



# Addressing the **impact** of **commodity derivative trading**

## Context and Scope for Agreement

### Report on the meeting of the public-private initiative on commodity market volatility 25<sup>th</sup> September 2012, New York

*Please note this document is a final draft subject to comments from the other participants.*

The meeting examined the possibilities for strengthening public-private dialogue in the current discussions surrounding commodity market volatility, with a focus on agricultural markets. The attention on commodity market volatility is being driven by concerns about impacts on developing countries dependent on commodities. The meeting was convened with support from the Common Fund for Commodities (“CFC”), facilitated by De Novo Agricultura, and hosted by United Nations Conference on Trade and Development (“UNCTAD”) office in New York. The discussion was held under the Chatham House rules.

It was agreed that, in principle, considerable scope existed for banks' involvement in improving the coordination and effectiveness of international measures in support of poor people affected by commodity market volatility. Banks have the instruments and experience necessary to make financial resources available for investment into physical commodity production capacity. Investment remains the only sustainable way to address the fundamental physical causes of global volatility in commodity markets.

For the ease of reading, comments have been grouped under broad headings in this report.

A presentation of current supply and demand factors driving grains market was given at the commencement of the meeting by AgResource Company, a leading independent agricultural commodities research firm, providing an independent perspective on market fundamentals. A short review of the key issues presented is attached in Annexe 1.

#### **Financialization of commodity markets**

The interpretation of financialization of commodity markets in public discussion was context-dependent and not instructive for practical action. Futures markets are by their nature financial, therefore the relevant subject of the debate is not the penetration of financial capital in commodity markets “*per se*” but the externalities involved in the process. Reference was made to the evidence of extreme volatility in non-financialized commodity markets (e.g. apple juice and mustard seed) demonstrating that financialization by itself was unlikely a major factor in volatility.



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The matter of price volatility should further not be confused with general price levels. The current volatility<sup>1</sup> in commodity markets is not extremely high, but historically low. This development was surprising given extreme physical shocks experienced in a number of key commodity markets.

The meeting examined the recent "Policy Briefing" by UNCTAD and observed that contrary to its observations, much academic evidence on commodity market volatility pointed to the beneficial rather than detrimental impact of "speculative capital". The definitions of financialization as well as that of "speculation" were relevant to the interpretation and analysis of data and it was pointed out that the availability of trading data was likely an important constraining factor. A more granular analysis of categories of "speculator" and "investor" is required. The point was made that the individual participants in pension fund commodity investments can be categorised as being "consumers" who are hedging their purchasing power against future rises in commodity prices due to fundamental supply and demand factors. Because the academic evidence was obviously contradictory, policy recommendations at this stage were more a matter of interpretation than facts. A view was further expressed that it would not be productive to try to debate and negotiate an agreement on the exact origins and criteria of extreme volatility until more consistent and unbiased evidence and analysis were available.

### **Dealing with volatility**

The attention to volatility in commodity markets was largely motivated by concerns about food security of the most vulnerable countries and groups of people. The discussion on policy measures addressing current concerns with food security and the effects of commodity market volatility was highly politicized. The meeting noted the observations concerning lack of global governance on food security, and the information about the upcoming Food and Agriculture Organisation of the United Nations ("FAO") report expected to indicate ambiguous evidence on the effect of high, as opposed to volatile commodity prices.

Developing countries need to develop their capacity to deal with globalized markets and this should be supported through public-private partnerships. The development of this capacity primarily requires investment in knowledge, skills and broad financial and physical infrastructure. Practical actions could deal with:

- Information flows as it was noted that FAO AMIS was already an effort in this direction. However, to have a beneficial effect in terms of commodity market volatility in developing countries, the level of detail should be comparable to the most developed commodity markets e.g. data provided by United States Department of Agriculture ("USDA") for the US commodity market. The example of extreme regional variation in prices for maize in Sub Saharan Africa (Malawi and Kenya in 2011) was cited as an example for the need for better regional and local market data to be made available to producers and consumers.
- Affordable and locally feasible hedging instruments should be made available to developing countries. This includes the experience of CFC and International Finance Corporation ("IFC") in terms of providing such instruments to primary producers. However it was also observed

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<sup>1</sup> Commonly estimated using GARCH statistics from market data. It was also noted that short periods of high volatility may have large negative effects even though average levels of volatility may be low



that the economics of most crop insurance schemes in developed countries required government subsidies of around 75%, which demonstrated the practical difficulties in building effective pure market based insurance schemes for commodity risk management.<sup>2</sup>

- Education and capacity building for effective use of financial instruments at the producer and sovereign consumer level.

The relation between market liquidity and market volatility seems intuitively obvious, but is poorly understood in terms of its causality and important factors affecting the connection. The nature of the relationship is relevant to the discussion because market liquidity is essential for productive investment, while market volatility is currently the main source of concerns about the impact of global markets on commodity dependent poor countries.

Taking volatility as a given and persistent feature of commodity markets practical action should focus on formulating a robust and effective response. The view was generally shared that addressing the scarcity of food production would be one known and most effective approach to overcoming the adverse social effects of commodity market volatility.

It was suggested that there was no consensus on the principles of "responsible" agricultural investment. The view was expressed that the focus of action could be on promoting investment in productive capacity as "good" investment in agriculture, while discouraging destructive speculation<sup>3</sup> in agricultural commodity markets.

Concerns were raised that for financial market activity to be characterised as being negative and destructive runs a real risk of senior management in major financial institutions withdrawing from these businesses. Agricultural related commodity investment and hedging product revenues are insignificant relative to overall banking revenues, whilst the negative and "ill-informed publicity" these activities attract lead many to question the rationale for maintaining capabilities. The withdrawal of major banks from these markets would reduce capital liquidity and hedging capacity for corporate clients needing to hedge physical trading risks at a time when many European banks are closing businesses or significantly reducing capital employed in these activities (including and most significantly commodity and trade finance). Concern was raised as to the negative potential impact of Basle III on risk weighting of trade finance assets for emerging market financial institutions would reduce financing capacity for those countries and people already most exposed to negative consequences of high prices and volatility. It was recommended that this issue be highlighted to the relevant institutions within the United Nations as part of this initiative.

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<sup>2</sup> In pilot operations of the CFC it was demonstrated that farmers' expectations of coverage consistently exceed the economically feasible levels. The desired level of coverage was too expensive; the affordable level of coverage was considered too low and a waste of money. Thus, socioeconomic acceptance of hedging instruments at producer level was problematic. Further investigation was done in the direction of incorporating feasible hedging coverage into credit instruments made available to farmers through local agricultural financiers.

<sup>3</sup> No definition was given. From the context, it could be defined as extracting rents from financial intermediation to the detriment of investment in productive capacity, storage and distribution



Furthermore it was noted that the overall capital commitment by banks via a mix of commodity trade finance, corporate loans, capital markets activities and in some cases direct loan portfolios to producers in domestic markets runs to billions of dollars and that this was rarely if ever recognized in the negative publicity and commentary.

### **Facilitating investment in agriculture**

Scarcity and resulting high prices in the global commodity markets allow investors to generate premium returns and create a positive environment for investment in productive capacity. However, the poor conditions in storage and distribution of agricultural products in many developing countries effectively isolate their commodity markets from the global ones. This creates uncertainty and makes risk management more difficult, with the net effect of discouraging investment even when market conditions are generally beneficial. Other problems for investment in productive capacity include:

- Country, currency and regulatory risks.
- Cost implications to identify reliable partners to make effective investment decisions.
- Land rights and legal infrastructure are problematic.
- Absence of safety nets makes agricultural prices a sensitive political issue increasing policy uncertainty.

Most potential productivity gains today are found in developing countries making them an obvious target for investment in commodity productive capacity. In general some form of mitigation for producer level risk would be essential to facilitate such investment as costly mitigation is currently an impediment. At the same time substantial productivity improvements could be achieved with relatively small investments in the promotion of crop management practices and education on post-harvest treatment.

Given the significant perceived impact the effects of food distribution have on commodity market volatility, the ongoing debate on addressing its effects should involve large food merchants.

### **Positive recommendations**

It was agreed to reflect on the discussion and resume in the future. It was expected that FAO publication<sup>4</sup> could further clarify the understanding of the priority direction in building a private-public partnership for addressing commodity market issues. The key messages that were determined by the participants covered the following:

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<sup>4</sup> Due 16 October 2012



### *Research agenda on the origins and criteria of excess market volatility*

The public concern mainly relates to short term volatility in commodity markets and the research available is not conclusive. A number of issues requiring further examination include:

- Dealing with inefficient supply response to price movements.
- Clearer definition of financialization of commodity markets. Simple share of derivatives-to-physical is not informative<sup>5</sup>.
- Regulatory risks and their effect on investment; policy choices of governments in the face of public concern.
- The connection between market liquidity and market volatility.

### *Practical actions which are considered feasible and effective given the current uncertainty*

- Detailed information and availability on prices.
- Investment in more productive agricultural practices allied with improved storage and distribution.
- Overcoming constraints to longer term investment and greater bank involvement in agricultural production.
- Detailing and proposing short, medium and long term strategies and supporting policies to increase investment and extend supply.
- Mitigating the adverse distribution of the costs of volatility through the value chains.
- Role for direct public involvement to improve accessibility of food in periods of high food prices<sup>6</sup>.

### *Organizing the implementation of practical actions*

- Consult further to consider the challenges and actions in the short term, medium term and long term.
- Maintain a commitment to dialogue for developing a positive agenda in public-private cooperation in commodities.
- Strengthen channels of communication to the international community.
- Extending the participation in this forum to include major trading companies, food companies, multilateral institutions and Non-Government Organisations.

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<sup>5</sup> because it does not seem to have significant relationship to volatility

<sup>6</sup> which may be prolonged if resulting from long-term underinvestment in productive capacity



### *Challenges in communication*

- The requirement for investment in agriculture as key to overcoming volatility and other challenges affecting the vulnerable.
- To respect the needs of private investors in terms of security and fair returns that reflect risk and are commensurate with alternative investment opportunities. Without a return on capital the necessary investment flows to expand supply will not be forthcoming.
- The need to channel long-term investment, e.g. pension funds into productive capacity.
- The need for sound factual evidence in formulating policies directed at financial involvement in commodities.
- Attention to the effects of criticism of banks' involvement in commodity sector as a discouraging factor for agricultural investment.



## Annexe 1

### AgResource Presentation on Outlook for Global Grain Markets

A short presentation of key supply and demand fundamentals for grains (corn, soybeans and wheat) was given by Bill Tierney the Chief Economist of AgResource Company.

***The key point of the presentation was that in the 2012/2013 crop year supply and demand fundamentals are driving markets.***

The rally in grains prices since April has been driven by acute drought in the US and supply issues in Russia and the Ukraine, leading to very low levels of inventories and the need for demand rationing:

- Central US drought the worst since 1936.
- Since May 105 MMT's of US feed grains & 16 MMT's of soybean production have been lost.
- In 2012 loss of 40-44 MMT's (18-20%) of soybean production in the Western Hemisphere will require acute rationing until the Latin American crop is harvested in Jan 2013.
- FSU grain losses amount to 40-49 MMT's with Russian wheat crop worse than in 2010.
- 2012/13 CBOT prices for corn could reach USD 10/bsh and soybeans USD 20/bsh based on historic regression analysis.
- A return to normal weather patterns and yields in 2013/14 would increase stocks towards more normal levels and ease price levels and volatility. However any further major supply interruptions could be explosive to prices in key markets.

#### **Corn – acute tightening of supply facing firm demand**

- US corn crop conditions are the lowest on record for mid-September ratings & US corn stocks have only been this low for 3.3% of the time since 1973.
- World corn stocks (including China) the lowest in 39 years at 12%.
- US ethanol mandate may have peaked as the driver for ever expanding US corn and row crop production acres, but the economic incentive to blend ethanol remains independent of the mandate outing an effective floor under corn demand at around 4.5- 5.0 bn bsh/annum.
- Rationing of demand for feed grains difficult when global meat consumption is still growing at 4% p.a.
- But Brazil produced record export of corn in 2011/12 of 17 MMT's and looks set to reach 15 MMT's.
- A return to trend US yields (160+ bsh /acre) in 2013/14 and flat ethanol demand could see US stocks surge to 1.5 -1.75 billion bsh.
- China's demand for corn remains firm and per bsh cost of production well above US costs. Big unknown factor over next decade – will China become a scaled importer of corn in the way that it has for soybeans.





## **Wheat**

- Largely following corn rally. Despite dire Russian wheat crop world inventories are higher than in 2007/08.
- But major wheat exporters inventory levels have fallen to 2007 levels at 13%
- Russia expected to slow exports if not directly through export bans as has done twice previously since 2007.
- Major importers of wheat especially in North Africa and Middle East faced with volatile supply from FSU origins. This has become the major swing factor in world wheat markets.
- Australian crop currently under some threat from dry conditions and unlikely to boost global inventories.

## **Soybeans**

- Soy stats and inventory levels are very bullish.
- Rationing needed in the Sep 2012 – Jan 2013 period to get to a record low January inventory level is the second largest ever in % terms and the largest ever in tonnage terms. Where will rationing come from – reduction in pig and poultry herds and reduced exports.
- But unlike corn US soybean exports are at record highs (700 ml bsh for 2012/13).
- South American crop is now crucial. If current crop forecasts for Brazil and Argentina are harvested from Feb 2013 stock / use levels will return to comfortable levels.
- However, any significant supply loss from Latin America could drive soy prices through USD 20/bsh.

## **Conclusions of presentation and related discussion**

World corn, soybean and wheat supply and inventory levels have tightened significantly in 2012/13. This is driving markets and price levels. Whilst a return to trend yields and global production levels in 2013/14 would reduce short term price pressures, any major supply interruption would sustain the fundamentals.

In the mid-term continued growth in demand for food and especially meat from key emerging markets will continue to put pressure on supply and inventory levels of key commodities.

Agricultural productivity gains in major OECD countries are falling and the greatest potential for supply growth are in countries with higher perceived risk for investors and deficient infrastructure. Finding ways to boost investment in production, infrastructure and human capital is crucial in key growth markets.





## **Annexe 2**

### **Additional comments from the facilitator, Professor Viral Archaya**

1. Historically, purely speculative futures markets have not survived; or put another way, futures markets survive only when there is BOTH demand and speculation. Hence, any welfare consideration of a thriving futures market must trade off the hedging benefits provided to the real economy and the potential speculative effects of speculation (if any).
2. Governments in many countries have excessive interference in both spot and futures markets, as well as in banking sectors, in both a protective sense from outside investors and banks, and a distortive sense even within the economy. Some of these repressive factors, plus the routine protectionism of the agri sector, has contributed to underinvestment in productivity and infrastructure for this sector. Some reforms here would be necessary to expand the pie and ensure reasonable risk-return trade-offs for private market investors.
3. It might be an idea to consider an multi-lateral style fund - even if small to start with - to seed the funding of a few "projects" or "examples" where public-private partnership is demonstrated to work in a few promising areas such as in China, Brazil, India, some parts of Africa, e.g., to create the platform for a bigger expansion down the road.