic Relation between Spot and Future Prices of Agricultural Commodities. In: FAO Commodity Market Review 2009-2010: "The causality tests performed indicate that the futures markets analyzed generally dominate the spot markets. Price changes in futures markets lead price changes in spot markets more often than the reverse, especially when examining returns."

27) House of Commons Select Committee on Science & Technology of the United Kingdom (2011): "While the debate on the relative importance of the multiple factors influencing commodities prices is still open, it is clear that price movements across different commodity markets have become more closely related and that commodities markets have become more closely linked to financial markets."

28) Hunt, Simon (Simon Hunt Strategic Services) (2011): "Slowly, the truth on whether the global copper market is really tight is coming out. It illustrates just how large an involvement the financial institutions have become to the copper industry. It shows, too, that by throwing money at a market, prices can be driven higher. In the process, however, the delicate balance between supply and the industry's requirements for a basic material used to produce a range of essential products is destroyed. In short, copper is becoming a financial asset in place of its historic role as an industrial metal."

29) Inamura, Yasunari / Kimata, Tomonori / Takeshi, Kimura / Muto, Takashi (Bank of Japan) (2011): Recent Surge in Global Commodity Prices – Impact of financialization of commodities and globally accommodative monetary conditions. Bank of Japan Review March 2011: „While the strong increase in commodity prices has been driven by global economic growth propelled by emerging economies, speculative investment flows into commodity markets have amplified the intensity of the price surge. (…) global commodity markets have become more sensitive to portfolio rebalancing by financial investors, which has made commodity markets more correlated with other asset markets, including major equity markets."

30) Institute for Agriculture and Trade Policy (2009): Betting Against Food Security: Futures Market Speculation. Trade and Global Governance Programme Paper: "A large share of the commodity exchange price volatility resides not so much in supply and demand of the commodity traded as in the fund formulas for buying and selling the bundled futures contracts."

31) International Monetary Fund (2008): Regional Economic Outlook: Middle East and Central Asia: "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 looked for a hedge in oil futures (and gold)."

32) Jalali-Naini, Ali bin Ibrahim (Economic Research Forum Cairo) (2009): The Impact of Financial Markets on the Price of Oil and Volatility: Developments since 2007: "Causality tests indicate that changes in speculative positions – resulting from the entry and exit of non-commercials – can generate price volatility. When used in

conjunction with a number of other variables, including commercial stocks and product prices to explain variations in the price of oil, the speculative length in the futures market has a positive and significant coefficient."

33) Jickling, Mark / Austin, Andrew D. (Congressional Research Service) (2011): Hedge Funds Speculation and Oil Prices: "A statistically significant correlation is evident between changes in positions held by "money managers" (a category of speculators that includes hedge funds) and the price of oil. In other words, during weeks when money managers have been net buyers of oil futures and options (or increased the size of their long positions), the price has tended to rise. Price falls, conversely, have tended to coincide with reductions in money managers' long positions."

34) Jouyet, Jean-Pierre (President de l'Autorite des marches financiers) / de Boissieu, Christian (President du Conseil d'analyse economique) / Guillon, Serge (Controleur general economique et financier) (2010) : Rapport d'étape – Prévenir et gérer l'instabilité des marchés agricoles: **"**Les marchés agricoles sont confrontes a une mondialisation et a une financiarisation qui influencent leur fonctionnement. La volatilité naturelles des prix qui caractérise ces marches est amplifiée par de nouveaux facteurs et notamment par une speculation excessive.**"**

35) Kaufmann, Robert (Boston University)(2010): The role of market fundamentals and speculation in recent price changes for crude oil: "I hypothesize that the price spike and collapse of 2007–2008 are driven by both changes in both market fundamentals and speculative pressures."

36) Kemp, John (Reuters) (2008): Crisis remakes the commodity business: "It does not alter the fact most of the upsurge in futures and options turnover on commodity exchanges and in OTC markets over the last five years has come from investment-related rather than trade-related business."

37) Khan, Mohsin S. (Petersen Institute) (2009): The 2008 Oil Price "Bubble": "While market fundamentals obviously played a role in the general run-up in the oil prices from 2003 on, it is fair to conclude by looking at a variety of indicators that speculation drove an oil price bubble in the first half of 2008. Absent speculative activities, the oil price would probably have been in the $80 to $90 a barrel range."

38) Korzenik, Jeffrey (CIO, Caturano Wealth Management) (2009): Fundamental Misconceptions in the Speculation Debate: "'Overspeculation' or 'excessive speculation' exists when speculators become primary drivers of price. When this happens, commodities are no longer efficiently allocated – if prices are driven below the point where commercial supply and demand meet, shortages result."

39) Krugman, Paul (Columbia University) (2009): Oil speculation: "Last year I was sceptical about claims that speculation was central to the price rise, because what I considered the essential signature of a speculative price rise ... just wasn't showing. This time, however, oil inventories are bulging, with huge amounts held in offshore tankers as well as in conventional storage. So this time there's no question: speculation has been driving prices up."

40) Lagi, Marco / Bar-Yam, Yavni / Bertrand, Karla Z. / Bar-Yam, Yaneer (New England Complex Systems Insitute, Cambridge MA) (2011): The Food Crises: "The two sharp peaks in 2007/2008 and 2010/2011are specifically due to investor speculation, while an underlying upward trend is due to increasing demand from ethanol conversion. The model includes investor trend following as well as shifting between commodities, equities and bonds to take advantage of increased expected returns. Claims that speculators cannot influence grain prices are shown to be invalid by direct analysis of price setting practices of granaries."

41) Lines, Thomas (commodity consultant) (2010): Speculation in food commodity markets: "These are the main problems that are caused by long-only index trading: It pushes prices up, irrespective of the market situation. It disrupts the rolling over of futures contracts when the nearest month expires."

42) Lombardi, Marco J. / Ine Van Robays (ECB) (2011): Do financial investors destablize the oil price?: "We find that financial investors in the futures market can destabilize oil spot prices, although only in the short run. Moreover, financial activity appears to have exacerbated the volatility in the oil market over the past decade, particularly in 2007-2008. However, shocks to oil demand and supply. remain the main drivers of oil price swings."

43) Luciani, Giacomo (Gulf Research Center Foundation) (2009): From Price Taker to Price Maker? Saudi Arabia and the World Oil Market: "The inflow of liquidity, the increasing role played by the futures market (paper barrels) over the spot (wet barrels), and the proliferation of derivatives which encourage betting on price changes rather than on the absolute level of prices all contribute to worsen the situation, amplifying price oscillations."

44) Masters, Michael W. (Masters Capital) (2009): Testimony before the Commodities Futures Trading Commission: "In summary, passive investors compete with physical commodity consumers and make it much more difficult for them to hedge. (…) They provide no benefits whatsoever to the markets because they consume liquidity. And most importantly, they drive up commodity prices, which hurts everybody on the planet."

45) Masters, Michael W. (Masters Capital) / White, Adam K. (White Knight Research) (2008): How institutional investors are driving up food and energy prices: "Unfortunately, this price discovery function of the commodities futures markets is breaking down. With the advent of financial futures, the important distinctions between commodities futures and financial futures were lost to regulators. Excessive speculation gradually became synonymous with manipulation, and speculative position limits were raised or effectively eliminated because they were not deemed necessary to prevent manipulation."

46) Mayer, Jörg (2009): The Growing Interdependence between Financial and Commodity Markets. UNCTAD Discussion Paper 195: "The increasing importance of financial investment in commodity trading appears to have caused commodity futures exchanges to function in such a way that prices may deviate, at least in the short run, quite far from levels that would reliably reflect fundamental supply and demand factors. Financial investment weakens the traditional mechanisms that would prevent prices from moving away from levels determined by fundamental supply and demand factors – efficient absorption of information and physical adjustment of markets. This weakening increases the proneness of commodity prices to overshooting and heightens the risk of speculative bubbles occurring."

47) Medlock, Kenneth B. / Jaffe, Amy M. (Rice University) (2009): Who is in the Oil Futures Market and How Has It Changed?: "…trading strategies of some financial players in oil appears to be influencing the correlation between the value of the U.S. dollar and the price of oil. (…) We also find that the correlation between movements in oil prices

and the value of the dollar against the trade-weighted index of the currencies of foreign countries has increased to 0.82 (a significant measure) for the period between 2001 and the present day, compared to a previously insignificant correlation of only 0.08 between 1986 and 2000."

48) Miller, Marcus (University of Warwick) (2011) Interview with Al-Jazeera:"A disturbing amount of price increases, I fear, is being driven by speculative activity. Bets [on future price rises or declines] can become self-fulfilling if you are big enough to affect the market."

49) Morse, E. (former Lehman Brothers chief energy economist) (2008): Oil Dotcom, Research Note: "Fundamental changes cannot explain sudden, severe price or curve movements. (…) Our conclusion from this study is that we are seeing the classic ingredients of an asset bubble."

50) Mou, Yiqun (Columbia University) (2010): Limits to Arbitrage and Commodity Index Investment: Frontrunning the Goldman Roll: "This paper focuses on the unique rolling activity of commodity index investors in the commodity futures markets and shows that the price impact due to this rolling activity is both statistically and economically significant."

51) Newell, J. (Probability Analytics Research) (2008): Commodity Speculation's "Smoking Gun": "Real market forces in these diverse markets are largely independent of one another, and therefore price changes should be essentially uncorrelated. This was clearly true historically; from 1984 through 1999 average correlation between all commodities was only 7%. In the last 12 months this average rose to 64%. Correlation with the GSCI was 23% historically, and rose to 76% in the last year. Index speculation has swamped real market forces."

52) Nissanke, Machiko (University of London) (2010): Commodity Markets and Excess Volatility. Sources and Strategies to Reduce Adverse Development Impacts. Paper presented at the CFC Conference in Brussels December 2010: "It can be argued that asset prices, including commodity prices, traded globally are largely influenced by market liquidity cycles in global finance. From this particular perspective, we can have a plausible narrative of the recent episode of commodity pricey cycle. (…) Clearly, trading activities in world commodity markets have undergone some fundamental change, as the links between activities in commodity and financial markets has further intensified."

53) Ortiz, Isabel / Chai, Jingqing / Cummins, Matthew (2011): Escalating Food Prices – the threat to poor households and policies to safeguard a Recovery for All. Unicef Social and Economic working paper. „Such activities [trading futures contracts for speculative gains] have contributed to excessive fluctuations in food commodity futures prices and distorted signals for expected prices. By doing to, speculation impedes practical hedging strategies and imposes significant unanticipated costs and undue burden on food farmers, processors and distributors, potentially contributing to unwarranted changes in local food costs"

54) Petzel, Todd E. (Offit Capital Advisors)(2009): Testimony before the CFTC: „I believe these investors in aggregate have had a material impact on price levels, price spreads and the level of inventories being held."

55) Phillips, Peter C.B. (Yale University) / Yu, Jun (Singapore University) (2010): Dating the Timeline of Financial Bubbles During the Subprime Crisis: "a bubble first emerged in the equity market during mid-1995 lasting to the end of 2000, followed by a bubble in the real estate market between September 2000 and June 2007 and in the mortgage market between August 2005 and July 2007. After the subprime crisis erupted, the phenomenon migrated selectively into the commodity market and the foreign exchange market, creating bubbles which subsequently burst at the end of 2008, just as the effects on the real economy and economic growth became manifest."

56) Pollin, Robert / Heintz, James (University of Massachusetts)(2011): How Wall Street Speculation is Driving Up Gasoline Prices Today: "A major additional factor is the rapid growth in large-scale speculative trading around oil prices through the oil commodities futures market. Indeed, we estimate that, without the influence of large-scale speculative trading on oil in the commodities futures market, the average price of gasoline at the pump in May would have been $3.13 rather than $3.96."

57) Ray, Darryl E. / Schaffer, Harwood D. (University of Tennessee) (2010): Index funds and the 2006-2008 run-up in agricultural commodity prices: "the fundamentals and/or expectations in the energy and mineral markets rein supreme—grains are along for the ride with little-to-no regard to what is happening in the grain sector. Worries during the period about the availability of oil drove up the price of crude, which caused index funds to rebalance their portfolios by making additional purchases of the other commodities to maintain the specified balance. Since the resulting price increases in agricultural commodities had virtually nothing to do with their market conditions, the record level of activity in the futures market by index funds would seem to make index funds a logical source of possible price overshooting."

58) Robles, Miguel / Torero, Maximo / Braun, Joachim von (IFPRI) (2009): When speculation matters. IFPRI Issue Brief 57: „Changes in supply and demand fundamentals cannot fully explain the recent drastic increase in food prices. Rising expectations, speculation, hoarding, and hysteria also played a role in the increasing level and volatility of food prices."

59) Roubini, Nouriel (New York University) (2009): The risk of a double-dip recession is rising (Financial Times Article): "Another reason to fear a double-dip recession is that oil, energy and food prices are now rising faster than economic fundamentals warrant, and could be driven higher by excessive liquidity chasing assets and by speculative demand."

60) Sachs, Jeffrey D. (Columbia University) (2008): Corn Futures Spark Riots as Speculators Take Trading to Limit (Bloomberg article): "The fact that prices soared and then they came down so much really does suggest that there was a speculative element to it."

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