

Comment by Markus Henn, WEED
on Gerdien W. Meijerink's and Karl Shutes' (LEI – Wageningen University) work on commodity prices and the role of speculation

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This comment relates to Ms. Meijerink's and Mr. Shutes' "Overview of present state of affairs regarding research into speculation and food prices. Prepublication of literature study" (not downloadable anymore), their own study (together with Siemen van Berkum and Gloria Solano) "[Price and Prejudice: Why are food prices so high?](#)"¹, and to their criticism of my [evidence list](#).

Surely, Meijerink/Shutes provide a lot of insightful reasoning and figures which any serious discussion of the issue needs to take into account. However, their own prejudice seems to be that commodity prices must be driven by fundamentals and that speculation cannot be blamed even though they can also not provide any "smoking gun" or clear evidence for their position as they require it from the critics of speculation. To the contrary, many of the papers they cite themselves give good reason to assume certain influence. Of the 23 (quantitative and non-quantitative) studies they review, at least 11 utter a critical view, with some more at least leaving space for critical reasoning.

Both the study and the review make a selective use of studies (due to such use I began to set up my one-sided list). In their list, **many important studies are left out**, particularly Tang/Xiong 2011 and US Senate 2009 – though Meijerink/Shutes state to include studies that "deal specifically with index funds and other speculation", "that have been the focus of much publicity", and that are "quantitative" – all of which applies to these studies. In their study chapter on futures markets, Meijerink/Shutes do not seriously discuss the studies that provide evidence for negative and non-fundamental elements in prices, not even the ones from their review with the exception of Cooke/Robles 2009. They pick up Gilbert (2010); however they selectively quote the study with Gilbert's guess that index funds might have channelled information. In fact, Gilbert also says that "By investing across the entire range of commodity futures, index-based investors appear to have inflated food commodity prices", and speaks of "bubble-like increase". Baffes/Haniotis, interestingly, are quoted later on in assessing the biofuels impact but not with its main finding that index funds were a key factor in the 2007/08 price spike. The selective bias is also given regarding oil: although Meijerink/Shutes state that literature dealing with the effect of financial speculation on oil prices was not part of the review, they quote two studies which only deal with oil and oil/metals (Harris/Buyuksahin 2009 and Lescaoux 2009), supporting their view. In this respect their list is particularly biased as important studies such as Medlock/Jaffe 2009 or Singleton 2011, to name only two, are missing. Another example of a **misleading selection technique** is that Meijerink/Shutes extensively quote shorter papers and a blog entry which criticise speculation. However, such papers by their very nature cannot (and do not want to) compete with scientific studies. To use the same benchmark for these papers as for the studies is a flawed methodology. It would be easy to do the same exercise for pro-speculation papers and articles which could then also be reviewed as scientific unsound.

The general line of criticism by Meijerink/Shutes against any "unpopular" non-quantitative study seems to be that "**scientific**" **could only be a study that uses quantitative evidence**. This is most clear when, in their study conclusion, they only relate to the quantitative studies. It is also clear in the review section on the non-quantitative studies when the criticism always goes: there is no data. While quantitative studies might have their advantages and merits, it is just unscientific to believe that (almost) only figures count in economics. Of course, Meijerink/Shutes also apply non-quantitative reasoning, especially in their own study, but then their insistence on figures towards other studies is at least opportunistic. The respective discussion about the

¹ Update: This list has later been included into another study released in March 2012. All comments only relate the old list.

quality and inferiority of studies is legitimate but this could be applied to both sides. As Meijerink/Shutes admit themselves, there are different problems with the quantitative tests (identification, Granger causality limitations). Their criticism is also disappointing as their own study does not provide very much own quantitative analysis on the speculation issue apart from two small graphs (of which one has a time-scale which is not understandable). It is also obvious that Meijerink/Shutes **tend to criticize the methodology much more in case of criticism of speculation**. Positive assessments are addressed to studies which defend speculation such as the agnostic Headey/Fan 2010 study where the absence of own quantitative evidence is not remarked as a flaw, or Sanders/Irwin 2010 where the Granger causality is not at all questioned even though Meijerink/Shutes do this in their own study. Additionally, they have forgotten their own concerns on Granger test when they debunk Frenk's 2011 criticism of Irwin/Sanders 2010.

Finally, they also call for a **burden of (quantitative) proof that can hardly be satisfied**. In their conclusion of the review they say that the quantitative literature does find “either no effect, a very small effect (e.g. an effect lasting a number of hours or days) or a partial effect (only for some products over a period of time and only explaining part of the price inflation)”. This means that they more or less demand a study proofing that for all commodities the whole price increase over a long period of time can be undoubtedly attributed to index funds or speculation. In this respect it is interesting that they do not discuss Tang/Xiong 2011 which at least aims at this. But the more serious problem is that they call for evidence which does also not exist for any of the other reasons provided (stocks, supply, demand, biofuels, exchange rate). For example, Prof. Gilbert in his latest [text](#) on commodity agreements says that “stock differences explain less than 40% of price differences”.

In their criticism of my list, Meijerink/Shutes say: “A number of source (sic!) that Henn cites actually concludes the opposite. Many sources are not scientific, but are statements based on an opinion, not evidence. In addition, a number of quantitative (scientific) studies are of inferior quality.” Having looked at the list again after this, I cannot really see **that any of the quotes would support the opposite of the argument** that financial speculation has an influence on prices which is not justified by fundamentals (what I call a negative influence). Admittedly, after having reviewed the list following their criticism, I took out a quote from a Saudi minister (due to conflict of interest, not because of lack of evidence), and an IFPRI study that was about the price-leadership of futures markets. However, given the reasoning of Meijerink/Shutes in their study that futures markets do not lead spot markets, the IFPRI study actually should be part of the “evidence chain”. While Meijerink/Shutes have criticised me of **wrongly quoting** (which I refuse unless I got any detailed example) they are doing this in their own review. When assessing Caballero, Farhi, Gourinchas (2008), they leave out that these speak of a “commodity bubble” and thus rather support criticism of speculative influences. The same is true for Gilbert, as demonstrated above. My list does also **not pretend to include academic studies only** as the title clearly says; however the number of quotes from studies or at least from economists is large. I also see no reason why a quote from a scientist or a study by a financial analyst or trader is not evidence in the broad sense this word has – evidence is not necessarily proof even though it can be such.

To **sum it up**, the work by Meijerink/Shutes is not as scientific as they themselves call for. Selective use of literature, misinterpretations, conclusions not justified by the sources, and lack of (own) quantitative evidence are amongst the shortcomings their work has. Below are some **detailed comments** on the studies reviewed (row 3), and a counting of studies and papers that contain (more or less) evidence for the argument that financial (index) speculation has a negative (i.e. price distorting) effect (row 4):

No	Study	Comment Meijerink/Shutes	Comment Henn	Evidence
1	Ai, Chatrath, Song (2006): On the Comovement of commodity prices	Using inventory & harvest information, the majority of the price movements of the commodities considered are explained. There is little room for other factors in any systematic manner.	This is a study from 2006 which does not take into account the two recent food price spikes.	
2	Aulerich, Irwin, Garcia (2010): The Price of index Funds in	Using a modification of the Granger causality approaches common elsewhere in the literature, the paper analyses the price impact of long-only index	This study does not find only evidence that speculation has no effect (see emphasis	(X)

	Commodity Futures Markets	funds in commodity futures markets for the January 2004 through July 2008 period. (...) It finds very limited evidence to support the argument that index fund trading affects the direction and magnitude of commodity futures returns, regardless of how positions are measured. Some evidence emerges that volatility has been influenced by the presence of index traders in several markets, but only using one of the measures of index funds positions changes. These effects appear to be small except in the most illiquid markets as one would expect. (emphasis added)	added left).	
3	Bryant, Bessler, Haigh (2011): Causality in futures markets	The hypothesis that hedgers pay a premium to speculators is strongly rejected. Hypotheses that trader types are important in determining price volatility is (sic!) also rejected.		
4	Caballero, Farhi, Gourinchas (2008): Financial Crash, Commodity Prices and Global Imbalances	The problems with the commodity markets come from the macro-economy and the persistence of the financial crisis has caused problems that generated the commodity situation.	This study explicitly speaks of a “ commodity bubble ”, I quote from the conclusion: “Global asset scarcity led to large capital flows toward the U.S. and to the creation of asset bubbles that eventually crashed. The crash in the real estate market was particularly complex from the point of view of asset shortages since it compromised the whole financial sector, and by so doing, closed many of the alternative saving vehicles. Thus, in its first phase, the crisis exacerbated the shortage of assets in the world economy, which triggered a partial recreation of the bubble in commodities and oil markets in particular. The latter led to an increase in petrodollars seeking financial assets in the U.S. Thus, rather than the typical destabilizing role played by capital outflows during financial crises, petrodollar flows became a source of stability for the U.S. The second phase of the crisis is more conventional and began to emerge toward the end of the summer of 2008. It became apparent then that the financial crisis would permeate the real economy and sharply slow down global growth. This slowdown worked to reverse the tight commodity market conditions required for a bubble to develop, ultimately destroying the commodity bubble. ” (emphasis added)	X
5	Chinn, Coibion (2010): The Predictive content of Commodity Futures	The biases in futures markets is (sic!) seen to be the result of light trading in the markets. As the volume of trading increased, so does (sic!) the level of efficiency and the biases in prices fall. Futures are at least as good an estimate of spot prices as other models.		
6	Cooke, Robles (2009): Recent Food Prices Movements	The paper aims to validate several explanations for prices, ranging from demand-driven forces to supply shocks, by using time series econometrics and data at monthly frequency. They find that our empirical analysis mainly provides evidence that financial activity in futures markets and proxies for speculation can help explain the observed change in food prices. However, the results should be viewed critically due to the flaws in the methodology.		X
7	Du, Yu, Hayes (2011): Speculation and volatility spillover in the crude oil and agricultural commodity markets	Oil price rises have triggered increases in a number of cereal markets, most probably due to the increased connection through biofuel demand.		
8	Gilbert (2009): Speculative Influences on Commodity Futures Prices	Some evidence of bubble type occurrences. The impact in the metals market is around 5-10%. The effect of inde (sic!) investors is to amplify the fundamental driven price movements for short periods.		X

9	Harris, Buyuksahin: (2009): The Role of Speculators in the Crude Oil Futures Market	Evidence does not support the hypothesis that funds' position changes precede price changes; rather the opposite is true.	The correct quote is that they found " little evidence that hedge funds and other non-commercial (speculator) position changes Granger-cause price changes;—the results instead suggest that price changes do precede their position changes." This is not as strong as Meijerink / Hughes state. Accordingly, Buyuksahin (with Robe) has also written a study that is even more critical.	
10	Irwin, Sanders, Merrin (2009): The Role of Speculation i (sic!) the Recent Commodity Price Boom	This paper explores four main points. First, the arguments of bubble proponents are conceptually flawed and reflect fundamental and basic misunderstandings of how commodity futures markets actually work. Second, a number of facts about the situation in commodity markets are inconsistent with the existence of a substantial bubble in commodity prices. Third, available statistical evidence does not indicate that positions for any group in commodity futures markets, including long- only index funds, consistently lead futures price changes. Fourth, there is a historical pattern of attacks upon speculation during periods of extreme price volatility.		
11	Irwin, Sanders (2010): The Impact of Index and Swap Funds on Commodity Futures Markets: Preliminary Results. Irwin (2011): Index funds, Financialization and Commodity Futures Markets		The rebuttal of the Frenk (Better Markets) review is more polemic than the review itself. Stating that Frenk would not know about the difference between correlation and causation is ridiculous. Also the methodological critique is at least to take serious (Meijerink/Shutes themselves do it!). – To point to the fact that Frenk is aligned to Masters is also a weak argument. Following this logic, also Irwin/Sanders would not be allowed to defend themselves when they have been criticised by Masters (or contended by his arguments).	
12	Lescaroux (2009): On the excess co-movement of commodity prices – A note about the role of fundamental factors in short-run dynamics.	Price changes in commodities are mostly explained by inventories and the supply and demand factors. Other influences are rather limited.	This study is "focusing on oil and six metal prices". It also only says that the co-movements can be explained "to a large extent" (or " mostly ", as Meijerink/Shutes say) by fundamentals. This does not fully exclude other factors.	
13	Nazlioglu (2011): World oil and agricultural commodity prices: Evidence form nonlinear causality		Unfortunately, the conclusion is covered by a graph; however the study mainly deals with the relation of oil and food and not directly with speculation (or the question if oil and food might be both affected by speculation).	
14	Sanders, Irwin (2011): New Evidence on the Impact of Index Funds in U.S. Grain Futures Markets	(...), the paper analyses the price impact of long-only index funds in commodity futures markets for the January 2004 through July 2008 period. (...) It finds very limited evidence to support the argument that index fund trading affects the direction and magnitude of commodity futures returns, regardless of how positions are measured. Some evidence emerges that volatility has been influenced by the presence of index traders in several markets, but only using one of the measures of index funds positions changes. These effects appear to be small except in the most illiquid markets as one would expect. (emphasis added)	This assessment is exactly the same as for Aulerich, Irwin, Garcia (2010) (see above). Either this is a mistake, or the studies basically make the same analysis (and thus should not be counted separately).	
15	Sanders, Irwin, Merrin (2008): The Adequacy of Speculation in Agricultural Futures Markets	Data analysis seems to support the hypothesis that the traders' (sic!) are following rather than creating or generating trends; specifically non-commercial and fund positions contain little useful information about returns.		
16	Sariannidis (2011): Stock, Energy and Currency Effects on the Asymmetric	Impact on the wheat market comes from the equity index via market integration and confidence effects and from energy prices as they are important inputs and as the impact of encouraging bio-fuels usage.	This study seems to support the argument that speculation (speculative money) influences the commodity market. I quote from the abstract: "The results suggest that the stock market, and particularly the S&P	X

	Wheat Market		500, positively influence the wheat market , a fact that is attributed to the wealth effect and the modern portfolio management in the context of international markets' integration. (...) Furthermore, the results show that the shocks of the U.S. dollar/yen exchange rate are transmitted to the wheat market. " (emphasis added)	
17	Silvennoinen, Thorp (2010): Financialization, crisis and commodity correlation dynamics	Support for market integration between financial and commodity markets due to the different approach used. This has developed over the period until 2009. The impact is related to levels of stock market volatility.		X
18	Timmer (2009): Did speculation affect world rice prices?	The paper concludes that in the long run the commodity markets for rice, wheat and corn are influenced by basic supply and demand factors. These commodity markets are connected by financial markets in the very short run (days). It concludes that in the short run, some of the run-up in wheat and corn prices was almost certainly caused by financial speculator, although the evidence provided by the paper is rather inadequate and based on the proxy of the exchange rates & oil prices	The criticism of the proxies seems rather inappropriate, at least in its general way. All studies use similar proxies. Rice is not the main issue anyways as there no elaborated futures markets as for wheat and corn.	X
19	Robles, Torero, von Braun (2009): When speculation matters Von Braun, Torero (2009): Implementing Physical and Virtual Food Reserves to Protect the Poor and Prevent Market Failure	The study (sic!) ... have been quite influential. (...) The study was criticised by Wright (2009) and Aulerich et al (2010) for the fact that the analysis by Robles et al actually did not prove the claim that von Braun was making.		X
20	Baffes, Haniotis (2010): Placing the 2006/08 commodity price boom into perspective	The article concludes that activities by index funds can "induce higher price variability in the sense of exacerbating the length and the amplitude of price cycles, as they most likely did during the 'perfect storm' of 2007/08." Their conclusion is based on a very summary discussion of the subject, without any evidence or references provided.	It is ridiculous if Meijerink/Shutes say that Baffes and Haniotis have their conclusion "without any evidence or references provided". There are many references in these texts, for speculation and biofuels they are surely better than Headey/Fan (2010) which Meijerink/Shutes obviously do not criticise for a similar omission.	X
21	Headey, Fan (2008): Anatomy of a crisis: the causes and consequences of surging food prices Headey, Fan (2010): Reflections on the Global Food Crisis: how did it happen? How has it hurt? And how can we prevent the next one? Heady, Malaiyandi, Fan (2009): Navigating the perfect storm: reflections on the food, energy, and financial crises	Headey et al (2009) state that "Our view is ultimately agnostic, because we believe it is impossible to discern causality in the context of futures markets, even from time series econometrics, as futures-market variables represent expectations of the future". However, they also stat the "we find it unlikely that [future market activities] were a driving force, if only because we have substantial confidence in several of the more tangible explanations of the crisis (...)"	Interestingly, this non- or even anti-econometric approach is not at all criticised by Meijerink/Shutes, in stark contrast to Baffes/Haniotis, 2010, even though the latter, according to my assessment, have a better review of the literature, at least than Headey/Fan (2010). I have commented on Heady, Fan (2010) more extensively before, just some basic criticism: 1. My impression is that the two authors come from the agricultural side and have not a very deep understanding and knowledge of futures markets. 2. There are not very many references on the speculation issue. 3. It is then also very interesting to re-read the summary: "Despite this complexity, the assessment presented here suggests that some explanations still hold up much better than others. This set of interconnected factors includes rising energy prices, the depreciation of the U.S. dollar, low interest rates, and investment portfolio adjustments in favor of commodities. " (emphasis added) 4. On biofuels, I find that Headey/Fan's assessment of a strong influence is also not really comprehensive	(X)

22	Naylor, Falcon (2010): Food Security in an Era of Economic Volatility	Naylor & Falcon (2010) delineate the nature and causes of recent food price volatility. The paper claims that "the increased activity [of commodity index trading] affected price variability and/or price trends seems doubtful. However, they (sic!) authors do not provide a substantive discussion underpinned by data nor do they cite many scientific sources.		X
23	UNCTAD (2009): Trade and Development Report. Chapter II: the financialization of commodity markets	This chapter (...) aims at enhancing understanding of how the speculative activities of financial investors that are active in both financial and commodity markets can influence price movements to higher or lower levels than those dictated by market fundamentals. Although it provides a good overview and thorough discussion of various mechanisms by which possibly index trading could lead to higher prices, it makes several assumptions that are not backed by data or scientific evidence.		X
24	De Schutter (2010): Food Commodities Speculation and food price crises: regulation to reduce the risks of price volatility.	Claims that a significant portion of the increases in price and volatility of essential food commodities can only be explained by the emergence of a speculative bubble. However, the evidence provided for this is very scanty.		X
25	IATP (2008): Commodities Market Speculation: The Risk to Food Security and Agriculture.	This collection of papers cannot be seen as a scientific report. The premise of the report is that speculation led to higher food prices and does not provide any substantial underpinnings to support this claim.		X
26	Jones (2010): The great hunger lottery – how banking speculation causes food crises.	Conclusion: Jones (2010) argues that part of the reason for the spike in food and other commodity prices was financial speculation. However, the evidence to support this claim is flimsy.		X
27	Kaufman (2010): The Food Bubble: How Wal (sic!) Street starved millions and got away with it.	The article assumes that there has been a food price bubble (and thus not reflecting fundamentals) and assumes that index funds are the only cause behind the high food prices. It explain (sic!) by making the demand fallacy and that future prices determine spot prices. Nowhere in the article are fundamental causes for high food prices discussed. The evidence is anecdotal and flimsy.	To expect by an article in the Harper's magazine that it provides scientific evidence is a strange expectation.	X
28	Masters, White (2008): The accidental hunt brothers: how institutional investors are driving up food and energy prices	This paper as well as the testimony by Master (sic!) (2008) is widely cited. It blames the rapid increase in overall commodity prices from 2006-08 on institutional investors' embrace of commodities as an investable asset class. However, the evidence is limited to anecdotes, unfounded statements and correlations between money flows and prices, which says nothing about cause-effect relations.	It remains unclear why the Masters / White text is in this section. Obviously, for Meijerink/Shutes "scientific" means that a text has to be written by someone at a University. The fact that a financial market member might understand more of financial markets than a professor seems not to be possible for them.	X
29	Wahl (2008): Food Speculation The Main Factor of the Price bubble in 2008.	The article argues that speculation led to high food prices. However, it does not make a convincing argument why/how speculation led to higher prices, nor do the arguments reflect economic theory, nor does it provide any substantial evidence for this.		X
30	Wise (2011): Food Price Volatility: market fundamental and commodity speculation.	Conclusion: the blog entry argues that speculation led to higher food prices. However, the two main arguments used are not supported by theory		X
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