## EDITORIAL

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- Piyush Pant

## **Commodity Futures Spoiling the Food Market?**

Unlike sensex, the food price index in India, for a long time now, has been keeping bullish. Despite Prime Minister or Finance Minister making statements every six months regarding prices to come down within a month, prices refuse to budge. From 2007 onwards prices of all goods, particularly the food items have been rising much faster than people's earning. The debate is on as to why the prices of food items refuse to come down. Some blame global economic turndown and global rise in the price of fuel for high food prices, some put the blame on scanty rainfall resulting into drought like conditions and there are others who point their fingers towards the demand and supply mismatch. But there is a very big section of experts who lay the blame at the door of 'Future Trading in Commodities'. They say that price rise can be checked only if there are curbs on futures trading in essential commodities and ban on open entry of private players into the grain trade. Planning Commission member and Chairman of the committee studying the impact of futures trading on commodity prices Abhijit Sen concedes that the futures market could be responsible for price increases. As Kavaljit Singh in Global Research comments-"The recent Guar trading scandal gives a peek into the murky world of Indian commodity futures markets and reveals how commodity exchanges are acting like casinos for speculators, moving away from their avowed objectives of price discovery and price risk management in an efficient and orderly manner." This is to be noted that Guar (Jaggerhy) seed and Guar gum prices rose at an extraordinary rate during the six month period between October 2011 and March 2012. On October 1, 2011 the guar seed was selling at Rs. 4263 per quintal (100 Kilograms). By March 2012, guar seed price had touched a high of Rs. 32,000 per quintal. The prices of guar gum surged almost 900 per cent in the futures market, from Rs.11230 per quintal on November 2011 to Rs.98350 per quintal in March 2012. Says the writer - "The key factor behind the massive increase in guar prices was excessive speculation- totally disproportionate to hedging activities of these two commodities in the futures markets."

Studies by the Switzerland-based Bank of International Settlements have also concluded that a clear corelation between the volume of derivative trading in commodities and sharp rise in commodity prices did exist. A study conducted by Lehman Brothers just before its bankruptcy revealed that the volume of index fund speculation increased by 1,900% between 2003 and March 2008. Morgan Stanley estimated that the number of outstanding contracts in maize futures increased from 500,000 in 2003 to almost 2.5 million in 2008. Writes Olivier De Schutter, UN special rapporteur on the right to food in his report titled 'Food commodities speculation and Food price crises'-" While the food price crisis may have been sparked off by the factors affecting demand and supply, its effects were exacerbated by excessive and insufficiently regulated speculation in commodity derivatives. The promotion of bio fuels and other supply shocks were relatively minor catalysts, but they set off a giant speculative bubble in a strained and desperate global financial environment. These factors were then blown out of all proportion by large institutional investors who, faced with the drying up of other financial markets, entered commodity futures markets on a massive scale. Therefore, the policy solutions that are needed to avert another crisis must address both the problems affecting underlying financial market fundamentals, and the conditions under which speculation is allowed to take place in essential food commodities, thereby exacerbating the effects of those movements in market fundamentals."

A significant question often raised during the debate on future trading in commodities relates to the nature and extend of futures market affecting the spot markets. It is said that the movements of spot and futures markets are clearly connected because both are influenced by market supply and demand influences. Over the long run, spot and futures prices can not move in completely independent ways-i.e. one being completely independent of supply and demand forces. If this were to happen, it would create huge opportunities for traders to arbitrage between the markets. Such opportunities would themselves serve to close the gap between the spot and futures prices. As far as gauging the extent to which speculative movements of futures prices can themselves influence the spot prices is concerned, one will have to look at the forces that are largely independent of "fundamental" supply and demand influences. These are forces operating primarily within the futures markets, particularly the market liquidity, exerting influence on spot prices.

In this issue of *INFOPACK* the summary of the documents discussing various aspects of 'Futures Trading in Commodities' has been given.

Forward Markets Commission

Ministry of Consumer Affairs, Food and Public Distribution, Department of Consumer Affairs

By:

Government of India, Annual Report 2009-2010

Published on January 2011

## **Bird's Eye View**

The 137-page document is divided into six chapters. It also contains eight annexures.

In Chapter I, under the title Introduction, the document talks about Commodity Futures markets in India. It says that the first organized futures market was established in 1875, under the name and style of 'Bombay Cotton trade Association' to trade in cotton derivative contracts. This was followed by institutions for futures trading in oilseeds, foodgrains, etc. The futures market in India underwent rapid growth between the period of First and Second World Wars. As a result, before the outbreak of the Second World war, a large number of commodity exchanges trading futures contracts in several commodities like cotton, groundnut, groundnut oil, raw jute, jute goods, Castorseed, wheat, rice, sugar, precious metals like gold and silver were flourishing throughout the country. In the view of the delicate supply situation of major commodities in the backdrop of war efforts mobilization, futures trading came to be prohibited during the Second World War under the Defence of India Act. After independence, especially in the second half of 1950s and the first half of 1960s, the commodity futures trading again picked up and there were thriving commodity markets. However, in mid-1960s, commodity futures trading in most of the commodities came to be banned and futures trading continued only in two minor commodities like pepper and turmeric. In 1980s, the futures trading in some commodities like potato, c+astorseed, and gur (jiggery) was permitted. In 1992, futures trading in hessian was permitted; in April 1999, futures trading in various edible oilseed complexes was permitted and in May 2001 futures trading in Sugar was permitted. The National Agricultural Policy announced in July 2000 recognized the positive role of forward and futures market in price discovery and price risk management. In pursuance thereof, Government of India, by a notification dated 1.4.2003, permitted additional 54 commodities for futures trading. With the issue of this notification, prohibition on futures trading has been completely withdrawn. The mechanism of forward trading has actually developed and advanced considerably in the major trading nations of the world, like USA, UK, France, Japan, etc. In these countries, forward trading has been permitted in many new items/services including financial futures, shipping freights and interest rates etc. In comparison, commodity futures markets in India are much simpler and at present dealing in single futures contracts in commodities.

#### **Economic Functions**

The document says that in a free market economy, futures trading performs two important economic functions, viz, **price discovery and price risk management**. The forward prices give advance signals of an imbalance between demand and supply. This helps the government and the private sector to make plans and arrangements in a shortage situation for timely imports. This ensures availability of adequate supplies and averts spurt in prices. Similarly, in a situation of a bumper crop, the early price signals emitted by futures market help the importers to defer or stagger their imports and exporters to plan exports, which avoid glut situations and ensure remunerative prices to the producers. At the same time, it enables the importers to hedge their position against commitments made for import and exporters to hedge their export commitments.

#### Benefits to the Farmers and Other Stakeholders

Under this title, the document says that farmers and growers also benefit through the price signals emitted by the futures markets. It says that the futures markets, through advance price discovery lead to a shift in sale-purchase patterns during harvest and lean seasons and thereby facilitate reduction in the amplitude of seasonal price variation and help the farmer realize somewhat better price at the time of harvest. These signals also help him in fine tuning his marketing strategy after the harvest. By providing the manufacturers and the bulk consumers a mechanism for covering price-risks, the futures market induces them to pay higher price to the producers, as the need to pass on the price-risk to farmers is obviated. The manufacturers are able to hedge their requirement of the raw materials and as also their finished products.

## Suitability of a Commodity for Futures Trading

The document points out that the concerned commodity should satisfy certain criteria. These are:

- The concerned commodities should be capable of being classified into well identifiable varieties and the price of each variety should have some parity with the price of the other varieties;
- The commodity must be capable of being standardized into identifiable grades;
- Supply and demand for the commodity should be large and there should be a large number of suppliers as well as consumers;
- The commodity should flow naturally to the market without restraints either of government or of private agencies;
- There should be some degree of uncertainty either regarding the supply or the consumption or regarding both supply and consumption;
- The commodity should be capable of storage over a reasonable period of time of, say, a few months or more.

While talking about **Participants in the Commodity Futures Markets**, the document says that there are three broad categories of participants in the futures markets, namely, hedgers, speculators and arbitrageurs. **Hedgers** (for example, stockists, exporters, producers) are those who have an underlying interest in the specific delivery or ready delivery contracts and are using futures market to insure themselves against adverse price fluctuations. **Speculators** are those who may not have an interest in the ready contracts, but see an opportunity of price movement favourable to them. They are prepared to assume the risk which the hedgers are trying to transfer in the futures market. They provide depth and liquidity to the market. **Arbitrageurs** are those who make simultaneous sale and purchase in two markets so as to take benefit of price imperfections. For example, the arbitrageurs help in bringing the prices of contracts of different months in a commodity in alignment.

## System of Regulation of Forward Trading

The document says that regulation of forward trading is done by a three tier regulatory structure, viz, the Central Government, Forward Markets Commission and the Recognized Commodity Exchanges/Associations.

- The Central Government has the powers to legislate on the subject of forward trading in commodities. It broadly determines the policy relating to areas such as identification of commodities as well as the territorial area in which futures/forward trading can be permitted and giving recognition to the Exchanges/Association through which such trading is to be permitted.
- The Forward Markets Commission performs the role of approving the rules and regulations of the Exchange in accordance to which trading is to be conducted, accords permission for commencement of trading in different contracts, monitors market conditions continuously and takes remedial measures wherever necessary.
- The Recognized Exchange / Associations provide the framework of Rules and Regulations for conduct of trading, indicate the place where the trading can be conducted, report, record, execute and settle contracts, provide forum for exchange of documents and payments, etc.

#### Forward Contract (Regulation) Act

The document here says that the Commodity Futures Markets are regulated according to the provisions of Forward Contract (Regulation) Act 1952. **The Act broadly divides commodities into three categories, i.e. commodities in which forward trading is prohibited, commodities in which forward trading is regulated and residuary commodities.** Under Section 17 of the F.C (R) Act, 1952, the Government has powers to notify commodities, forward trading in which is prohibited in whole or part of India. Any forward trading in such commodities in the notified area is illegal and liable to penal action. Under Section 15, Government has powers to notify commodities in which forward trading is regulated as also the area in which such regulation will be in force. Once the commodity is notified under Section 15, the forward trading in such

contracts (other than Non-transferable Specific Delivery Contracts) has to be necessarily between members of the recognized association or through or with any such member. Contracts other than these are illegal. Trading in commodities where non-transferable specific delivery contracts are prohibited is illegal and liable to penal action. Trading in non-transferable specific delivery contracts in respect of regulated commodities has to be through recognized association just as in the case of other forward contracts. The commodities that are notified neither under Section 15 nor under Section 17 of the Act is in common parlance referred to as free commodities. For organized forward trading in such commodities, the concerned Association or Exchange has to get a certificate of registration under Section 14B of the Act from the Forward Markets Commission.

The document further says that the Act defines three types of contracts i.e. **Ready delivery contracts**, **Forward contracts and Option in goods**.

**Ready delivery contracts** are contracts for supply of goods and payment thereof where both the delivery and payment is completed within eleven days from the date of the contract. Such contracts are outside the purview of the Act.

**Forward contracts** are contracts for supply of goods and payment, where supplies of goods or payment or both take place after eleven days from the date of contract or where delivery of goods is totally dispensed with.

The forward contracts are further of two types, viz, a) specific delivery contracts and b) other than specific delivery contracts.

The specific delivery contracts are those where delivery of goods is mandatory and are essentially merchandising contracts entered into by the parties for actual transactions in the commodity and terms of contract may be drawn to meet specific needs of parties as against standardised terms in futures contracts.

The specific delivery contracts are of two types, viz, **the transferable variety** where rights and obligations under the contracts are capable of being transferred and the **non-transferable variety** where rights and obligations are not transferable.

Forward contracts other than specific delivery contracts are what are generally known as 'futures contracts'. Futures contracts are usually standardised contracts where the quantity, quality, date of maturity, place of delivery are all standardized and the parties to the contract only decide on the price and number of units to be traded. Futures contracts are entered into through the Commodity Exchanges.

**Options** in goods means an agreement for the purchase or sale of a right to buy or sell, or a right to buy and sell, goods in future and includes a put, a call, or a put and call in goods. Options in goods are prohibited under present Act. An option contract is the right (but not the obligation) to purchase or sell a certain commodity at a pre-arranged price (the strike price) on or before a specified date. For this contract, the buyer or seller of the option has to pay a price to his counterpart at the time of contracting, which is called the "premium". When prices move favourably, this right will not be exercised, and therefore, the purchase of options provides protection against unfavourable price movements, while permitting to profit from favourable ones.

## Working of Forward Markets Commission (FMC)

The document points out that Forward Markets Commission is a statutory body set up under Forward Contracts (Regulation) Act, 1952. The Commission functions under the administrative control of the Ministry of Consumer Affairs, Food & Public Distribution, Department of Consumer Affairs, Government of India. The functions of the FMC are dealt with in section 4 of the Forward Contracts (Regulation) Act, 1952 [F.C(R) Act, 1952] which is given below:

- i. To advise the Central Government in respect of the recognition of, or the withdrawal of recognition from any association or in respect of any other matter arising out of the administration of the FC(R) Act, 1952.
- ii. To keep forward markets under observation and to take such action, in relation to them as it may consider necessary, in exercise of the powers assigned to it by or under the FC(R) Act, 1952.
- iii. To collect and whenever the Commission thinks it necessary, publish information regarding the trading conditions in respect of goods to which any of the provisions of this Act is made applicable, including information regarding supply, demand prices and to submit to the Central Government periodical reports on the operation of the Act, and the working of forward markets relating to such goods.
- iv. To make recommendations generally, with a view to improving the organization and the working of forward markets.
- v. To undertake the inspection of the accounts and other documents of (any recognized association or registered association or any member of such association) whenever, it considers it necessary and

vi. To perform such other duties and exercise such other powers as may be assigned to the Commission by or under the FC(R) Act, 1952 or as may be prescribed.

The document says that Section 4A of the FC(R) Act, 1952 deals with the powers of the Commission. It says that the Commission has all the powers of a civil court under the Code of Civil Procedure 1908 (5 of 1908) while trying a suit in respect of the following matters:

- Summoning and enforcing the attendance of any person and examining him on oath;
- Requiring the discovery and production of any documents;
- Receiving evidence on affidavits;
- Requisitioning any public record or copy thereof from any office;
- Any other matter which may be prescribed.

The document further states that futures trading has the risk of being misused by unscrupulous elements. In order to safeguard the market against such elements, regulatory measures as under are prescribed by the Forward Markets Commission:-

- a) Limit on open position of an individual operator as well as member, to prevent over trading;
- b) Limit on daily price fluctuation, to prevent abrupt upswing or downswing in prices;
- c) **Special margin deposits** to be collected on outstanding purchases or sales, to curb excessive speculative activity, through financial restraints;
- d) During times of shortages, the Commission may even take more stringent steps like skipping trading in certain deliveries of the contract, closing the markets for a specified period and even closing out the contract to overcome emergency situations.

## Improvement of Regulatory Framework and Re-structuring of Forward Markets Commission

The F.C (R) Act enacted in 1952 does not meet the regulatory needs of a modern electronic market. Hence, the regulatory framework needs to be overhauled to bring it on par with those of similar regulators like SEBI, etc, and also to restructure and strengthen the Forward Markets Commission to meet the regulatory challenges. Hence, a Bill proposing amendments to F.C (R) Act has been approved by the Cabinet which, inter alia, provides for -

- Defining forward contract so as to include other commodity derivatives, definition of intermediaries, etc.
- Composition and functioning of FMC.
- Financial and administrative autonomy of the Commission so as to provide for recruitment of its officers and its employees, management of the affairs to vest with the Chairman, accounts and audits, and creation of an 'FMC General Fund' to which all receivables except penalties will be credited. The FMC General Fund shall be used for the management of the affairs of the Commission and to enforce the provisions of the F.C (R) Act, 1952.
- Levying of fees on intermediaries to finance the Commission activities.
- Allowing trading of options and other derivatives in goods.
- Provide for corporatization and demutualization of commodity exchanges
- Strengthening the penal provisions.
- Constitution of Forward Markets Appellate Tribunal.
- Provision for grant by the Central Government to meet transitional financial needs of FMC.

## Developmental Initiatives taken by Forward Markets Commission

The document says that the Commission has taken the following steps in recent years to ensure that the markets are broad based and its benefits reach all the stakeholders of the Commodity Markets.

- **Promoting the participation of hedgers** (producers, processors, exporters, importers, etc.) to counter balance the speculative element in the price discovery.
- Increasing the awareness level of different category of stakeholders especially farmers to make them aware of the existence of as well as benefits from the futures markets, sensitization of policy makers and capacity building in the commodity sector.
- Working on various models of 'Aggregation' to enable the farmers to take the benefit of actual hedging on the Commodity Exchange to manage their price risks.
- Working on a project of **Price dissemination** through APMCs and other centres to empower the farmers with price information.

• **Meeting with various stakeholders** to understand their difficulties, problems and felt needs so as to align / design policies to feasible / desirable objectives.

In Chapter II, the document discusses Development in the Commodity Derivative Market 2009-10.

The document says that during the year 2009-2010, forward trading in 109 commodities was regulated at the four national exchanges, viz, Multi Commodity Exchange, Mumbai; National Commodity and Derivatives Exchange, Mumbai; National Multi Commodity Exchange, Ahmedabad and Indian Commodity Exchange, Gurgaon. Besides, there are 17 regional exchanges recognized for regulating trading in various commodities approved by the Commission under the Forward Contracts (Regulation) Act, 1952.

The document further says that the total value of trade for the entire financial year 2009-2010 was Rs. 77.65 lakh crore as against Rs. 52.49 lakh crore in the preceding financial year, registering a growth of 47.93%. Bullion, base metals, energy products and agricultural commodities were the major group of commodities traded at the exchanges. Amongst these, gold, silver, copper, lead, nickel, zinc, chana, soy oil, guarseed, jeera, pepper and energy products were prominent commodities traded during the year. The year 2009-10 saw the resurgence of agriculture commodities in the commodity futures platform. During this period, futures trading was permitted in the following new commodities, viz, Almond, and Menthol Flakes (MCX Mumbai), Platinum, Natural Gas, Gasoline, Short Term CER (Certified Emission Reduction), Heating Oil, and Lead (NCDEX, Mumbai).

During 2009-2010, the Commission focused its activities on the regulation of futures trading in commodities. The Commission also took steps to promote the participation of hedgers through a series of regulatory and developmental initiatives.

The document says, in the coming years, the priority of the Commission will be to consolidate the market; strengthen regulation to generate confidence amongst the participants and keep the market free from manipulation and abuses; empower the farmers with price information and identity and facilitate the participation of farmers in the market for hedging.

The endeavour of the Commission has been to prevent market manipulation and ensure market integrity and customer protection.

The important developments in commodity derivative market during 2009-2010 are enumerated below:

- Bullion Rs 31.64 lakh crore. (40.75%)
- Base metals Rs. 18.02 lakh crore. (23.20%)
- Energy products Rs. 15.78 lakh crore (20.32%)
- Agricultural commodities Rs. 12.18 lakh crore (15.69%)

## **Revision in Regulatory Measures**

Under this title, the document says that The Commission kept a close watch on the trading activities and took necessary action by way of revising from time to time regulatory measures such as revision in the limit on open position, daily price limits, imposition of additional margin etc.

Fresh position in internationally referenceable contracts: The Commission examined the proposal to allow members to take fresh position during the delivery period till the expiry of the contract and permitted them to take that fresh position in internationally referenceable commodities during the delivery period till the date of expiry of the contract. Since settlement prices of international referenceable commodity contracts are fixed on the basis of international prices, the Commission on 5.6.2009 allowed members of National Commodity Exchange, to take fresh positions in internationally referenceable commodities.

**Revision in Position Limits for NAFED:** The Commission, to encourage participation of NAFED in futures trading in agricultural commodities with the intention of transferring the benefits of futures trading to farmers issued guidelines on 30<sup>th</sup> June, 2009 for allowing separate position limits to the NAFED and its branches for implementation w.e.f. August 2009. Guidelines issued in this connection are given in **Annexure IV**.

#### **Guidelines for Equity Structure of National Commodity Exchanges**

The document says that with the approval of the Ministry, the Commission on 4th August 2009 issued guidelines on the equity structure of the National Multi-Commodity Exchanges after 5 years of their operation. These Guidelines are given in Annexure V-A & B.

## Guidelines on Dealings in Cash with Members

Under this title, the document points out that the Commission on 23rd July 2009, issued the following directions

to all National Commodity Exchanges with respect to dealing in cash with the members. The directions are:

- Members should not accept cash from the client whether against obligations or as margin money for trading in commodity derivatives,
- All payments should be received / made by the members from/to the clients strictly by account payee crossed cheques/demand drafts or by way of direct credit into the bank account through EFT, or any other mode allowed by RBI. The members should accept the cheques drawn only by the clients and also issue cheques in favour of the clients only, for their transactions. However, in exceptional circumstances, the members may receive the amount in cash to the extent not in violation of the provisions of Income Tax Act, as may be in force from time to time.
- The Exchanges should make necessary amendments to their relevant bye-laws, rules and regulations and circulars for the implementation of the above directions immediately, and prescribe suitable penal action for the violation of the above provisions.

## **Uniform Penalty for National Exchanges**

The document further says that the Commission examined the penalties imposed by the National Exchanges on the members for various irregularities, shortcomings and thereafter rationalized the entire penalty structure. A two-pronged approach was followed, i.e. it was ensured that the penalties would be adequate so as to act as a deterrent and would be uniform across the exchanges so as to rule out the possibility of regulatory arbitrage. Special attention was paid to the penal provisions related to client protection. The Commission, on 5th March 2010, notified the uniform penalty structure for proper regulation on the markets in an equitable manner and to discourage malpractices. In addition to the financial penalties, the Exchanges were also directed to deactivate the trading terminals of the members and initiate disciplinary measure, which may culminate into suspension of membership.

The Commission felt that the interest of market participants would be well served in case the uniform penalty structure is implemented in its spirit by the Exchanges. The details of penalties are annexed in Annexure VI.

### **Inactive Client Account**

Under this title, the document says that after inspection of the members of the National Exchanges it was observed by the Commission that there were large number of inactive clients and there was lack of awareness about when to consider an account as "inactive". The Commission, therefore, on 7th December 2009, reiterated its earlier directives with regard to inactive client accounts and directed, inter alia, that those clients who have not operated their account during the last six months may be considered as inactive client.

In Chapter III contains graphs only.

In **Chapter IV**, the document refers to **Action Against Illegal Forward Trading**. The document says that the Rule 13 of the Forward Contracts (Regulation) Rules, 1954 states as under:

"The Commission shall communicate information in respect of the commission of any offence under the Act to the concerned police authorities and assist such authorities in scrutinizing documents referred to by them and in rendering such expert advice as may be required by them".

The document further says that in pursuance of the provisions of Rule 13 as cited above, the Commission keeps close surveillance on the activities in illegal forward markets and communicates the intelligence thereon, to the concerned police authorities for their verification and appropriate enforcement action. The Commission or its officers are not empowered to conduct search, seizure and prosecution in respect of the various offences committed under Act. These powers are vested with the police authorities in the State/Union Territories.

Though the prohibition on futures trading under Section 17 of the Forward Contracts (Regulation) Act, 1952 has been revoked completely, the need for enforcement action would continue, as long as various other forms of illegal forward trading, like "Option" in goods, (which is totally prohibited under the Act), and "dabba" trading are reportedly prevalent in various parts of the country.

# An Evidence of speculation in

## Indian commodity markets

By:

Varadi, Vijay Kumar ICRIER, New Delhi, India Published by MPRA March 2012

## **Bird's Eye View**

This 22-page paper was published online at MPRA (Munich Personal RePEc Archive) website. The objective of this paper is to investigate the evidence and impact of speculation on volatility of commodity price in Indian commodity markets. And, results exhibit that speculation has played decisive role in the commodity price bubble during the global crisis in India.

The paper contains six sections. Section I provides some background information about commodities and commodity indices. Section II documents the role of speculation in commodity markets. Section III discusses Indian commodity markets and its regulatory reforms, and an extensive review on financialization of commodity markets has been done in Section IV, and objectives, data and proxies for financialization in commodity markets and results have been discussed in Section V and finally the conclusion is made in Section VI.

### 1. Introduction

The paper says that global commodity markets have experienced significant price swings in recent years. Recent price surge in commodity markets has stipulated the intensity of various factors which lead the price volatility. Global academia have found the following factors for high and volatile commodity prices including a) traditional demand and supply factors, b) monetary factors; finally, financialization of commodity markets (including speculation, particularly by institutional investors such as hedge funds, pension funds and investment banks and other exchange traded funds and notes).

The paper further says that recently commodities have been treated as an "asset class" because it would develop a vibrant, active and liquid commodity market and help investors hedge their commodity risk, take speculative positions in commodities and exploit arbitrage opportunities in the market. A few characteristics including a) Liquidity transmission into commodity assets, b) Volatile stock market - "commodity markets are investors' heaven", c) Low interest rates in the host nations; and d) Hedge against weak dollar are major influential factors caused for investors to treat commodity markets as an "asset class".

Commodity index investment is an activity typically characterized by a passive strategy designed to gain exposure to commodity price movements as part of portfolio diversification strategy. Investors have seen portfolio diversification advantages in adding a proportion of commodity futures to equity and bond portfolio. Index investment in commodity markets has a tendency to increase speculative activity in futures markets, leads to large percentage of market place has no intent of taking futures to delivery, causing price volatility and commodity markets have started setting price of commodities as an asset, which may offer a possible explanation through sunspot equilibrium. In this scenario, the objective of the paper is to examine whether Indian commodity markets do have any significant role of institutional investors/speculators.

## 2. The Role of Speculation in Commodity Markets

The paper says that recent global financial and food crisis is evidenced and realized the assumptions of speculation trading. Speculators are trendspotters. Speculators in the forwards or futures markets may be on the long or short side of any single such transaction, but in aggregate their commitments must offset any net imbalance of the long and short hedger's positions. Speculation in commodity derivatives markets performs a valuable economic function. Firstly, speculation in these markets allows for the transfer of price risk from those least willing to bear it (commodity producers and consumers, or 'end users') to those with the greatest appetite and capacity to do so (generically speculators). Secondly, derivatives markets transmit valuable information about supply and demand conditions. In recent times, increased amounts of capital have been flowing into the commodity futures trade, and there is thus a need to analyze the role of futures market participants can possibly play in forming or distorting prices in the market for the underlying commodity. Increasing speculative activity in futures markets i.e. large percentage of market place has no intent of taking futures to delivery, causing price volatility, commodity markets have started setting price of commodities as an asset. Therefore, speculators can create a price distortion and speculative bubble with anticipating making significant profits form major movements in the markets. Persistent inflationary pressures in global commodity prices in the recent past has sparked a debate over its nature with speculation in commodity markets being singled out as the primary factor behind rising prices, even leading to a demand for a ban on futures trading for several important commodities.

## 3. Indian Commodity Markets

The paper says that the commodity futures market in India dates back to more than a century. Commodity futures markets in India are at present dealing in single futures contracts in commodities. The forward contracts in commodities ensure that the manufacturers, processors, or producers get continuous supply of the raw materials.

In 1952, Forward Contracts (Regulation) Act, (FCT Act) was enacted to regulate the commodity futures market and Forward Market Commission (FMC) was set up as a commodity futures market regulator in 1953. The system of regulation of the commodity futures markets contributes to the overall objectives of ensuring an efficient market, reducing information asymmetry and promoting confidence in the market. The regulations aimed at the prevention of market manipulation focus on maintaining the integrity of the market price of commodities.

The paper further says that speculation in the commodity futures and futures markets were prohibited in most of the commodities, which continued for about three decades. With reference to various committee reports such as Kabra (1994), World Bank and UNCTAD (United Nations Conference on Trade and Development) report (1996) India revived the futures trading and allowed national level commodity exchanges to set up. Three National level exchanges i.e. NMCE (National Multi-Commodity Exchange, Jan, 2003), MCX (Multi-Commodity Exchange, Sep, 2003), and NCDEX (National Commodity and Derivative Exchange Ltd. Nov, 2003) were granted recognition for commodity futures trading with demoralized and corporative (online electronic trading). At present 113 commodities are notified in 21 exchanges for futures trading and actual trading is taking place in about 50 commodities. The value of trading which was just Rs. 66 thousand crores in 2002-2003 increased to Rs. 119.49 lakh crores i.e. 181% increase during the period.

## 4. Literature Review

The paper says that the empirical evidence on this subject has been mixed. Sanders, Irwin, and Merrin (2008) expressed scepticism about the assertion that speculation has led to bubbles in agricultural futures prices. Other authors share somewhat different views. Robles and others (2009) identified speculative activity in the futures market as a source of the 2007/2008 agricultural commodity price increases. Plastina (2008) concluded that between January 2006 and February 2008, investment fund activity might have pushed cotton prices 14 percent higher than they would otherwise have been.

The paper further says that according to VV Acharya, speculators that invest in commodity markets determines commodity spot prices and commodity futures risk premia in equilibrium. And according to S.H. Irwin, speculative buying by index funds in commodity futures and over-the-counter derivatives markets created a "bubble" in commodity prices. In 2008, Peter Wahl says that speculation on food prices has played the decisive role in the price bubble in 2007/2008. He also says that the grains and oilseeds sector, corn, the soybean sub-sector and wheat sub-sector all exhibited speculative bubbles in US. As speculative hoarding takes place, the price of commodities jumps (Richardo caballero, 2008). Thus there is a consensus and evidence of financialization (speculation) in commodity markets which is being seen a real culprit for the recent price surge during the financial and food crisis. In this scenario the paper tries to examine whether Indian commodity markets have any significant impact by institutional investors.

## **Objectives and Results of the Study**

This paper made an effort to investigate the speculation in commodity prices, which would be of interest to

the investors, commodity exchanges and policy makers and regulators etc. Further this study provides useful insight for the market activity with respect to price volatility. Objectives of the study include investigating the impact of speculation on commodity markets in India, and to elucidate relationship between investor's behaviour and financialization in commodity markets.

The paper says that there are three possible explanations to establish the evidence of speculation in commodity markets. First, finding outliers in the study using three proxies such as volume of traded contracts, capital flows in the commodity markets i.e. value of trade and open interest are considered. A possible explanation for being outlier in any month is the actual trade, turnover and open interest is higher than the average of its actual, then those observation respective months are considered as a potential speculative months in the commodity markets. Second, the volatility spillovers between cross-markets i.e., if the risk increases in any asset, the potential investment would reduce and it yields lesser returns or even negative. In order to avoid such idiosyncratic risks, investors may search for the alternative assets, which yield more or less the same returns. In this paper an attempt has been made to find the volatility spillovers between assets i.e., equities and commodities. Finally, the third explanation is based on basis, contango and backwardation, the shape of the futures curve is an important indicator for the hedgers and speculators or price discovery analysis.

This analysis of the role of financial speculation in the behaviour in the recent years focuses on trading activities. For the analysis, aggregate data from FMC (forward market commission) has been taken. To capture the size of the change in speculative behaviour, the paper analyzes the following indicators, including a) Volume of Futures Contracts (Trading Volume), b) Value of the Contracts (Trading Value), c) Open Interest in futures contracts (OI, All Contracts in Commodity markets).

The paper further says that during the global financial and food crisis, there are bubbles in trade volume and investment inflows in the commodity markets which are above the average trade, and there are few huge bubbles in the period staring 2010 and it would have a recursive carry forward effect for the further. This explains that, speculators may have influenced the market with their short positions and made investments in long positions. During recent global crisis, the bubble size of trade is 14,00,0000 thousand metric tonnes, which is 5-9 times greater than the average trade, similarly value of trade is also increased suddenly from 300 thousands crores to 900 thousands which again is 4-5 times greater than the average value of trade. In the case of commodity index buyers, evidence suggests that the sellers are not typically other investors or leveraged speculators. Instead, they are owners of the physical commodity who are willing to sell into futures market and either deliver at expiration or roll their hedge forward if the spread allows them to profit from continued storage. This activity is effectively creating "synthetic" long positions in the commodity for the index investor, matched against real investors held by the shorts. High spot prices has been seen along with large inventories and strong positive carry relationships as a result of the expanded index activity over the last few years.

The paper says that Volume of Trade in mid-2007 thorough the mid-2008 - where it is evidence appears to be a close correspondence between index trader positions (long positions) and global financial crisis. Further mid-2009 provides significance of long positions in Indian commodity markets. Active large positions can improve liquidity and make hedging easier for large commercial users. In periods of rapid and sharp price changes, large positions are a "liquidity sponge", making it difficult for hedgers with commercial interests to place orders. The ratio of volume to open interest also captures speculative market activity, under the assumption that the majority of speculators prefer to involve in a short period of time. Hence a speculator taking opposite positions (buying and selling contracts) in the market within days or weeks will generate an increase in monthly registered volumes but little change in monthly open interest.

The paper further says that the government intervention or regulatory bodies by imposing margin on spread positions, banning few commodities from exchanges, policies to allow foreign investment in commodity exchanges and to trade in evening times, approval to granting permission launching new contracts in commodities and new commodity exchanges, permission to accredit the warehouses of procurements, extending to hedge positions and to early delivery system, approval of transfer equity shares, revised open position limits etc., may drew attention of investors to play a significant role in commodity markets during the spikes of the months.

It also says that volatility spillovers between cross markets, i.e., commodities and equity markets may improve the chances for speculators to shift their investments from one market to another. It further says that there is a strong relationship between volatility and market performance. Modern portfolio theory (MPT) describes, volatility creates risk that is associated with the degree of dispersion of returns around the average i.e., the greater the chance of a lower-than-expected return, the riskier the investment. When volatility increases, risk increases and returns decrease. Hence, one can expect that the players in equity markets may have shifted to the equities to reduce their investment risks and increasing their returns from commodities, which may cause the speculative bubble in commodity markets.

Over the last few years, commodity prices have undergone strong fluctuations as a consequence of economic, political and financial issues that have the global economic equilibrium. Most of the anomalies recorded during this period were attributed to the growing role played by financial instruments, specifically derivatives. In fact, although it is well known that derivatives provide economic benefits, such as information dissemination, price discovery and efficient allocation of resources, the tightened cross-market linkages that result from derivatives trading also fuel a common public and regulatory perception that derivatives generate or exacerbate volatility in the underlying asset markets, since they represent not only an important tool for managing risk exposure, but also an opportunity for trading and speculation.

While talking about the relationship between the commodity spot and futures returns the paper says that futures price returns have a positive impact on the current prices, where as spot prices returns have a significantly negative impact on futures prices. It also says that the long-run equilibrium relationship between spot and futures prices using conventional cointegration analysis, use a refined methodology to analyze the existence of a potential structural break in the cointegration vector in order to gather the time dynamic of the relationship, which is important in a period of high price movements.

### **Concluding Remarks**

The paper points out that there is a widespread belief and assumption in commodity markets that especially after global financial crisis, the speculative activity has increased dramatically with involvement of exchange traded funds and active index investors in commodity markets. It is easy to agree that speculators affect price developments as they help in the discovery of future prices, which are important, but unknown fundamental variables, created bubble in commodity markets. As a result of too optimistic bets on certain maturity, the futures price set on an "incorrectly high level", which would move the whole price curve due to arbitrage if stocks are high. Thus also the spot price would rise to an artificially high level if bets are on rising prices. Higher-than-fundamental prices would induce inventory accumulation, although the very low price elasticity's of both supply and demand would diminish the smoothness of adjustment.

The paper further says that there is no applied research on this subject in Indian commodity markets on speculative activity with which to further compare the findings. This paper provides an evidence for "speculation" during the crisis period and which might be a cause for "excessive volatility" in commodity markets. It further says that speculation can cause unreasonable or unwarranted price fluctuations. Hence, the regulator or policy makers should take initiative steps in order to reduce the impact of excessive speculation in future. The policy recommendations include a) Impose speculative position limits for the purpose of preventing "excessive speculation". Monitor daily potential violations in the market, b) Implementation of Commodity Future Trading Commission (CFTC) (2010) (Dodd-Frank Act) for position reporting requirements for commodity futures contracts traded on or subject to designated contract markets (DCMs), c) Surveillance of individual /institutional trader's activities and potential market power and enforces speculative position limits by using a large trader reporting system (LTRS), d) Exercise the special call provision for preventing insider trading and prevent manipulation or abusive practices, e) Ban on high frequency trading in commodity markets.

## The Rise of Commodity Speculation: From Villainous to Venerable

By:

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Edited by Adam Prakash

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## **Bird's Eye View**

This 25-page paper is 13th chapter in the document. In the beginning of the chapter, the writer points out that throughout history, food profiteering has been roundly condemned. Those engaging in speculation, hoarding or exploitation, or otherwise extracting money from sustenance have met with sharp rebuke, punishment or even execution. During the twenty-first century the once maligned food profiteer - particularly the commodity speculator - has been transformed into a generally positive and welcome force. He says that far from causing harm or havoc, the modern commodity speculator is often hailed as the new oracle of the food cycle, boldly wagering multi-million dollar bets on the direction of prices on mammoth futures exchanges. While pouring unprecedented amounts of money into trading commodities, speculators claim they are merely aiding what futures markets are meant to do - discovering the equilibrium price of goods at any moment in time.

Under the title background, the writer points towards the statement of Levy which says that food security and statehood have gone hand in hand since ancient times. As far back as the fifth dynasty, the rulers of Egypt took control of grain management; by the reign of Ptolemy I in 306 BC, they held ownership of supply, land and granaries, dictating that "all (grain) prices were fixed by fiat" (Levy, 1967).

The writer says that ancient city state of Athens, highly dependent on grain imports ranging from Sicily to the Black Sea, regulated every aspect of the grain trade including a ban on exports, the lawful port of entry (Piraeus), maritime loans, inventories, prices and import taxes. Similarly, Asia linked political control to food. During the Han Dynasty, Chinese officials received half their salaries in grain. In fourth century BC India, the *Arthasastra or* "handbook for princes" instructed that only proper authorities should undertake grain collection and that profit margins charged by merchants be strictly capped.

Starting in the first millennium, references appear in religious texts on food speculation. The Christian movement of Monasticism decried the "making of profits" over wheat in Syria. Talmudic law, compiled from approximately 70 AD to 500 AD forbid "fruit hoarding" and the hoarding of other food essentials such as oil, wine and flour, particularly with the intention of reselling these products at an exorbitant mark-up. From its beginning in the seventh century, Islam forbade speculative activity as one of its principles.

#### The Monetary Revolution

Under this heading, the writer says that the western feudal land-based system that had hindered the development of commercial markets disintegrated slowly starting in the thirteenth century. For centuries prior, fragmented political authority, a dearth of metallic coinage, irregular and variable minting and the widespread practice of "clipping" or "shaving" led to the reliance on barter. The minting of gold practically ceased in medieval Europe between ninth century and thirteenth century even while East maintained a gold standard.

The paper further says that while the Middle East and China - during the Song Dynasty - established the recognizable components of banking deposits, loans and letters of credit over long distance, the European system remained weak. Although the Crusades precipitated monetary innovation crucially, medieval society never invented the banknote; paper money was circulating since the ninth century in China. When the balance of trade began to improve between southern Europe and its Eastern trading partners, more gold came into circulation. Under Europe's new bi-metal system in the thirteenth century - silver coins served as domestic money and gold, with its higher store of value, became the international medium. Indeed, the economy itself was roughly divided between the interior of Europe that was loosely populated by rural communities and townships and the outer ring of cities that engaged in shipping.

The increased commerce propelled the development of banking, first in Venice in 1177 and later in other Italian and French trading centres, giving rise to "bills of exchange" - forerunner of banknotes. Grain financing was the first organized speculative trade in forward grain pricing and debt trading since Athenian times.

As the moneyed economy replaced the medieval system, financial innovation grew. This innovation led to further developments in the financial markets: "government credits were traded in secondary market and financial derivatives, such as overdue interest - became diffused objects of trade". The system marked the beginning of modern public finance and sophisticated credit market based on government loans (Pezzolo 2005).

Trade, risk and moneyed credit played crucially in the development of risk management mechanisms and speculative activity emerging during sixteenth century.

In England, statutes prohibited grain speculation as early as 1552. The statutory offences were based on three common law violations: (1) forestalling - the purchase of grain outside of a market and a subsequent sale in the market; (2) regrating - the purchase and resale of grain in the same or nearby market; and (3) engrossing - the purchase of grain before harvest for the purpose of reselling after harvest (Banner, 1998). The law's prohibition of food speculation thus rested on a solid base of popular disapproval. Popular belief held that "speculation raised prices, harmed the poor, gave rise to deceit, and more subtly undermined the common good" (Banner, 1998).

## Mercantilism in Europe

The writer here says that capital markets obtained a major impetus with the creation of the first joint stock corporations in the early 1600s. By allowing the pooling of capital, these new structures revolutionized commerce and investment opportunities. This financial innovation - mutual ownership - did not aid futures markets development in commodities. Rather, the joint stock company was extension of mercantilism, a system aimed at promoting exports and limiting imports through tariffs and the Navigation Acts.

In fact, the mercantile system was highly protectionist. In Amsterdam, increasing taxes and tariffs levied by the state in the seventeenth century, caused skilled labour and commerce to move to other centres, to safeguard the general organization of guilds, workers' wages and prices.

The Poor Law in 1601 was enacted to deal with the rural labour dislocation caused by the conversion of much crop land to sheep grazing enclosures that was fuelling England's wool manufacture. The observation of individuals "unattached to the manor or any feudal superior" sounded an alarm in England in the seventeenth century, and the social and economic causes of the new pauperism became the subject of much literature and several humanitarian and religious movements.

Not surprisingly, then, while European powers battled each other for supremacy and sought a stable domestic food supply, commodity futures markets did not develop during this period and the notorious speculative fevers that erupted in the seventeenth and eighteenth century, such as "tulip mania" (1637) and the "South Sea bubble" (1720) involved schemes of a more exotic nature.

In 1830, England abolished its centuries-old Settlement Laws and Poor Laws, abruptly unshackling its labour force. It repealed its Corn Laws in 1848, and other countries began enacting similar reforms.

As nations ceased trade barriers, commodities flowed around the globe and the grain trade dramatically increased. It was during this century that family enterprises replaced state monopolies. The family grain companies emerged as giants of the trade - most of which are in dominance today.

## Japan

Talking about trends in, Japan the paper says that following the proto futures grain exchange in Amsterdam, the next centre to develop forward and eventually futures trade in grain was the Dojima Exchange in Osaka, Japan during the Tokugawa Period (1603 - 1867). Following the development of warehouse receipts, called rice bills, the market emerged as an autonomous commercial development between rice buyers and sellers. The officials, however, saw the trading in these bills as fictitious and the cause of inflation, and therefore shut down trading in 1705.

In 1730, when bountiful harvests together with monetary intervention were depressing rice prices, the government abruptly changed course and issued a decree to sanction trading at the Dojima Rice Exchange. The trade was lively and robust.

The Government of Japan tried unsuccessfully to intervene in the Dojima rice futures market several times over the next 100 years. By 1940, trading on the Dojima Rice Exchange was suspended.

## Development in the United States of America

The paper states that commodity markets in the American colonies existed haphazardly from early on. In 1697, "The Exchange" was operating commodity trading in fuel and grain. Speculation increased during the Revolution and the War of 1812. The US Supreme Court gave validity to commodity speculation when it ruled that a tobacco trader could legally profit from advance notice of the signing of the Treaty of Ghent in 1817, which caused a steep rise in tobacco prices.

The most famous and still extant futures exchange to emerge in the nineteenth century was the Chicago Board of Trade (CBOT) in 1848.

Chicago's geographic location at the southern edge of Lake Michigan and at the centre of extensive rail lines made it ideal as a trans-shipment hub and, combined with its commercial activity, was pivotal to the "Great European Grain Invasion" lasting from 1870 to 1913.

The CBOT, recognized from the onset for its legitimate commercial purpose, nonetheless drew Congressional attention soon after the start of futures trading.

As Chicago grew in importance in establishing the price of grain, the Farm Alliance and other farm groups demanded federal regulation of the CBOT. The Democratic Party introduced several measures favouring the suppression of "the pernicious practice of gambling in agricultural products by organized exchanges (Himmelberg, 1994) - none of which passed. During WWI the Government of the United States of America became involved in grain distribution, at which time wheat exports tripled and the price rose to USD 3.25 per bushel.

After the War ended, prices slumped and the farm block demanded and obtained the first federal futures market regulation. The Grain Futures Act (GFA) of 1921, however, was soon declared unconstitutional owing to its taxing power provision. The GFA did not end market manipulation, however, after a substantial rise in wheat prices in 1924, a Senate investigation found that some speculators had concealed their trading through the use of several accounts.

The farming community, too, was suspicious of the CBOT, particularly after it denied Farmer's National - a cooperative --- exchange membership. Alexander Legge, a former Farm Board Chairman complained in 1932 that the members of the CBOT " have set up a little government of their own, in which trials are held like a secret lodge, no lawyer being allowed to represent the client, and there being no appeal from their decisions to any court of record" (Markham, 2001).

In 1936, responding to complaints about trading on the exchanges, Congress enacted the Commodity Exchange Act "to facilitate honest and fair practices and to restrain fraud, excessive speculation and manipulation in commodity exchange" (Stassen, 1982).

#### **Global Protectionism and Monetary Instability after WWI**

Under this title, the writer says that following First World War, the liberal creed of laissez-faire imploded. As countries debased their currencies to fund the war effort, the system of fixed currencies based on the gold standard fell apart.

Against this backdrop of hyperinflation that ravaged the economies of Russia, Austria, Hungary, Poland, Bulgaria and Germany, the restoration of the gold standard and the fixed-rate currency system was a tenet common to all political and social doctrines of the new Europe.

Once currencies were re-fixed to gold, they came under speculative attacks and government intervention. Also common were bank panics: a bank failure in Austria in 1931 ignited a wave of bank runs across the financial world.

As global protectionism replaced the doctrine of laissez-faire, world trade collapsed by 66 percent. The United State of America left the gold standard in 1933 and the other countries operating on a "dirty float" arrangement abandoned gold by 1937. Conferences in Brussels, London, Lausanne, Geneva and Locarno failed to reinstate a pre-war stable monetary system to allow for the resumption of trade. Some countries reverted to barter: Germany conducted trade through bi-lateral barter arrangements with the nearby Balkan

states and across the Atlantic with Brazil and Argentina, bypassing the banking system altogether. The collapse of the monetary system would also coincide with the demise of the liberal state as autarchy and totalitarianism erupted out of war's wreckage in Europe, South America and Asia. Commodity dependent countries reeled during this period as commodity prices spiralled downward.

### Water War II and its Aftermath

The paper says that the commodities trade and currency system changed substantially following the Second World War. Protectionism persisted after the War. While Europe and East Asia lay in ruins, the United States of America emerged in a dominant position: besides holding 80 percent of the world's gold, it boasted a booming capital market and produces half the world's coal, two-third the oil, and more than half the electricity.

The paper further says that needing markets, the United States of America used the 1944 conference at Bretton Woods to put forward a new monetary arrangement. It advanced a system of American based monetary institutions and a currency formulation that would stamp the United States Dollar with reserve currency status.

The United States Dollar was then fixed to gold at USD 35 per ounce creating a quasi-gold standard system. The arrangement cleverly solved the problem of bank runs, as the public could not redeem foreign currency in gold equivalents and, the United States of America had outlawed gold coin ownership since 1933. The International Monetary Fund (IMF) would administer the stabilization fund by making short-term loans (in dollars) to any country suffering a balance of payments problem that might threaten currency alignments.

The paper further says that the disruption of the world economy by WWII put a halt to many commodity futures trading centres. Some countries simply banned trading altogether as too speculative. India, for example, had thriving futures markets in Bombay and Calcutta as well as several other cities trading in cotton, jute, spices, wheat and oilseeds commencing in 1857. As a sophisticated trade, traders in the Indian cotton market often undertook arbitrage with other major international cotton markets. However, futures trading was restricted during World War II, not to be restored until 2004.

Although futures trading in the United States of America restarted after WWII, a price support system administered under the Commodity Credit Corporation radically diminished the pricing function of futures. With few exceptions, prices and futures trade languished during 1950s and 1960s. The early 1970s proved another matter. In 1971, the United States of America President Richard Nixon announced that grain sales to the USSR and the People's Republic of China would no longer be subject to the Export Control Act that required United States flag carriers to transport half the tonnage shipped to these countries. The result was a massive vessel chartering and grain purchase programme by the USSR (aided by substantial United States export credits), which went unannounced for months. As the multi-million ton sales were revealed, grain prices exploded. They continued to move still higher as an Australian drought slashed global production and India tendered for sizable quantities of wheat.

The demand shock in grains was exacerbated by the United States of America decision to suspend US Dollar/gold convertibility. While the war in Southeast Asia was increasingly straining the United States of America financial system, the Government of France demanded gold in exchange for United States Dollar liabilities.

The United States Dollar sank 30 percent against other major currencies while gold-unmoored from its USD 35 an ounce peg - rallied to USD 200 by 1974. The price of maize, which had dipped below USD 1 per bushel, traded close to USD 4 per bushel, soybeans soared to USD 12 per bushel and wheat topped the USD 6 mark. Compounded by the petroleum crisis in 1973, the inflation experienced in the United States of America finally culminated in wage and price controls.

## **Birth of Financial Futures**

The paper points out that the end of Bretton Woods arrangements gave rise to the mammoth futures market of financial instruments. To enable trade between the United States Dollar and foreign currencies, Chicago Mercantile Exchange swiftly launched seven currency futures contracts in 1972.

The innovation of exchange traded financial futures spurred the creation of the Commodity Futures Trading Commission (CFTC) in 1974. The United States of America Congress vested the CFTC with broad oversight and anti-fraud powers.

Financial futures trading revolutionized credit markets, including consumers financing. Mortgages that had been traditionally based on fixed rate of 30 year loans became flexible, retail credit that had only been

extended on a store to customer level became intermediated by credit card companies. These new forms of financing became increasingly mainstream, particularly after interest rates declined from double digit levels.

Elsewhere during the 1980s, financial futures markets multiplied. Following the easing of capital controls, the London International Financial Futures Exchange (LIFFE) launched in 1982, followed by Marches A Terme d'Instruments Financiers (MATIF, Paris 1986) and Deutsche Borse in 1990. As intervention cereal stocks were declining and CAP reformed its producer subsidies from commodity specific price supports to direct compensation schemes, MATIF launched a rapeseed and milling wheat contract in 1988. LIFFE absorbed the London Commodity Exchange in 1996 that had been a trading centre for coffee, cocoa and sugar for several decades.

### **Global Effects**

While referring to global effects the paper says that the market liberalization that swept across the globe starting in the 1990s generated a surge in commodity exchange and derivative market development. Income growth, rising demand for agricultural products and a reduced scope of price support systems created a need for risk management centres to deal the resultant regional price volatility.

In addition to economic and political forces, the technological revolution proved highly instrumental in exchange development. By incorporating instant audit trials and safeguards against fraud, market manipulation and execution errors, the electronic trading system that began in Europe in the mid-1990s was pivotal in establishing market integrity. The superior oversight and surveillance functions allowed electronic exchanges to gain overwhelming government endorsement, even in countries such as China (Mainland), India and Thailand that previously halted or banned commodity futures trading. Most commodity exchanges developed as physical transaction hubs where producers delivered and sold their crops to buyers with storage facilities, having to accept the spot offer price. In short, governments realized that exchanges helped confer pricing power to the producer. As an example of the newfound producer focus, the South African Futures Exchange designated over 100 delivery locations in its corn and wheat contracts to encourage farmer participation following the elimination of price supports.

Emerging market exchange development however was not without several hitches. As a front runner in this field, China (Mainland) saw too rapid a growth starting in the mid-1990s.

In Thailand, manipulation of the rice contract caused the exchange to halt rice trading. The Government of India suspended trading in wheat, dal, tur, potatoes and rice in 2007 when it witnessed an inflationary trend in the prices of these commodities.

#### The United States of America:Derivatives Revolution

The paper, under this title, states that by the mid-1990s the Over the Counter (OTC) market in interest rate swaps was in full swing, topping USD ten trillion in notional amounts of outstanding contracts. The opaque market made headlines in 1995 when the firms Proctor and Gamble and Gibson Greeting Cards sued Banker's Trust for misleading them about the riskiness of derivatives transactions sold to them. Nonetheless, the swaps business continued unabated, but took another turn when the Federal Reserve orchestrated a bail out of Long Term Capital Management by its creditor banks in 1998.

Free market fervour and the movement for deregulation accelerated in the United States of America in 2000. The Commodity Futures Modernization Act allowed for the exemption of energy products from position limits (later to be called the "Enron loophole" when the energy firm collapsed) and the exemption of OTC swaps and derivatives from CFTC oversight. Most significantly, Congress overwhelmingly passed the Gramm, Leach, Bliley Act, repealing the Glass-Steagall Act of 1933 that had separated insurance functions and commercial investment banking.

The paper further says that according to Robert Reich, "By 1999, Wall Street was salivating over such a (Glass Steagall) repeal because it wanted to create financial supermarkets that could use commercial deposits to place bets in the financial casino. That would yield the Street trillions".

The CBOT also embraced the deregulatory spirit. Since early 1990s, it had been steadily increasing the speculative position limits in its agricultural markets with the approval of the CFTC. These limits, which had existed for decades at 600 contracts per commodity would finally grow to 22 000, 10 000 and 6 500 for maize, soybeans and wheat respectively by 2005 and were set to double when the 2006-2008 high food price event hit.

The institutions selling these products would typically charge a customer fee of two percent of assets and 20 percent (or more) of profits. For the sales firms, nothing in the equity or fixed income world could compare

with the profitability of the commodity index fee structure.

It obliges the customer to deposit 100 percent collateral to purchase a basket of commodity futures. The sales firm then allocates the deposits as follows: two percent is collected up front as an annual asset fee; eight percent goes to the clearing house to cover the initial margins for the commodities involved; the remaining 90 percent is placed in T-bills.

In commodity index funds transactions, the customer acts as the swaps seller to the sales firm, as the customer bears the market risk while the sales firm bears none.

Not surprisingly, several firms petitioned for and received "hedge exemption" status, meaning that they could amass positions in excess of the already colossal speculative limits. According to Barclays Capital, about USD 320 billion dollars is invested in various commodity index funds today with most linked to the GSCI and the Dow Jones UBS commodity index fund (not inclusive of hedge funds).

In addition to the index products, OTC swaps also became a significant agricultural market offering. The market is opaque - existing figures on the market depth, volume or purpose, are not public; so whether swaps are customized products intended to reduce price risk exposure or whether they are another form of speculation cannot be ascertained for now. However, according to recent CFTC Commitment of Traders Report, Swap dealers have negligible short positions and hold substantial portions of the long open interest in agricultural commodities, i.e. 20 percent, 25 percent and 37 percent in CBOT corn, soybean and wheat contracts respectively.

The paper says that two articles in the Economist (June 26, November 19, 2010) made assertions that there was "almost no evidence" to connect commodity speculators with commodity price spikes. When cocoa prices dropped over 30 percent within a month, the Financial Times did not follow-up on the price spike and collapsed, leaving important questions unexamined and unanswered.

As for-profit entities, the exchanges themselves have become forceful marketers of their own products and the merits of commodity futures. Having merged the CBTO, COMEX, and NYMEX into CME Group, the super-exchange has a ubiquitous presence in trade journals, newspapers and broadcast media. Euronext LIFFE also vaunts its rising presence in commodity futures trade, openly challenging the CME for dominance. Saying the commodity investing "has never been easier", in the Summer issue of Swiss Derivatives Review, a Euronext LIFFE director reproaches CBOT grain contracts for their lack of convergence between cash and futures, (Dudden, 2010) encouraging traders to switch to its products.

The paper further says that calling the steep rise of institutional inflows into the commodity futures the "Financialization of Commodity Markets," it argued that swap dealers and index funds ignored supply and demand fundamentals when making decisions to buy or sell commodity futures, (UNCTAD, 2009). The Report concluded that dealers /funds distorted proper price discovery. The CBOT itself raised the same concerns about the lack of convergence between futures and cash and the permanent contango in the wheat market, coinciding with the increase in fund activity.

## **A New Framework**

Under this heading, the paper points out that 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.

The annual volume of trade in the CBOT wheat contract for 2009 was about 90 billion bushels - the equivalent of trading the Soft Red Wheat crop every business day. Even if commercials were heavy participants in this trade volume - most of their buying and selling would have to be deemed speculative as well.

Poorer countries deserve answers to the question: in what proportions are speculative vs. fundamental forces driving commodity futures price formation? As food is the largest single expenditure for over a billion people in this world, price hikes in basic staples simply means reduced consumption of food.

High and volatile benchmark futures prices unleash a chain of events in food distribution networks tending to fuel futures prices even higher. In 2008, this chain of events resulted in record high prices. As estimates for stock-to-use ratios in wheat declined to the lowest levels in 30 years, prices shot up.

Furthermore, fluctuating markets make planting decisions far riskier than ever; price signals observed during planting may completely reverse by harvest, causing great hardship. So you get all kinds of misleading price signals. Farmers don't gain.

The document further says that poorer countries also suffer from monetary policy effects when food prices

rise. Most developing countries' price indices are heavily weighted in food. In both India and China, the central banks are responding to domestic food inflation by rising interest rate. These rate hikes may produce more harm than good by stifling business growth and farm productivity instead of stabilizing food prices.

Unfortunately, the will to examine the issue of speculation barely exists. In the richer countries - hosts to the quadrillion dollars a year futures exchanges - obesity, not food deprivation, is the greater concern. Hunger and starvation are abstractions seen through the intermediation of flat screen TV. Revealing how the general population is unperturbed and largely unaware of the 30-fold increase in speculative agricultural "investment" in six years.

Also, in modern celebrity culture, "big traders" have become "aspirational" figures. Today's sleek suited traders are the picture of wealth - worthy of imitation. Financial firms involved in derivatives trading employ over 1600 lobbyists in the United States of America to help burnish their image as providing a grand social good. Many officials in the "watchdog" organizations are pulled directly from the investment bank community, reinforcing the "interlocking directorate" phenomenon between big business and government, first observed in 1956, by Sociologist C. Wright Mills.

## Methodology

The paper says that most attempts to date to quantify the effects of speculation in agricultural markets have failed. Unfortunately, the higher level of disaggregation makes year to year comparisons impossible. For example, it previously placed "swaps dealers" in the same category as commercials, but now assigns them a separate category. Ownership (long and short) is an important informational component - however, open interest does not move markets. Open interest does not reveal the buying or selling patterns by the various trader categories on a particular day.

Now that markers are electronic, the daily "pit" commentaries previously provided by commission house merchants are gone - the information on the quantities bought and sold by various firms, including the major grain firms and hedge funds, is no longer available. But exchanges could produce these reports with great precision. They possess a perfect audit trail on the buys and sales of every firm - including quantities, prices and time of sales.

With the expansion of limits at the CBOT, a single speculator can, for example enter an order for 22,000 contracts of corn - 2.78 million tonnes - the equivalent of fifty-five Panamax sized vessels. As a serious supporter of transparency, the CFTC should seek these numbers.

The paper further says that although the entire derivatives industry has at times been labelled "casino capitalism", little debate exists on the global societal detriment of channelling more than a quadrillion dollars away from real investment into an activity that produces no economic growth and is a "zero-sum-game".

Also, now is the appropriate time to investigate how structural change in futures markets, including the migration from pit to electronic trading, has impacted the market structure, a phenomenon completely unknown. Price diversion between futures and cash values has caused hedging to become too risky and margin calls too expensive. Under this vacuum, markets can suffer from greater volatility and price spikes as buys and sells "at the market" simply go to daily price limits up or down.

Although published without regard to trader type, the COT reveals in wheat, for example, that 37 percent of the long open interest and 24 percent of the short open interest are controlled by 8 or less traders, challenging Adam Smith's capitalistic notion of the multitudinous "invisible hand."

## **Addressing Volatility**

The paper says that in addition to providing greater transparency to transactions, exchanges - which to date have relied on both position limits and price limits - could also consider several new approaches. These are:

- Limit the size of market orders entered within a particular time period. Although the investigation is still ongoing, the stock market "flash crash" (May 2010) in which the United States of America based Dow Jones Industrial Average dropped about 1000 points in a matter of minutes is thought to have been triggered by large sized orders entered in rapid succession.
- Ban high frequency trading. High frequency trading (HFT) is counter to the price discovery function of futures markets and should be banned.
- Apply spot month limit positions for longer time period prior to delivery month. Under today's rules, speculators must reduce the size of their positions to 600 contracts (all United States grain commodities) before the first notice day of the contract. The exchanges should consider whether this reduction might be

undertaken two to three months prior to first notice day to smooth out this rolling process.

- Settle contract every month either by delivery or cash. Delivery or cash settlement every monthwould cause continuous convergence of cash to futures in the front month contract.
- Allow shipping certificates or warehouse receipts to expire within one year of issuance. The wide contango has transformed commodity instruments into short medium-term financing arrangements and hindered the movement of grain in and out of the delivery market. If exchanges wanted to force the grain back into commercial channels, it could limit the life of these instruments to one year. Thus holders of expired warehouse receipts (WHRs) or shipping certificates (SCs) would have to sell the grain represented by the expired instruments to a willing cash buyer.
- Reduce position limit. The CBOT increased its limits over a twenty year period from 600 contracts to 22 000 (corn), 10 000 (soybeans) and 6 500 (wheat). Relatively small limits exist for the same or similar contracts at Euronext LIFFE and these contracts are gaining rapidly in open interest reportedly because their pricing is highly correlated with underlying cash values. CBOT needs to re-examine its position limits in the agricultural complex.
- Increase margins. Although controversial because high margins dissuade legitimate hedging, raising margins can reduce the leverage within the system and help control volatility.

## Conclusion

The paper concludes that throughout history, speculation has been strictly circumscribed or prohibited because of its market distorting effects and its disruption to the social order. For a variety of reasons, speculation and modern-day speculators have gained increasing respectability, particularly in the United States of America. Owing to enormous profitability of commodity linked products, banks and other traders have waged a successful public relations campaign, surmounting criticism traditionally associated with speculative activities. The creed of free market orthodoxy, defining agricultural markets as just another set of institutional arrangements to be gainfully exploited, has also stifled any debate over the morality of food profiteering and the effect upon the poor. Finally, aided by an admiring "celebrity conscious" media, speculator have ascended to a savvy venerable class.

The paper further says that a deep fissure divides the world's rich and poor. The IMF World Economic Outlook (2007) reports that, in the last 20 years, the effective global labour force quadrupled, which has put downward pressure on wages - in both rich and poor countries, and has created a life threatening hardship in the least developed ones. Owners and controllers of capital have never had so many opportunities to enrich themselves. Largely insulated from failure, today's institutional mega-traders can manoeuvre from one "hot sector" to another, with zero regard to ethical considerations.

While speculation is crucial to proper functioning markets, unlimited speculation is not. As the prices broadcast from the major exchanges, particularly the CBOT, reverberate around the world and affect billions of lives, a serious and more directed inquiry into the trading on the international commodity futures markets should commence. Only a new methodological approach - one that analyses orders and transactions, segregated by trading types -can start to separate fact from fallacy.

## Food Commodities Speculation and Food Price Crises

By:

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**Briefing Note** 

02, September 2010

## **Bird's Eye View**

In this 13-page note, the writer talks about 'regulation to reduce the risks of price volatility.

The writer examines the impact of speculation on the volatility of the prices of basic food commodities, and he also identifies possible solutions forward. The writer says that the global food price crisis that occurred between 2007 and 2008, and which affects many developing countries to this day, had a number of causes. The initial causes related to market fundamentals, including the supply and demand for food commodities, transportation and storage costs, and an increase in the price of agricultural inputs. However, 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.

While talking about the reason for crisis, the writer points out that a significant role was played by the entry into markets for derivatives based on food commodities of large, powerful institutional investors such as hedge funds, pension funds and investment banks, all of which are generally unconcerned with agricultural market fundamentals. Such entry was possible because of deregulation in important commodity derivatives markets beginning in 2000.

#### The Food Price Crisis of 2008

The writer's notes says that as a result of the increase in prices of basic food commodities and oil in 2007-2008, the number of people in extreme poverty rose by 130 to 150 million, according to an estimate of the World Bank. At least 40 million people around the world were driven into hunger and deprivation as a result of the 2008 food price crisis, raising the total number of people living in hunger to 963 million in 2008. The brunt of the food price spike was borne by people in the Low Income Food Deficit Countries (LIFDCs), or the poorest developing countries. In these countries, of special concern are the urban and rural poor who even at the best times must spend up to four-fifth of their income on food. The food price crisis undermined this already meagre ability to meet essential food needs. This should not be allowed to recur.

Beginning 2005, markets for numerous agricultural commodities started to witness price increase and higher levels of volatility. The note says that according to a document circulated under the auspices of the UN Conference on Trade and Development (UNCTAD), food prices rose by 83% between 2005 and 2008, with maize prices nearly tripling, wheat prices increasing by 127%, and rice prices by 170% between January 2005 and June 2008.

The note further says that at present, there is a lively debate as to whether these developments were the result of factors adversely affecting food supply, or whether they were caused by excessive speculation in food commodities derivatives. Advocates of the first position maintain that the price spikes were attributable to factors such as a decline in the rate of growth of food production, climate change and water depletion, and the growth of biofuels. For instance, wheat production, they note, was lower than expected because of a severe drought in Australia, and according to the IMF, consumers in China and India developed a taste for meat which drove up grain prices.

However, the note points out that a closure examination reveals that the abovementioned arguments of supply and demand are insufficient to explain the full extent of the increases and volatility in food prices. For instance, the price of rice rose by 165% between April 2007 and April 2008 - a magnitude difficult to explain by reference to market fundamentals.

It is also difficult to accept the IMF's thesis that the food price increases were the result of per capita income growth in China, India. That interpretation is not corroborated by data collected by the FAO (Food and Agriculture Organisation) for the period concerned.

## The Speculative Bubble Effect

The note says that instead, a number of signs indicate that a significant portion of the price spike was due to the emergence of a speculative bubble. The 2008 food price crisis was unique in that it was possibly the first price crisis that occurred in an economic environment characterized by massive amounts of novel forms of speculation in commodity derivative markets.

The particular area of concern is speculation in derivatives based on food commodities. A study conducted by Lehman Brothers just before its bankruptcy revealed that the volume of index fund speculation increased by 1,900% between 2003 and March 2008. Morgan Stanley estimated that the number of outstanding contracts in maize futures increased from 500,000 in 2003 to almost 2.5 million in 2008.

In fact, while the food price crisis may have been sparked off the above mentioned developments affecting demand and supply, its effects were exacerbated by excessive and insufficiently regulated speculation in commodity derivatives. The promotion of biofuels and other supply shocks were relatively minor catalysts, but they set off a giant speculative bubble in a strained and desperate global financial environment. These factors were then blown out of all proportion by large institutional investors who, faced with the drying up of other financial markets, entered commodity futures markets on a massive scale. Therefore, the policy solutions that are needed to avert another crisis must address both the problems affecting underlying financial market fundamentals, and the conditions under which speculation is allowed to take place in essential food commodities, thereby exacerbating the effects of those movements in market fundamentals.

### **Traditional Speculation**

The note states that traditional speculation in agricultural commodities markets is based on market fundamentals - above all on the demand and supply for any particular commodity. This form of speculation is generally considered necessary and useful in the market: it facilitates commercial hedging against risk, and it allows for price discovery, assisting farmers and buyers in discovering the reasonable price for a particular commodity in individual trades and on spot markets. If the buyer is willing to offer a higher price for a future than before, it means that he/she expects the eventual price of the commodity to increase further. As such, if the price of the commodity futures goes up, it signals to sellers on spot markets to raise their prices. Moreover, it is conventionally thought that such speculation reduces price volatility, because speculations provide a market for hedgers, and because they buy when the price is low and sell when the price is high, thus evening out extremes of prices.

Of course, such speculation is not an unalloyed blessing, it can have significant price effects without adding anything of economic value. It can also be extremely dangerous - the terrible Bengal famine of 1943 in which 3 million people died, occurred to a large extent because grain traders hoarded essential food grains in anticipation of future higher prices. Such hoarding exacerbated the price spike, thus denying the poorest sections of society access to food.

## **Momentum-Based Speculation**

The note further says that another form of speculation is based simply on 'market momentum'. This has been described as "herding behaviour in times of strong price trends, which in developed and easily accessible markets can result in the emergence of speculative bubbles...". Far from providing a stabilizing hand, such speculation tends to increase price volatility. Such momentum-based speculation may have been the main cause of the food price crisis in 2007-2008.

It is important to note that different kinds of speculation in different markets combined to create the food price crisis, and that no one category of market conduct was singly responsible. For instance, market momentum-based speculation in oil contributed to the food price crisis, by affecting fundamental conditions of supply of an essential agricultural input. Petrol is an integral component of modern food supply chains, being used for fertilizers, food processing and transportation, and the rise of bioenergy leads to an increased merger of the food and energy markets. The fact that market-momentum based speculation may have been the main contributing cause of the food price increases is no reason to lower one's guard against other factors which also cause food prices to rise.

## The Larger Financial Markets

The note says that sudden massive entry of index funds into commodities should be placed against the background of developments in the broader financial markets. Following the passage of the U.S. Commodity Futures Modernization Act in 2000, Over the Counter (OTC) derivatives were exempted from the oversight of the U.S. Commodity Futures Trading Commission (CFTC). As a result of the Commodity Futures Modernization Act and the decisions of the CFTC, such trading was allowed to take place without any position limits, disclosure requirements, or regulatory oversight. Moreover, the Act permitted for the first time OTC derivatives contracts where neither party was hedging against a pre-existing risk; i.e. where both parties were speculating. Also, it enabled to hedge against those risks by taking positions on exchanges.

The lack of regulation of derivatives greatly facilitated the entry of institutional investors into commodity index funds.

Beginning at the end of 2001, food commodities derivatives markets, and commodities indexes in particular began to see an influx of non-traditional investors, such as pension funds, hedge funds, sovereign wealth funds, and large banks that packaged and dealt the commodity index instruments. The reason for this was simply because other markets dried up one by one. As each bubble burst, these large institutional investors moved into other markets. Strong similarities can be seen between the price behaviour of food commodities and other refuge values, such as gold. As the European Commission notes, the prices of both had been largely stable, began to rise slowly in 2005, and accelerated sharply in August 2007, when the subprime crisis hit. Similar behaviour obtained in oil market in February 2008 and peaked in June 2008, only to fall back subsequently.

The reasons for such movement were twofold. First, because it was thought that markets for food and oil would be profitable because they could not possibly dry up. Second, a portfolio diversification practice appears to have emerged of spreading out risk in any investment portfolio by balancing out investments in securities or bonds with investments in markets that display unrelated or opposite behaviour, such as food and oil. Total index-fund investment in corn, soybeans, wheat, cattle and hogs increased from US\$ 10 billion in 2006 to more than US\$ 47 billion in 2007.

The food price bubble burst when the giant non-traditional speculators lost the ability to carry on, as a result of their investments in other markets crashing. When they fell, the upward price spiral also ended.

#### **Policy Responses**

The note says that the 2008 food price crisis arose because a deeply flawed global financial system exacerbated the impacts of supply and demand movements in food commodities. Reforming the global financial system should therefore be seen as part of the agenda to achieve food security, particularly within poor net food-importing countries.

#### **US and EU Initiatives**

The note says that the recent Dodd-Frank Act on financial reform passed by the US Congress is encouraging in this regard. With specific relation to agricultural commodities, the Dodd-Frank Act sets out a new Section 4a(c) of the Commodity Exchange Act (CEA), which requires the CFTC to establish, within 270 days of the passage of the Act, limits on the number of agricultural commodities that can be held by any one trader, as well as on energy related commodities and futures. It also requires the CFTC to establish limits on the aggregate number of amount of positions in certain contracts based upon the same underlying commodity that may be held by any one person, including any group or class of traders, for each month. It is to be hoped that the CFTC does not set those limits so high as to be meaningless. On the other hand, the Dodd-Frank Act has not brought about the structural changes in the financial markets many had hoped for; in particular, the "Voicker rule" announced by President Obama in January 2010, which was intended to prevent banks from using taxpayer-backed funds to speculate on financial markets and give up their stakes in hedge funds and private equity funds, has been severely watered down in the Act.

The note further says that in the European Union, Michel Barnier, the EU Commissioner for the Internal Market and Services, announced on 15 September 2010 a Proposed Regulation on OTC derivatives, central counterparties and trade repositories. This proposed regulation imposes mandatory reporting and clearing (where possible) of OTC derivatives, and stipulates that "non-financial actors" will be subject to the same rules as "financial actors" if they meet certain thresholds.

The propose regulation will place obstacles in the path of index speculators' participation in commodity index funds. However, these obstacles do not appear to be insurmountable. Moreover, there may be a difference

between the "position limits" imposed by the Section 737 of the Dodd-Frank Act, and the "concentration limits" imposed by Article 44 of the proposed regulation. The former provision sets out clear restrictions, while the latter appears to set out more variable, individualized limits that could be subject to dispute.

In general, the EU has yet to act as boldly as the US with specific regard to speculation in food commodities, although the consequences of inaction are equally considerable.

While talking about **Possible Improvements** the note points out that certain steps could be taken to prevent improper speculation in the commodities derivatives markets.

- Certain important regulatory bodies comprise too few experts in commodity markets: a first improvement could be simply to begin remedefying this imbalance.
- Next, all regulators should distinguish between traders hedging against genuine commercial risks from non-traditional, market momentum-based speculators interested simply in making gains on price changes.
- Most importantly, regulators should recognize that there are fundamental conceptual differences between commodity derivatives and financial derivatives. They should not be treated as belonging to the same category of instruments.
- Once the distinction is made, access to commodities derivatives markets could be restricted to traders and specialist brokers. A number of proposals could be considered, such as an outright ban on momentum-based speculation, and a compulsory registration of actors trading on commodity futures markets, in order for such exchanges to exclude financial traders.
- In addition, certain regulatory steps could be taken to reduce the incentives for financial speculation. Among such measures are the establishment of spot platforms; the imposition of compulsory delivery, preventing traders from setting their obligations to cash; and, as proposed earlier by the Special Rapporteur, the imposition of higher margins, (for instance, from 10 to 30 per cent as down payment), thus forcing speculators to make a large down payment for their speculation.
- Aside from these regulatory changes, strengthening of spot markets may be brought about by investing in better warehousing facilities, communications services and in transport infrastructure. Such steps will not only reduce the influence of non-commercial commodity futures traders, and increase the participation of farmers on such markets, but will also improve the ability of commodity futures to act as price signals.
- At the same time, spot market regulation would be necessary in order to ensure that the delivery requirements do not result in hoarding. The Special Rapporteur believes that spot markets should be made transparent, so that the holdings of any single trader are known to all, and that there should be more transparency also about the strategic reserves held by States. Second, strict position limits should be placed on individual holdings, such that they are not manipulative.

## **International Cooperation**

The note says that there is a role for international cooperation in this regard. The ability of individual countries to feed their populations could be bolstered by setting up food and grain reserves. The efficacy of such food reserves would be enhanced if they were established at regional and not just at national level, or if countries exchanged information about their food reserves and insured each other against price volatility by mutualising such food reserves. But improved regulation preventing large financial actors from influencing the commodity futures markets would also significantly limit volatility.

Other initiatives presently extant at the international level are compensatory financing schemes such as the EU's STABEX and FLEX schemes, the IMF's Compensatory Financing Facility (CFF) and Exogenous Stock Facility (ESF), and the Food Financing Facility (FFF) mooted in the Marrakech Decision and the WTO Ministerial Conference at Doha. They simply help countries avoid the adverse impact on growth as a result of food price volatility, such as, for instance, by giving access to short-term loans.

In the Conclusion, the writer says that action to address the dangers of speculation in basic food-staffs is needed. He says that the fundamental structure of global financial markets appears to be little different from before the food prices crisis of 2007-2008. Although the global stocks of grain are higher now than they were previous to the 2007-2008 food crisis, the financial drivers of that crisis remain largely unchanged. More still need to be done to curb the negative effects of speculation on basic food commodities. This is an important source of vulnerability, particularly, for food net food-importing countries, whose dependency on food imports has been increasing over the years, and who will in the future suffer more balance of payments problems if they are confronted with a new peak in price.

#### Recommendations

Under this heading, the writer suggests --

- 1. Comprehensive reform of all derivatives trading is necessary. The very first step would be to require registration, as well as clearing to the maximum extent possible of OTC derivatives.
- 2. Regulatory bodies should carefully study and acquire expertise in commodity markets, instead of regulating commodity derivatives and financial derivatives as if they were the same class of assets.
- 3. Access to commodities futures markets should be restricted. A significant contributory cause of the price spike was speculation by institutional investors who did not have any expertise or interest in agricultural commodities, and who invested in commodities index funds because other financial markets had dried up, or in order to hedge speculative bets made on those markets.
- 4. Spot market should be strengthened in order to reduce the uncertainty about futures prices that creates the need for speculation. Spot market should be transparent, and holdings should be subject to strict limits in order to prevent market manipulation.
- 5. Physical grain reserves should be established for the purpose of countering extreme fluctuations in food price, managing risk in agricultural derivatives contracts, and discouraging excess speculation, as well as meeting emergency needs.

## The Great Hunger Lottery - How Banking Speculation Causes Food Crises

By:

Tm Jones

Published by:

World Development Movement

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## **Bird's Eye View**

This 35-page document was divided into six chapters and also contains an **Executive Summary**. The objectives of the document is to campaign for a world without poverty and injustice, to tackle the causes of poverty and promote positive alternatives which put the rights of poor communities before the interest of big business.

In Executive Summary, the document says that over the past decades, the world's most powerful financial institutions have developed ever more elaborate ways to package, re-package and trade a range of financial contracts known as derivatives. Derivative is a financial contract with a value linked to the expected future price movements of the underlying asset, and are traded on a growing number of such assets, from share prices, to mortgages, bonds, commodity prices, foreign exchange rates, and even index of prices. Derivatives trading has been one of the most lucrative parts of the financial industry, but it is the increasingly complex, opaque and disconnected nature of these and similar products that ultimately triggered the collapse of the banks and the worst financial crisis in human history.

The document further says that nowhere was this more clearly seen than during the astonishing surge in staple food prices over the course of 2007-2008, when millions went hungry and food riots swept major cities around the world. 'The great hunger lottery' shows how this alarming episode was fuelled by the behaviour of financial speculators.

'The great hunger lottery' carries a very straightforward message: allowing gambling on hunger in financial markets is dangerous, immoral and indefensible. And it needs to be stopped before any more people suffer to satisfy the greed of the banks.

In **Chapter I**, under the title Introduction, the document says that in 2007 and 2008, there was a huge increase in the price of food and energy. The International Monetary Fund's (IMF) food price index increased by more than 80 percent between the start of 2007 and the middle of 2008. Oil prices went almost \$150 a barrel. High prices contributed towards pushing countries into recession.

But across the global south, the impacts were even more serious. Households in developed countries tend to spend between 10 and 15 percent of their income on food. While poor households in developing countries tend to spend between 50 and 90 percent. Combined with lower incomes due to the global economic slowdown, high food prices led to number of chronically malnourished people increasing by 75 million in 2007 and a further 40 million in 2008.

The document says part of the reason for the spike in food and other commodity prices was financial speculation. It also says that as long as it remains unregulated, there is a danger it will contribute to a huge spike again.

Regulating commodity derivatives is a key part of the necessary response to the global financial crisis. Unregulated, opaque derivatives hid major risks in the financial system which directly caused the financial crisis. Resources tied up in unproductive commodity derivative contracts continue to increase economic inefficiency and deny resources for genuinely useful activities.

In **Chapter II**, the document presents the evidence that speculation in derivatives has influenced the real price of food. It outlines the particular role of commodity index funds. It also shows how unlimited speculation has also caused disruptions in the market, making it more difficult for farmers to use derivatives to hedge their risk, and made futures markets less able to predict future real price.

## The Impact of Financial Speculation on Price Increases and Volatility

The document says that the history of modern commodity speculation has its origin in the mid-19th century, when so-called 'futures contracts' were created for agricultural products traded in the United States. These contracts allow farmers to agree a guaranteed price for their next harvest well in advance, giving them greater certainty of income when planting crops. Futures contracts remain very important for farmers.

However, in the early 20th century futures contracts started to be bought and sold by financial speculators who had nothing to with the physical production, processing or retailing of food. This activity began to affect the actual prices of foodstuffs on the daily 'spot markets', causing them to become more volatile and to rise and fall sharply. Following the Wall Street crash, the Roosevelt government in the United States recognized this problem, and introduced regulations such as position limits to prevent excessive speculation through the Securities Act of 1933, the Securities Exchange Act of 1934 and the Commodity Exchange Act of 1936.

In the 1990s and early 2000s these regulations were weakened in the face of intense lobbying by the financial industry.

Banks such as Goldman Sachs created index funds to allow institutional investors to 'invest' in the price of food, as if it were asset like shares, and it was exempted from position limits. These commodity index funds have since become the primary vehicle for speculative capital involvement in food commodity markets. The number of derivative contracts in commodities increased by more than 500 percent between 2002 and mid-2008.

In a study on the issue, another UN body, the United Nations Conference on Trade and Development (UNCTAD) concluded that "part of the commodity price boom between 2002 and mid-2008, as well as the subsequent decline in commodity prices, were due to the financialization of commodity markets. These findings support the view that financial investors have accelerated and amplified price movements driven by fundamental supply and demand factors".

This analysis is widely shared within the financial industry itself. As early as April 2006, Merrill Lynch estimated that speculation was causing commodity prices to trade at 50 percent higher than if they were based on fundamental supply and demand alone.

## The Murky World of Commodity Index Funds

The document says that these indexes put money into derivatives across a range of commodities. They are mainly created by banks such as Goldman Sachs and Deutsch Bank. It is estimated the money in such index funds increased fivefold from \$46 billion in 2005 to \$250 billion in March 2008.

The index funds are rarely marketed at 'normal' people and instead tend to be used by institutional investors such as pension funds, insurance companies and mutual funds such as unit trusts.

Central to how index funds work are banks. Banks play two, potentially conflicting roles; arranging the buying of derivatives contracts for which they charge fee, and selling the contract the index fund is buying. This means banks are trading against their own clients. The largest commodity swap dealers are Goldman Sachs, Bank of America, Citibank, Deutsche Bank, HSBC, Morgan Stanley and JP Morgan. Goldman Sachs

on its own made around \$5 billion from commodities trading in 2009, and Royal Bank of Scotland made \$1 billion.

One commentator at the Financial Times noted in 2007 that investors in commodity index funds were losing large amounts of money and exposed that the main beneficiary was the trading arm of Goldman Sachs.

UNCTAD says that a major new element in commodity trading over the past few years is the greater presence of financial investors that treat commodities as an asset class. The fact that these market participants do not trade on the basis of fundamental supply and demand relationship, and that they hold, on average, very large positions in commodity markets, implies that they can exert considerable influence on commodity price developments.

In this context, Goldman Sachs argues that commodity prices reflected real supply and demand, saying that the so-called commodity speculator should be applauded for speeding up the message to oil companies and consumers that energy markets are tight and that this signalled the need for greater investment.

The document further says that there is a scarcity of data on the commodity derivatives trade, particularly because huge numbers are sold 'over-the-counter' and so are opaque. However, one estimate of contracts purchased by index funds shows a close correlation with food prices. Interestingly, the number of contracts held by indexes began to fall before the unusual and extreme drop in prices in mid-2008.

It also says that one way in which the movement of money into and out of index funds is seen is in the correlation between commodity index prices and heavily speculated exchange rates. This speculation impacts on the price of currencies and commodities.

Index funds can also use computer models to decide what to invest in. These models tend to be similar across funds, leading to herd behaviour into and out of commodity contracts. *UNCTAD states that this can result in increased short-term price volatility, as well as the overshooting of price peaks and troughs.* 

Jayati Ghose, professor of economics at Jawaharlal Nehru University, New Delhi, says that from about late 2006, a lot of financial firms - banks and hedge funds and others - realized that there was really no more profit to be made in US housing market, and they were looking for new avenues of investments. Commodities became one of the big ones - food, minerals, gold, oil. And so you had more and more of this financial firms entering these activities, and you find that the price then starts rising. And once the price starts rising a little bit, then it becomes more and more profitable for others to enter. So what was a trickle in late 2006 becomes a flood from early 2007.

#### Market Servant or Market Master?

The document says that two main reasons are given for why speculation is needed in commodity markets: to help producers and buyers of commodities to manage their price risk, and to help price discovery. Whilst these are valid reasons for allowing a limited amount of speculation. But there is evidence that excessive speculation has actually made more difficult for commodity markets to fulfil these objectives.

**Price risk management:** Producers and purchasers of food who want to use futures markets to limit their exposure to price movements need financial traders to take on that risk. Such traders effectively act as insurers to, for example, a farmer who gets a guaranteed return, and the trader gets a potentially higher return. Such traders are therefore needed to provide 'liquidity' to the futures markets. Whilst such liquidity is needed, the current scale of trading by financiers dwarfs that actually needed to provide sufficient liquidity for real buyers and sellers of food.

The increased demand for food derivatives by speculators has actually made it more difficult for farmers to hedge their risk. With rising futures prices, more margin has been required of farmers in order to hedge.

**Price discovery:** Futures contracts are seen as a way to discover the price of a commodity in the future. Financial traders are expected to use information they learn about a particular commodity to influence their decisions about what price to buy and sell futures contract at. Policymakers and farmers can then use future prices to help make decision.

However, in recent years, futures markets have less accurately predicted the future spot price than just assuming that the future spot price would be the same as the current spot price.

This failure of futures markets to predict prices can be explained largely because index speculators often base their decision to buy contracts on information unrelated to underlying supply and demand in that commodity. They are driven by factors outside commodity markets such as availability of cheap money, currencies, property shares, and using commodity markets as a hedge. Furthermore, the larger the investments by financial traders the more they determine prices rather than demand and supply, as evidenced by the subprime mortgage crisis that led to the 2008 crash. All these suggest that rather than helping to discover prices, the scale of financial involvement in commodity markets is actually disrupting them, making them less able to set sustainable prices.

In **Chapter III**, the document talks about the impacts price swings have had. It outlines how poor households in developing countries were impacted by the high prices and volatility of staple foods in 2007 and 2008. It shows how farmers of cash crops such as cocoa and coffee also suffer from the increased volatility in the price of such crops.

## Hunger and Poverty

The document says that the increase in the price of food has been disastrous for people across the world. The latest estimate by the Food and Agriculture Organization (FAO) in June 2009 was that over one billion people are now chronically malnourished due to 'global economic slowdown combined with stubbornly high food prices'. It is estimated that the food price spike increased the number living in poverty by between 100 and 200 million. As well as eating less food, households have been forced to:

- Eat less fruit, vegetables, dairy and meat in order to afford staple foods.
- **Reduce any savings, sell assets to take out loans.** This can include selling-off assets vital to future income such as land or cattle. Mohemmad Farook, a UNICEF child protection specialist in Lesotho says that many people responded by "selling off assets if they have any- or taking loans with high interest rates, for which they could end up in bonded labour, so the situation will get worse.
- **Reduce spending on 'luxuries' such as health care, education or family planning.** Mohemmad Farook in Lesotho says that many people had to take children out of school in 2008 so that they could be sent out to work.
- Women tend to manage the food budget and often bear much of the suffering. Women may also try to increase income through taking on insecure and risky employment such as becoming domestic workers, mail-order brides and sex workers.

The document further says that high food prices affect poor farmers as well as the urban poor. A high percentage of rural households are net buyers of staple foods. In Kenya and Mozambique, around 60 percent of rural householders are net buyers of maize. Very few poor farmers produce a significant surplus to sell. In addition any increase in income was for many producers negated by increasing costs of farm inputs such as oil and fertilizer. The cost of fertilizer almost doubled in 2007 and 2008.

Furthermore, in general terms wild price swings make it difficult for farmers to make decisions about what crops to grow and what they should invest precious resources. As Jayati Ghosh, professor of economics at JNU, New Delhi, says that *the world trade market in food, has started behaving like any other financial market: it's full of information asymmetry... So farmers think that the price of sugarcane is really high, and they go out there and cultivate lots of sugarcane. By the time their crop is harvested, the price has collapsed. So you get all kinds of misleading price signals. Farmers don't gain anything.* 

Sudden food price surges also frequently result in political and social unrest, and the crisis of 2007-2008 was no different. There were protests and riots against the rising prices in major cities across the developing world.

**Cash Crops** - The document says that speculation on cash crops such as cocoa, coffee, and cotton is actually a large problem for farmers. Speculation can temporarily push up the prices of these crops, but this also causes the price to become more volatile with sudden decreases in price too.

In the first half of 2008 the price of cocoa hit a 28 year high. However, these rises were only temporary and in the second half of 2008 cocoa experienced a sharp decline. This volatility in cash crop prices is a major issue as it makes it harder for farmer's to make decisions. Cash crop farmers in developing countries lack the knowledge and money to adequately respond to confusing market signals, and the farmers have few safety nets such as insurance, futures contracts or other risk reducing instruments to protect them if they respond incorrectly.

The document further says as farmers cannot respond to the volatile market they can be forced out of business altogether, and lose their main source of cash income. One of the initial responses of cash crop farmers will be to sell any assets they hold, such as land. This can create opportunities for corporate land grabbing, where companies buy-up land to produce export crops. For example, in just five African countries, 1.1 million hectares has been taken over by companies to grow biofuels. Furthermore, buying up land is seen

by speculators as an alternative way of speculating in food to buying derivatives.

Another problem caused by speculation is that more powerful middlemen can use the volatile price to take advantage of individual farmers by buying at a low price from the desperate farmers and then selling at the high international price, gaining most of the benefits of high commodity prices for themselves. This price volatility is also a major barrier to increasing cash crop farmer's efficiency.

Cash crop markets provide the most recent evidence that speculation continues to be a problem. Chocolate producers have identified speculation as a key reason why cocoa prices reached an all time high in April 2010.

**Inflation** - The document says that as well as increasing food and oil prices for people across the world, speculation also impacts on the general rate of inflation.

In the context of speculation on commodity prices, low interest rates can also increase inflation by increasing speculation. Low interest rates make more money available which can then be put into commodity derivatives, increasing commodity prices. This is another route by which low interest rates can increase inflation. But this does nothing to increase demand and economic activity, it just ties the cheap money up in unproductive derivative contracts.

In **Chapter IV**, the document discusses the ways in which real changes in supply and demand have contributed to changes in food price in recent years.

The document says that financial speculation is not the only cause of high food prices during 2007-2008. Changes such as increased use of biofuels, changes in crop yields and the fall in the value of the dollar have all affected prices in recent years. But an examination of the evidence during and since the 2007-2008 crisis leads to the inescapable conclusion that speculation rides on the back of these underlying changes, amplifying their impact on price. The FAO concludes that: **at the onset of the price surge in 2007, FAO identified a number of possible causes contributing to the price rise: low levels of world cereal stocks; crop failures in major exporting countries; rapidly growing demand for agricultural commodities for biofuels and rising oil prices. As the price strengthening accelerated, several other factors emerged to reinforce the upheaval; most importantly, government export restrictions, a weakening United States dollar and a growing appetite by speculators and index funds for wider commodity portfolio investments on the back of enormous global excess liquidity.** 

The document further says that the IMF argued that real demand and supply factors were primarily responsible for the commodity spikes then taking place. But this prediction was shown to be incorrect the following month when prices fell rapidly.

**Biofuels -** Donald Mitchell at the World Bank argues that the main trigger for the spike in food prices was the increase in biofuel production from grains and oilseeds in the US and EU. Biofuels have certainly increased demand, particularly for maize. The proportion of maize used for bioethanol increased from four percent in 2001-2002 to twelve percent in 2007-2008. Biofuels have therefore had some impact on the general rise in food prices. But demand for biofuels remained strong and continued to increase throughout 2008 and 2009. It is therefore difficult to see how biofuels can explain the sharp fall in food prices in mid-2008, and so the sharp increase in 2007 and 2008.

**Low Crop Yields -** The UK government argues that low wheat yields were a key factor behind the 2007 and 2008 price spike. They argue that earlier in 2008 food prices continue to rise because of uncertainty over the 2008 wheat yield. The bubble then burst in mid-2008 once it was clear wheat production was high. However, early in 2008 it was still expected that the wheat yield would be 7 percent higher than in 2007. There was no sudden moment which would explain the rapid fall in wheat and food prices in mid-2008. Yields offer an explanation for a general rise in price through 2006 and 2007, and a fall in 2008. But it is unclear how they explain the large spikes and fluctuations in price.

**The Future Outlook for Food -** The Organization for Economic Co-operation and Development (OECD) and FAO outlook for food commodity prices in June 2010 predicted that from 2010-2019 "Average wheat and coarse grain prices are projected to be nearly 15-40 percent higher in real terms relative to 1997-2006.

One interesting point about the report is that whilst it expects pressure on the food price to continue to increase, it predicts that food prices will not go as high up until 2019 as they did in 2007 and 2008. Given that increased demand for biofuels and from emerging markets is continuing to increase, as will the impacts of climate change on food supply, this prediction raises the question as to why prices rose so high in 2007-2008. Financial speculation provides the answer.

It is entirely possible to prevent food prices from rising as high over the next decade if regulations are introduced to limit excessive speculation.

In **Chapter V**, the document outlines proposed ways of regulating commodity derivative markets to limit speculation. Firstly, the extent of worldwide concern about the impact of speculation on commodity prices is shown. Two, specific proposals of how to re-regulate commodity derivative markets are then presented; clearing and position limits. The current political situation and proposals in the US and EU are discussed.

### Worldwide Concern

The document says that whilst it has been less commented on in the UK, the impact of financial speculation on food and energy prices has received significant attention elsewhere in the world; including by government such as the United States and France, as well as by the European Commission.

Gary Gensler, head of the US government commodity regulator, *says that increased speculation in energy and agricultural products has hurt farmers and consumers.* He also referred to the need to bring back the checks put in place by the Roosevelt administration.

Michel Barnier, European commissioner for the internal market, told the European parliament: *Speculation in basic foodstuffs is a scandal when there are a billion starving people in the world. WE must ensure markets contribute to sustainable growth.* 

These sentiments have been backed by a number of UN agencies and offices dealing with food and hunger issues, including the UN's special rapporteur on the right to food, Olivier de Schutter, who has called for limits on speculation in foods.

In an interview with the World Development Movement, Pedro Paez, former Minister for Economic Policy Coordination of Ecuador, said that *international financial markets are distorting the markets in food and energy. This is increasing vulnerability day-by-day. In one-and-a half years, the number of people in hunger has increased from 900 million to over one billion. The lives of millions of people come to depend on the activities of a handful of financial speculators.* 

Commodity speculation is therefore a live political issue, particularly in the United States and in the European Union, where a package of regulatory reforms in now under review.

#### Transparency

The document says that all futures contracts need to be cleared through regulated exchanges. Because most contracts are currently set in private, meaning it is impossible to know how much of what is being traded. Contracts need to be brought out into the open.

The document further says that there is an enormous amount of derivatives trading which takes place 'overthe-counter'. The European Commission says there were \$4.4 trillion of over-the-counter commodity derivatives outstanding in December 2008. These are private trades for which there is little information. Because such contracts are by their nature opaque, for those buying the contracts they may have little information of the price similar contracts are being bought and sold at. But because all trading happens through banks, firms such as Goldman Sachs have a very good idea of what is happening in the market. They can use this 'information asymmetry' for their benefit, over their clients.

Exchanges also allow contracts to be 'cleared'. This is when a clearing entity (the exchange or potentially a bank) becomes the buyer to each seller, and the seller to each buyer, of a contract. The clearing entity makes the payments to each side of the deal, converting them from the risk of the other defaulting. This in turn provides financial stability. In contrast, over-the-counter derivatives can be defaulted on. It was non-payment of derivative contracts (not traded through clearing exchanges) which directly caused the 2007-2008 financial crisis. In return for being protected from default, buyers and sellers make up-front payments to clearing exchanges.

Nobel-prize winning economist Joseph Stiglitz says that Many economists agree that the unregulated, over-the-counter derivatives market played a key role in transforming a financial downturn into a global economic calamity.

The document points out that if all trades had to go through clearing, this would impose a new cost on speculators, which would increase the more excessive speculation takes place. The small clearing charge if repeated over many transactions should have a dampening affect on speculative trading.

## **Position Limits**

The document says that Position limits were first created in the 1930s in United States to limit the amount of

financial speculation possible in a particular commodity market. Whilst real producers and consumers of food, such as farmers, were allowed to buy and sell unlimited contracts, limits were placed on speculators so that prices would not be subject to financial bubbles, such as the one preceding the Wall Street Crash.

But in 1991, a Goldman Sachs owned commodities trading company, J.Aron, wrote to CFTC arguing that they were using food derivatives to hedge their risk in other markets, just as farmers use futures to hedge their risk against changing food price. Therefore, they should be treated as hedgers, and the limits on number of contracts should not apply to them.

This ran counter to the whole purpose of CFTC regulations in the 1930s; to make a distinction between real buyers and sellers of food and the financial markets. By putting money into commodity markets, Goldman Sachs was increasing its risk to changing food prices, and potentially contributing to a financial bubble.

The document further says that under heavy corporate lobbying, this bogus argument was accepted, and the CFTC issued a 'Bona Fide Hedging' exemption. This allowed Goldman Sachs and many speculators to completely bypass the limits on speculation set by the CFTC, leading eventually to the bubble in food price of 2007 and 2008.

Positions limits in the US failed to prevent the events in food markets of 2007 and 2008 because they were not applied to speculators. Europe has never had a commodities market regulator or set position limits.

Position limits do not need to apply where derivatives are being used to hedge the buying or selling of real food. But all other transactions in derivatives should be limited. These limits would still allow financial markets to provide enough liquidity for real buyers and sellers of food to hedge with. But they would prevent the excessive speculation of recent years.

## Action in US and EU

The document says that in the United States a coalition of over 450 organizations including civil society, farmers, and businesses such as hoteliers and airlines are campaigning for such regulations to be introduced. The Obama government and the commodity regulator both support re-regulation. As of June 2010, regulation being discussed in Congress could force much derivatives trading to go through regulated exchanges, and give the CFTC new powers to set position limits in food and energy.

However, regulation is needed in Europe as well; particularly London and Parish, the two main commodity exchanges outside the United States.

The document further says that there is also a danger that regulations in the US will be able to be bypassed by traders operating through London and Paris. Even if this is unlikely to happen, the threat of it is being used by corporate financial lobbies in the US to try to weaken regulations. Joint action by the EU and U is vital to tackling the commodity speculation problem.

The European Commission is due to bring out proposals on regulating speculation in food later in 2010. Some EU member states, such as France, are strongly pushing for the EU to take strong action and set-up a regulator of financial markets in commodities.

Unfortunately, the corporate lobby will act to maintain their ability to make vast profit out of unregulated trading in commodity derivatives. The financial services lobbyists and banks such as Goldman Sachs hold huge sway in Brussels. The City of London has already played a leading role in campaigning against proposed EU regulations on hedge funds. The UK government has been silent on the role of speculation in influencing commodity prices. Despite the wealth of evidence to the contrary, the Treasury has been sceptical that speculation presents either a systematic risk to the economy or has been a contributing factor in food price rises. The UK government says that *Whilst theory allows for the possibility of speculation having an impact on prices, they are sceptical that speculators have played a significant causal role in the 2007-2008 price spike. This runs counter to much of the evidence presented in this document.* 

Perhaps not coincidentally, London is host to the highest amount of commodity trading outside the United States. Recent opposition to EU regulation of hedge funds by the UK treasury shows that the UK government still gives a disproportionate voice to the financial sector at the expense of other sectors of the economy, and against the interests of citizens. Rather than playing an active role in setting the best regulatory standards, there is a danger that the UK will continue its disastrous no-touch approach to the financial sector. Worse still, it might seek to actively block progressive reforms, making in the global pariah of derivative and commodity market reform.

Ironically, in doing so the UK government risks not only jeopardizing the food security of millions around the world, but also the affordability of food and fuel to low-income consumers in this country, as well as to

business end-users highly dependant on commodities such as food manufacturers, haulage companies and commercial airlines.

In **Chapter VI**, while concluding the document says that regulating commodity markets is a vital step in tackling hunger and reshaping the global economy to work for the benefit of people rather than profit for the small elite of bankers. This document has outlined five reasons why the UK government and EU should support regulations to limits excessive speculation in commodities. These are:

- Higher and more volatile food and oil prices
- Help producers and purchasers to hedge their risk
- Enable futures markets to better discover prices
- Free up capital for use in genuinely productive investment
- Protect against financial crises

The document further says that the opposition to regulating commodity derivatives comes from those in the financial industry with a vested interest in the profits they make from the unregulated market, particularly the large banks. The profits banks make allows them to throw huge amounts of resources into a behind-the-scenes lobbying effort to prevent regulation. The power of banks in the UK unfortunately makes UK authorities particularly susceptible to such lobbying.

Regulators need to resist lobbying and look to what is genuinely in the interests of people rather than the profit of a small elite. All those who have concern for justice and for less risky economies have to push for such regulations to be implemented.

## **The Hunger- MaKers**

## How Deutsch Bank, Goldman Sachs and Other Financial Institutions are Speculating with Food at the Expense of the Poorest

#### Published by:

Centre for Human Rights and Global Justice, NY University School of Law

## **Bird's Eye View**

This 85-page report talks about how Deutsche Bank, Goldman Sachs and other Financial Institutions are speculating with food at the expense of the poorest'. This document is divided into four main chapters. It also contains **Forward**, **Observations and Food-watch Calls for Action**.

Chapter I points out "What is bread doing on the exchange?"; Chapter II refers to "The global commodity casino"; Chapter III talks about "Prices and proof - the impact of speculation on the commodities boom"; Chapter IV deals with "Power struggle over pricing power - who will tame commodity speculators?"

The report says that the Foodwatch states that there is overwhelming evidence that speculation with foodstuff on commodity exchanges drives up prices and causes hunger and starvation to spread. This proof is enough to justify taking immediate political action. First and foremost, the European Union must stringently regulate trading on commodity exchanges so that trading no longer has negative impact on the price of food. Regulation of this kind is an important element in the long overdue regulation of the entire financial sector.

'Foodwatch' wants to use this report to help ensure that the European Commission and the governments of Germany and other EU states finally take action and assert themselves against the financial and agricultural industries. They also want this report to make a complex issue, dominated by the specialist language of experts, more accessible to the public. It says that it is only when more people understand what is happening on commodity exchanges that the public will exert more pressure of the kind needed for policy makers to buck the interest of powerful lobbies.

The report talks about some important **Observations** that the report made. These are:

#### 1. High Food Prices Make People Go Hungry

If people have to spend 80 percent of their income on food - not just 10 to 20 percent as in wealthy industrialized countries - then an increase in the price of grains, bread and other staples poses an existential threat. In 2010 alone, higher prices for foodstuffs caused 40 million people to go hungry and live in abject poverty. Speculation on commodity exchanges with food products such as corn, soybeans and wheat is strongly suspected to contribute to poverty and hunger.

#### 2. Commodity Trading as a Capital Investment Strategy

Financial institutions promise in their advertising that a growing global population and economic expansion will create steady demand for commodities and therefore turn the purchase of raw materials into a profitable business. As consequence, pension funds, insurance companies, foundations and a large number of individual investors have invested more than 600 billion dollars at commodity exchanges.

#### 3. Exchanges Need Speculators

These investments are not being made however to participate in the production of commodity exchanges. Instead, investors buy futures that are traded on commodity exchanges. These contracts originally served to hedge prices in future business transactions by the producers and processors of commodities. In this way, the parties concerned could reliably calculate the cost of raw materials otherwise subject to sharp price fluctuations. This activity has nothing to do with the actual physical business. It is the traditional role of speculators who, in a certain number, are indispensable for the functioning of commodity exchanges.

#### 4. From Useful to Excessive Speculation

Most investors active on exchanges today differ from these traditional speculators. These investors invest in futures because they see them as viable long-term investments. This has caused the share of speculative trading in the total market for commodity futures to swell from formerly about 30 percent to some 80 percent.

#### 5. Legal Price Rigging

This development became a reality when governments in the United States and Europe deregulated futures trading at the turn of the century and allowed investors driven solely by a financial market strategy to have unrestricted access to commodity exchanges. This had serious consequences. Because investors use them for capital investments, their powerful presence on the market creates an apparent additional demand for commodities over longer periods of time, which ultimately leads to commodity prices being higher than they would be without these financial market-driven investments.

#### 6. Prices Disconnected from Supply and Demand

The appearance of capital investors on commodity markets has coupled commodity exchanges with the general development of financial markets. As a result, factors such as interest rates, readiness to take risk, and falling stock prices have had an impact on prices for commodities that is completely independent of supply and demand for physical goods.

#### 7. Future Prices Dictate Today's Prices

Futures prices at the exchanges for physical trade serve as reference prices for buyers and sellers of commodities. If prices for futures have been driven by financial market investment strategies to a level higher than they would have been without this influence, then this has an immediate negative impact on the price of food.

#### 8. How Betting on Commodities Drives up the Prices of Bread

Respected economists, among them Nobel laureate Paul Kurgman, argue that investments in futures on commodities exchanges are only bets, and that they cannot distort spot prices. It overlooks that financial market-driven investors at commodity exchanges do not behave like traditional speculators and are not influenced by developments in supply and demand but continuously buy over a longer period of time without selling. This artificially raises futures prices and thereby raises spot prices as well. This has serious consequences mainly for poor populations in developing countries, whose food and energy supplies depend on imports and global market prices.

#### 9. Banks Always Win by Organizing Bets on Commodities

Using commodity markets for investment has no economic value. It is all about betting on the performance of the commodity traded. Diverting investment capital to commodity markets primarily serves the interests of participating financial institutions and exchange groups, who secure profits without risk by charging high fees for transactions.

#### 10. No Lack of Evidence

Managers in the financial industry argue that there is no evidence that financial investors in commodity markets have more than short-term impact on price levels. The connection between speculation and rising prices is no longer doubted by specialists in the financial industry when it comes to the crude oil market. Numerous empirical and economic studies by experts from prestigious institutions and universities, cited in this report, also provide evidence of speculation influencing the food price.

#### 11. Regulation Saves Lives

'Foodwatch' believes these studies provide enough evidence to see to an end of the abuse of commodity exchanges for capital investment. The European Union's basic law inherently obliges European Policy to be designed to regulate speculation with commodities. The precautionary principle is enshrined in the legal provisions of the Treaty of Lisbon governing the protection of the environment. Article 191 explicitly includes the protection of human health. The precautionary principle means that the burden of proof must be reversed when the impact of financial market investments on commodity prices is assessed - financial providers and marketers need to prove the harmlessness of their actions. As long as participating financial institutions are not able to prove this, governments and regulators must have the legal

power to do everything possible to prevent commodity speculation from causing harm to the life and health of people in poor countries. In plain language, this means that trading in commodity futures must be strictly regulated.

#### Foodwatch - Calls for Actions

Under this title, the document highlights some important points. These are:

**1. Impose Position Limit -** The influence of financial investors on price developments in commodities must be thwarted. The absolute number of futures contracts available for speculation must be limited, which means that limits on positions must be defined.

**2. Exclude Institutional Investors from Commodities Trading -** To use limits effectively, regulatory authority must be able to reliably distinguish which transactions are subscribed only for speculative purposes, and which serve to hedge prices in trading with physical goods. This distinction has become appreciably more difficult since financial groups like Morgan Stanley, Deutsch Bank and Goldman Sachs have begun trading with physical goods, while oil groups like Shell and BP and major grain trading companies like Cargill, Bunge and ADM have for their part gone into selling the services needed for speculative investment on commodity markets. For this reason, there is also a need to dry up sources of capital for commodity speculation. The largest investments are made by pension funds, insurance companies and the managers of foundation assets. 'Foodwatch' therefore urges the EU Commission and the German government to expand existing restrictions on these institutional investors to include a ban on investing in commodity derivatives.

**3.** Prohibit Mutual Funds and Certificates for Commodities - Equally questionable are the mutual funds and countless so called certificates which the financial industry has launched for individual investors, allowing them to participate in commodity speculation. These exchange-traded funds (ETF) and exchange-traded notes (ETN) divert more than 100 billion dollars and euros to commodity markets without being of any economic benefit. Instead, they involve hundreds of thousands of investors in an ethically and legally untenable betting game which has devastating consequences for poor populations in many countries around the world. 'Foodwatch' therefore calls on legislators in Europe to prohibit the issuers of commodity index funds and certificates at least from investing in agricultural and energy commodities.

**4. Stop Banks from Speculating on Food -** Major banks like Goldman Sachs and Deutsch Bank were key actors in setting up commodity indices, and it is their commodity index funds and other financial products that contribute to harmful price rises at commodity exchanges. 'Foodwatch' calls on major banks to take first precautionary step by refraining from speculation with food commodities like soybeans, corn and wheat in their financial strategies.

In **Chapter I**, while talking about **What is bread doing on the exchange**, the report says that about one billion people across the globe do not get enough to eat because they cannot afford to pay for the food they need. Malnutrition and consequent illnesses are still the main causes of death in more than 40 countries around the world. The prices of staple foods on a global scale have been going up since 2000. All major agricultural commodities for human sustenance were at least twice as expensive on global markets in the spring of 2011 as they had been 10 years earlier, even after adjusting for inflation. Prices for the most important grains, wheat, corn and rice, were on average 150 percent higher than they had been in 2000. In wealthy industrialised countries, where consumers spend less than 10 percent of their income on food, and commodities contribute only a fraction to retail prices. But for some two billion people in developing countries who need to spend the major share of their income on food, an increase in prices poses serious limitations to their lives, and for many it means illness and death.

The report further says that food prices in 2010 alone rose by more than a third, reported the World Bank, estimating that an additional 40 million people had descended into absolute poverty as result. This disastrous development created a "toxic brew of real pain contributing to social unrest," warned Robert Zoellick, president of the World Bank. Price explosions for all kinds of grain led to massive protests in 61 states in Asia, Africa and Central America. Particularly hard hit were the impoverished populations in cities who could no longer pay for their food and transportation. This had already led to a social unrest in Uganda and Burkina Faso, and other countries could follow. It also severely affected populations in poor Central American states, whose main food made of corn bread, tortillas, became 70 percent more expensive within a year.

While agricultural prices were reaching new highs and more warning were coming from poverty-stricken regions, the other side of the world community was listing a new record as well. Barklays, a major British bank, reported that by the end of March 2011, investors of all kinds, ranging from billion dollar pension funds and insurance companies to many thousands of small investors, had invested more than 600 billion dollars in securities, by which they benefited from rising commodity prices.

The report points out that booming commodity markets and rising destitution on one side, and euphoric investors gaining billions profit on the other side. Is the small minority of the rich doing business with the plight of the large majority of the poor? Or even worse - is it the capital investment in commodity markets that is actually driving up prices?

For France's President Nicolas Sarcozy, this question was answered long ago. Speculation with commodities and agricultural goods was "simply extortion" and added up to a "pillaging" of poor countries dependent on food and oil imports, he said in February 2011 at an African Union conference in Addis Ababa. Sarkozy took advantage of this year's presidency of his government in the G20 group to call on leading industrial and emerging countries for the globally coordinated regulation of commodity trading.

But as obvious as this proposal was, Sarkozy and other critics of commodity investors met with intense resistance to the idea. Many governments in the G20 group, especially the large commodity-exporting states of Brazil and Canada, flatly rejected Sarkozy's initiative, and at the same time, the global community of investment bankers and many influential economists dismissed out of hand the underlying assumption that speculation was inflating prices. They use a strong argument, claiming that the major reason for price increase is that the production of grains and oilseeds and the production of crude oil are not increasing fast enough to meet the growing demand posed by the rise of emerging economies."Long-term trends, including increased meat consumption by the growing middleclass in the emerging markets and the increased use of biofuels in the developed markets, have created a backdrop for global food shortages," wrote Steve Strongin, head of investment research at Goldman Sachs knowing that many economists at all institutions involved, from OECD (Organization for Economic Co-operation and Development) and the FAO (Food and Agriculture Organization of the United Nations) to the European Union Commission, would agree with him.

The document says that this argument can't be denied on principle. But the vast majority of developing countries affected by shortages today carelessly neglected making investments in their own agricultural systems for decades, up until the 2008 hunger crisis. This is why productivity in agriculture often reaches only a medieval level in many places. At the same time, the United States and the European Union flooded the markets of developing countries with foodstuffs at dumping prices for years, removing the economic base from local agricultural development.

The report further says that none of these answers the real questions associated with the rise of commodity investments to the top of the market for capital investment. Why is bread for the world being traded on exchanges, and moreover, by capital investment? Why is bread for the world being traded on exchanges, and moreover, by capital investors who have nothing to do with the production or processing of food? What economic sense lies in trading on commodities exchanges volumes of foodstuffs each day that exceed the total global consumption of grain or oil several times over? And regardless of other inflationary factors, could it be that massive speculation in the commodity markets is driving up prices, which may not be directly responsible for the plight of many millions of people, but is worsening their hardship?

In **Chapter II**, under the sub-title 'Money and Grain' the report says that speculation with our daily bread is an activity of humankind itself - and it has been morally condemned ever since it began.

The document further states that even the first Egyptian pharaohs in the third millennium B.C. are said to have maintained a state grain administration. Everything was regulated, from land allotment to grain storage and trading, including the prices that were prescribed by decree.

The government of Athens, heavily dependent on grain imports from present-day Italy and regions around the Black Sea, managed the grain trade with iron hand. The Emperors of China did the same. As early as the Zhou dynasty in the first millennium B.C., a comprehensive system was used for monitoring and controlling grain prices. Ever since these times, this kind of control was also associated with morally condemning any speculation with food. Not until the money economy during the Renaissance were these old rules broken. International trade flourished, merchants established exchanges in new commercial centres in Italy and the Netherlands, and with that, all kinds of speculation became part of everyday economic life. The profiteers of these business deals incurred the wrath of their fellow citizens when prices went up. German and Flemish traders in Amsterdam were accused of "great evil" because they demanded as much as the market could possibly yield, and the authorities, like their ancient predecessors, again placed the trade under strict control.

This all changed with the advent of the industrial revolution in the 19th century. The division of labour across the national boundaries became a major driving force of economic development and the international trade which grew out of that was accompanied by the first triumphal march of market liberalism. Government intervention in trade was seen as a hindrance to prosperity. That is why it was the merchants of that era who created the structures for global trade with food whose basic features have been preserved to this day. Private business took the place of state monopolies. From small family-owned trading houses such as Bunge & Born (Argentina, Netherlands), Dreyfus (France, Germany) and Cargill (United States of America) grew the global corporations that still dominate the physical trade in grains today.

The same period also saw the founding of the institution that for decades was and today is back at the centre of the global debate on speculation in the commodity markets and their state regulation - the Chicago Boart of Trade (CBOT). In 1848, a group of 82 grain traders founded an exchange company there to set up a central trading centre for business. It was here in the trading rooms of Chicago that dealers eleven years later set up those trade contracts that are still used as the standard around the globe today for trading and speculating in commodities: futures. These are contracts for the buying and selling of raw materials on future dates.

The report further says that the buyer of a futures contract has to deposit collateral into an account at the exchange. Known as a margin, it is usually 8 to 12 percent of the nominal value of the commodity amount bought or sold through the futures contract. If the futures price fluctuates greatly and the margin paid is not high enough to offset a loss in value, the exchange demands additional payment in a process known as the margin call. Margins are also commonly used in trading with other derivatives and in trading between banks.

This system served, and in principle still does serve, interests of both sides. Farmers and their trading cooperatives knew even before sowing how much grain they could sell at what price, and could plan their crop cultivation accordingly. Within few years, this system was initiated around the world.

But as obvious and practical as the idea is and was, it was also vulnerable from the very beginning to manipulation and speculative excesses. Anyone with sufficient capital was able to secure rights to such large shares of harvests through futures contracts that he could dictate selling prices and reap profits from this monopoly position. Added to that, the trading with futures for speculative purposes soon became well-established. Stakeholders who had nothing to do with production or processing, and indeed only bet on price movements, used futures purchases to create artificial shortages, thereby driving up prices.

Similar operations jolted agricultural exchanges around the world again and again between the world wars. Sometimes it was cotton speculation in India, sometimes wheat dealers in Europe, and Chicago was consistently the scene of spectacular market manipulation.

But Franklin D. Roosevelt reformed financial markets in the wake of great Depression in 1836, setting up effective oversight of commodity exchanges. The regulatory agency sets limits for the first time on the maximum number of futures contracts that individual trading companies could hold.

While talking about **The Financial Revolution**, the document says that the fact that capital investors today can nevertheless speculate in a big way on price trends in grain and other commodity markets began with a development that had nothing to do at first with commodity trading.

The report further says that no longer confined within national boundaries, banks and funds of all kinds built up a global financial system in which exchange rates constantly fluctuated. World trade became noticeably more dependent on financial markets. To hedge against changes in interest and exchange rates, banks together with stock exchanges developed special, new, and purely finance-related futures contracts with which producers and commercial enterprises could secure interest or exchange rates on fixed date in the future. Fees or premiums incurred become one of the most important sources of revenue for the financial industry. Around the world, exchanges were set up for these contracts, called derivatives. Derivatives were invented to help business and traders hedge against price fluctuations. However, they lend themselves to speculation because they enable traders to make high profits (and losses) with only a small outlay of money.

The development of these markets was accompanied by the electronic networking of exchanges and participants across all borders. By the mid-1990s, a cyberspace of global finance had come in to being that visibly put countries and other economies under the spell of the financial world. A steady increasing amount of cash, freely available capital, fed from pension funds, insurance companies, endowments and savings in various forms, has since then been flowing back and forth between banking centres, stock exchanges, shares, bonds and currencies. The financial world became a global arena for playing with greed and fear.

Even up until the late 1990s, commodity prices depended mainly on weather reports and the expected volume of harvests, or demand for oil. This changed radically at the beginning of the new millennium.

#### The Birth of Commodity Index Funds

In this context, the report says that the financial industry began to market a new product-investment in commodities. The instrument for this purpose, the Goldman Sachs Commodity Index (GSCI) had already been developed in 1991 by investment bank Goldman Sachs. This index reflected the development of futures prices for 25 different commodities, ranging from aluminium to sugar, and included only those raw materials for which there was liquid futures trading on the exchange.

Commodity index funds were initially just a niche product for a few large investors for the first 10 years after their invention. This idea significantly gained momentum when two professors, financial scholars Gary Gorton and Geert Rouwenhorst at Yale University, published a study in 2004 commissioned by insurance group AIG (American International Group). Titled "Facts and Fantasies about Commodity Futures", the study contained data meant to prove that investments in commodity futures contracts over long period of time had returns that were just as high as those for stocks or bonds.

The report further says that the study contained no information on the real cost of such investments, Gorton and Rouwenhorst did not mention anywhere that yields are actually much lower because futures contracts always run for a limited period of time and are therefore regularly sold, often with substantial deductions for investors, and the proceeds have to be n new invested in new futures with later expiry dates. But the promise of being able to take financial precautions against crisis and inflation in this way attracted many investors. Heather Shemilt, a leading manager at Goldman Sachs, referring to the Yale study, praised commodity investment as a "portfolio enhancer". In addition to Goldman Sachs and AIG, many other major banks such as Barclays, Morgan Stanley, UBS and Deutsche Bank within a very short time set up similar indices as well as funds related to these baskets of commodities. The second most important became the Dow Jones-UBS Commodity Index (DJ-UBSCI), in which agricultural commodities accounted for nearly a third of the entire baskets. Another major actor is PIMCO (Pacific Investment Management Company), the world's largest asset manager, now owned by Germany's Allianz Group. Nearly 30 billion dollars have been invested in its Commodity Real Return Strategy Fund alone.

As a result commodity markets went through a radical transformation within a few years. For the first time in their 150 year history, commodity futures were no longer just a tool for pricing and hedging. Henceforth, the financial industry marketed funds that did business with commodity futures as a new asset class, a whole new kind of investment that any

money manager should add to his or her portfolio to hedge against crises in other markets.

Investment-seeking capital flowed in a big way to the relatively small commodity futures, which had never been intended for this purpose. Unlike stocks and bonds, commodity investments do not serve to finance the construction of production facilities, set up new businesses or improve public infrastructure, and in this way generate income. Instead, commodity investors only bet on the price development of commodities.

#### **The Big Deregulation**

The report here points out that the commodity index funds, acclaimed by the financial industry for their "innovation", would have had hardly any impact if old regulations at the futures exchanges in Chicago and New York had stayed in place. Individual banks would have quickly reached their limits with the ruling, valid until 1990, which limited futures contracts to 600 per investor and commodity.

The financial industry pushed for the abolition of old rules - and was successful. It was the great age of faith in selfregulating markets as taught in the neoliberal school of economics. One of the experts who did not put faith in this premise was attorney Brooksley Born, who at that time was chairperson of the Commodity Futures Trading Commission (CFTC), the agency responsible for overseeing the futures exchanges. Born had observed that trading with futures on the exchanges had grown at double-digit rates, regardless of whether transactions involved commodities, currencies or bets on interest rates. She also noticed that banks at the same time had began trading on a large scale with similar contracts outside the exchanges, directly with customers or among themselves in what is called over-the-counter (OTC) trading. Her announcement that CFTC wanted to assume the needed oversight met with massive resistance. U.S. Secretary of the Treasury, Robert Rubin, rejected Born's idea outright and was joined by then chairman of the Senate Committee on Banking Housing and Urban Affairs, Phill Gramm. Calling for "liberation from regulation", Gramm and Rubin were able to see through two radical legislative changes in 2000. First the Gramm Leach-Bliley Act abolished all limits on the financial sector, allowing all financial institutions to do all types of financial business under one corporate roof. The Commodity Futures Modernization Act followed shortly afterwards, freeing the OTC derivatives business from any oversight and also removing all limitations previously set on the trading futures in energy commodities.

The report further says that the first bank to claim this exemption, known as bona fide hedging, was Goldman Sachs after it began selling its commodity index funds. The position limit was actually meant to curb the influence of futures trading driven by purely financial motives. But the financial lobby exerted more pressure than this logic did, and the exemption was granted. From then on there was no holding back. Shortly afterwards, other providers of index-swap transactions such as Morgan Stanley, Merrill Lynch (now Bank of America), and Citibank received the same privilege. This did not rest just with swap arrangements for institutional investors like pension funds, or foundations. From then on, the new masters of commodities trading on Wall Street and the City of London increasingly steered private investors towards commodity futures investments. The Deutsche Bank was a pioneer on this front. Its former manager put together in 2004 a commodities fund open to retail investors for the first time. Called DB PowerShares, it could be traded on the stock market and bought or sold at any time, like other mutual funds. This financial product quickly became a hit and there are now hundreds of such exchange-traded funds (ETFs), in which hundreds of thousands of investors can join the betting on commodity prices. In this way, the market for investments tracking the prices of commodity futures has continued to expand.

Furthermore, at least as many Exchange Traded Commodities (ETCs) are on offer, granting investors additional security because physical commodities directly underlie them. Added to this are innumerable certificates on commodity prices, called exchange-trade note (ETNs). These are debt securities issued by banks to investors.

But even these publicly traded commodity-linked securities make up only a small share of the market. In parallel, the financial industry extended a much larger, non-public OTC market for commodity derivates beyond the exchanges and indeed beyond any control. All those banks at the centre of multi-billion dollar capital flows around the commodity business have an enormous information advantage over all other market participants as well as huge potential power over pricing. Consequently, large investment banks in recent years also have gone into the physical trading commodities. Around the world, big players like Goldman Sachs, Morg-

an Stanley, Barclays, JP Morgan and Deutsche Bank have bought storage facilities, tankers and pipelines capacity. Since then they have managed not only the virtual hoarding of commodities on behalf of their customers in the form of futures contracts, but actually hoard commodities themselves if futures prices show that raw materials can be sold later at higher prices.

The report further says that in this way, the commodity boom keeps refuelling itself. As recently as 2003, only about 13 billion dollars were invested in derivatives on commodities of all kinds. By the spring of 2011, the sum had swollen to 412 billion dollars. It also says that more than 600 billion dollars are invested in the financial industry's commodities business. This is roughly a tenth of value of all shares traded worldwide.

For the banks involved however, the commodities business has become all the more a mainstay of their profits. Goldman Sachs alone achieves net proceeds of up to 5 billion dollars a year from trading with commodity derivatives. Glenn Shorr, a leading banking analyst for Nomura Securities International, estimates that bank profits from commodity trading will reach altogether 9 to 14 billion dollars a year.

But who has to pay for these profits, which are not fed from investments in businesses and bonds, but from futures market transactions, are merely bets placed on rising and falling prices? Are investors themselves driving up the prices? After prices for grain and other agricultural commodities skyrocketed in 2007 and early 2008, threatening more than 100 million people around the world with famine, aid organizations, UN agencies and even many economists accused the financial industry of doing billion-dollar business with the plight of the poor. Managers in the financial institutions concerned rigorously rejected the accusation. Goldman Sachs claimed that price trends were to be blamed on the real lack of foodstuffs caused by food production not keeping pace with growing demand in emerging countries. The outcomes are far from clear, but the argument that commodity speculation has no impact on the price is less tenable.

In **Chapter III**, the report talks about the impact of speculation on the commodities boom. It says that the question of whether the increase in speculative investment is actually driving up prices in the commodities sector is always vehemently denied by representatives of interested businesses in the financial sector. They benefit greatly from an extreme increase in the volume of business with commodity derivatives and are, next to investment banks, among the largest profiteers of the commodity boom. To justify this, they always use largely unchanging canon of arguments, recently recited by three heads of stock exchanges at an EU Commission conference in Brussels in mid-June 2011. Martin Abbott, CEO of the London Metal Exchange, declared that changes in fundamentals, the data on supply and demand, were alone decisive for prices. The commodities sector was simply underinvested. This was followed by another standard argument from Bryan Durkin, managing director and COO of CME Group, the world's largest operator of futures exchanges in Chicago and New York, who said that speculators were badly needed to keep trading liquid. They also say that speculators have no influence on the real prices paid for commodities, at least none that can be definitely proven.

But these arguments don't describe what is really happening in today's futures markets because they don't take into consideration the fact that the motives and strategies of speculative investors in commodity markets have essentially changed.

#### Good and Bad Speculators - How Much Liquidity is Needed

The report says that even up to the turn of the century, most futures contracts were concluded by producers and processors who were interested in protecting themselves from price fluctuation. At the same time speculators also traded on exchanges. The profits they made were a kind of premium for the price security that futures trading offered to producers and processors. Overall, pure speculation made up only a small share of traded futures contracts.

The report further says that this has fundamentally changed since deregulation began in 2000, followed by the entry of index investors and many hedge funds to the market. These Commitment of Traders (COT) reports distinguish between commercial traders, those concerned primarily with the trading and processing of physical commodities, and non-commercial trades, who are only speculative players. Until 1999, the share contracts held at the exchange for purely speculative purposes was about 20 to 30 percent of the total volume. In contrast, a good two-thirds of contracts were held by those traditionally interested in safeguarding prices, the hedgers. But by 2006, this ratio had been completely reversed. Since then, up to 80 percent of positions are attributed to speculators, while contracts for traditionally hedging account at most for only one-third of the total volume.

But when futures trading is largely in the hands of speculators, it is grossly misleading to claim that this is only to generate liquidity and primarily serve producers and the industry as a safeguard for prices.

But the report further states that even if there were a need for liquidity, it is precisely the index funds and their investors, those mainly responsible for the high increase in speculative positions, who cannot provide this. Unlike traditional speculators, index investors always count on long-term price increases. Index investors are present only on one side of the market, and thereby virtually deprive the market of liquidity. Bremen economist Hans H. Bass headed an investigation of the impact of financial market players on the price of grain. He reasoned "If the primary activity is to roll long positions, the market continuously experiences new demand which can never be physically satisfied because goods are not is supplied for money. If anything, this investment strategy withdraws liquidity from the market rather than providing liquidity to the market". In this way, fund investments make up most of the outstanding long positions on the futures markets for commodities. The 30-some index traders listed by the CFTC alone hold between 35 to 50 percent of all long positions traded in wheat contracts in Chicago. This makes them by far the largest wheat buyers in the world, dominating the entire market. The positions of fund speculators in corn futures are equally large in number. This means that futures buyers interested only in buying contracts for speculative purposes are competing directly with processors who have to invest in long positions for hedging. The impact of financial investors frequently runs parallel to the dynamics of a self-fulfilling and reinforcing prognosis. The more that investment money flows into funds, the more this drives up prices and in turn attracts even more investors. Until the summer of 2008, a period of rapid price increases in commodities of all kinds went hand in hand with strong inflow of money to index funds.

Index funds are the whales in the market, explains market expert David Frenk. Because their large positions dominate the market, the growing number of other, actively managed funds generates even larger price movements. In the wake of deregulation and the massive entry of speculative investors, the volatility of futures prices rose sharply. Since funds have entered, fluctuations of up to 70 percent have become common place. Since deregulation, producers and processors of all categories of raw materials have had to deal with much larger fluctuations in prices.

The report also says that the more price fluctuate, the more other companies, which did not previously see a need for hedging, now feel forced to buy from banks to hedge so they can still plan their business activities properly. Larger price swings in futures markets reveal the absurdity of the assertion that speculation helps producers and processors hedge prices. In fact, hedging has become more expensive and uncertainty has increased.

#### Futures Markets Are (not) A Zero-Sum Game - Paul Kurgman's Storage Hypothesis

The report points out that the advocates of unlimited business at futures exchanges hold the view that: no matter how much money is invested in futures, where it may generate price movement, this is meaningless for prices on the spot market where the physical commodity is traded. The price here depends solely on available supply and the extent of demand, and it is this price alone that consumers and developing countries relying on food and oil imports ultimately have to pay. The leading proponent of this argument is economist Paul Kurgman, winner of the Nobel Prize in Economics and a recognized critical intellectual. Kurgman's storage hypothesis holds that criticism of speculation is "speculative nonsense". He argued that futures are just bets on future prices and the bottom line is a zero-sum game - no matter how many futures are traded. This activity does not create additional demand for commodities. This sounds plausible at first. In the end, there is not one ounce of corn or one barrel of oil less in the world when investors bet on futures exchanges. The report says that nevertheless, the hypothesis defined by Krugman and his academic colleagues has one major flaw: it comes from textbook logic of economic science, but has little to do with the reality of agricultural and other commodity markets. It assumes that prices on the spot market are entirely independent of what happens on the futures exchanges.

The report further says that if prices for futures contracts are determined primarily by the activity of speculative investors, this certainly has direct impact on the physical commodity markets. No producers will sell a large quantity of goods for less than could be obtained on the futures exchanges. The International Food Policy Research Institute (IFPRI) in Washington D.C., an institute supported by 64 governments and private foundations, also came to the same conclusion. 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.

Thus prices can rise and fall even if the physical quantities available don't change. This holds especially true if the majority of investors on futures markets are not basing their activity on news about harvests or consumption levels but only passively investing in a comprehensive basket of futures containing all kinds of commodities. Even if they don't, like traditional speculators, deliberately cut back the available supply of physical goods by hoarding raw materials, their investments have similar effect on exchange prices because, in fact, "their hoarding is sort of virtual", said Oliver De Schutter. George Soros shares this assessment, stating that it was the speculators' expectations, "their gambling on futures", that drove prices and distorted the market. This especially hit the trade with agricultural commodities. Economists at the United Nations Conference for Trade and Development (UNCTAD) describe that prices for commodities can be driven up by the mere fact that everybody expects higher prices, which in itself may be driven by rising futures prices following rising demand for futures by financial speculators.

Another important factor comes in here. Contrary to the contention of Kurgman and his academic supporters, it has not been substantiated whether producers and trading businesses, in the phase in which futures prices increase over several consecutive expiration dates, do not hoard their physical goods and store them because they can expect to get better returns in the future. Although the U.S. Department of Agriculture and the U.N. Food and Agriculture Organization (FAO) regularly publish data on grain stocks, these data are based merely on surveys and information that governments give them. Information on stocks held by private actors, from farmers to trading businesses and industrial processors, is not included or is highly inaccurate. The five groups that account for approximately three-quarters of the entire international grain trade, Cargill, ADM, Bunge, Dreyfuss and Glencore, maintain a global network of storage facilities. But they basically don't release any information on their stocks; this is, after all, one of their key business secrets. There are also many thousands of grain silos managed by farmers and their cooperatives. No one knows the extent to which owners of grain, motivated by high futures prices, use storage capacity to speculate with physical commodities themselves. America's big farmers have substantially increased their storage facilities for this purpose. This is consistent with the findings of an investigation by the U.S. Senate, in which many traders and analysts explained that the higher futures prices made it more profitable for grain elevators to purchase grain in the cash market, place it into storage, and then hedge those grain purchases with the sale of relatively high-priced futures contracts than to engage in arbitrage transactions at contract expiration.

Furthermore, high futures prices can drive up speculation with stored commodities and thereby reduce supply, with the effect that the price is driven even higher without the volume of stored stock being reliably registered.

#### Apples and Oranges - How the Impact of Speculation Prices Can and Can not be Measured

The report says that advocates of betting on the futures exchanges often argue that evidence of speculation generating higher prices cannot be derived from rising commodity prices and their increasing volatility being accompanied by speculative investment in commodities derivatives. Steve Strongin, senior manager for investment strategy at Goldman Sachs in New York, says that there is no credible evidence of a connection between commodity index investing in general and the sharp rise in the price of wheat in 2008, since this was due to a drastic shortage in stocks, and the same would apply to the price of crude oil. Experts at the Internal Market and Services Directorate-General of the EU Commission

use the same argument. They wrote in early 2011 in a report on the upcoming reform of the securities market that there was no conclusive evidence on the causality between speculation in derivatives markets and excessive volatility and prices increases in the underlying physical markets.

But a number other experts pointed out that the frequently cited study did not meet scientific standards in many respects. Economist David Frenk, today a recognized analyst of commodity markets, said after reviewing the study that it had applied statistical methods which "are completely inappropriate for the data used" and its results could be "easily refuted by looking at some basic facts." Economists have long agreed that data on a strong and frequently fluctuating pattern such as the prices of the next futures contracts to expire are useless because they are only random snapshots taken on the appointed date, said Frenk. Above all, it was nonsense that Irwin and Sanders compared index positions and futures prices with only a seven-day delay. This would not register the price effect of investor positions in commodity funds. In other words, Irwin and Sanders compared apples with oranges and did not come up with usable results.

The report further says that Christopher Gilbert, an economist at the University of Trento in Italy, came to a similar conclusion. In his report, he says that by investing across the entire range of commodity futures, index-based investors appear to have inflated food commodity prices. Gilbert went on to say that this was " the major channel through which macroeconomic and monetary factors generated the 2007 and 2008 food price rise."

A report by economists John Baffes and Tassos Haniotis published in July2011 carries special weight in this context. Contrary to their original convictions, they also came to the conclusion that "index fund activity played a key role during the 2008 price rise.

#### Beyond Supply and Demand - Commodity Prices in the Maelstrom of Capital Market

The report says that the misleading degree to which the controversy over the supposed lack of evidence on the impact of speculation is manifested above all in activity on markets themselves. As persuasive as the story about growing demand and lack of supply seems to be, it too often has nothing to do with actual prices on commodity markets.

The report further points out that the United States had been in recession since December 2007, together with many countries in the European Union. According to the Energy Information Agency in the US Department of Energy, global oil consumption fell between December 2007 and September 2008 from 87.5 million to 85,3 million barrels per day. At the same time, oil production rose slightly from 85.3 to 85.7 million barrels per day. All signs were pointing towards a decline in prices. But the price of oil instead rose a full 50 percent between January and June, from 95 to 147 dollars per barrel. There was only one plausible explanation. Business with mortgage securities and real estate had widely collapsed in the United States, interest rates and yields had fallen, as had stock prices, and investors were turning to the alternative offered by the financial sector: betting billion dollars flowed into speculation with oil futures alone through index investors. Only when the subsequent near collapse of the global financial system forced investors to liquidate all available assets to raise cash did the oil bubble burst, and the price of crude oil plummeted 62 percent within six months. Against this backdrop, even the European Central Bank concluded that "over the period 2002-2008, inefficient activity in the futures market pushed oil prices about 15 percent above the level justified by oil fundamentals.

The oil price shock generated by investors not only accelerated the slump in the global economy, it also significantly exacerbated the food crisis in many poor countries.

The document also points out that according to calculations by World Bank economist John Baffes, oil prices, through production costs, account for more than one-quarter of grain price. This means that commodity speculation would threaten the nourishment of the world's population even if grain markets themselves were not affected by speculation. Simultaneous speculation in both kinds of commodities therefore has even harsher consequences because rising production costs cause farmers' income to increase only slightly in spite of rising prices. This reduces the incentive to expand production.

It further says that the 2008 oil price spike was not a one-time mishap. The same thing happened again in the first half of 2011. From December 2010 to April 2011, the price of Brent crude traded at the leading exchange Intercontinental Exchange (ICE) rose by more than 30 percent. Nevertheless, the rally in oil prices continued on the exchanges. The price increases was "artificial", complained Ali Ai-Naimi, Saudi Arabian Minister of Petroleum and Mineral Resources. In truth, the market was awash with supplies.

Even Rex Trillerson, Chairman and CEO of the world's largest oil group Exxon, admitted that the oil price had little to do with supply and demand in 2011. He told the Financial Times in April 2011 that the market was "well supplied". Reserves in North America stood at "near-record highs" and storage tanks in Europe were also full. Further, Dan Dicker, an experienced dealer who traded on oil and gasoline at the New York Exchange for 25 years argued that these financial influences like investment banks, hedge funds, and ETFs allow 'dumb money' to enter the oil markets which swamped out people who had connections to the physical products. He also said that this flood of money and financial industry interest in oil markets led to increase in oil price that's unfair and hits businesses and consumers equally badly.

#### Beyond All Measure - Grain Prices and the Speculation Boom.

The document says that prices for corn and wheat on the exchange in Chicago between June 2007 and June 2008 went up a full 140 percent. Grain prices rose in the same period by some 80 percent according to the FAO. This extreme increase in prices created hardship for many millions of people and is seen as a major trigger of the social unrest that

erupted at this time in more than 60 countries whose grain supply was dependent on world market conditions.

Advocates who believe in the self-regulating efficiency of markets found three reasons for this: the growing consumption of meat by rising middle classes in China and India, the sharp rise in the use of corn and oilseeds for biofuel production, and a poor overall grain harvest in the 2007 and 2008 crop year. It certainly cannot explain the price explosion in 2008, because consumption in both countries rose only slightly that year and both countries were actually net exporters of grain. The FAO said that in the case of both China and India, there is no evidence of a sudden increase in imports to indicate that they have contributed to their price hike. Similarly, the growing production of biofuel does not provide a supporting argument. There is no doubt that biofuel production is rightly being criticized because it takes entire fertile farmland away from food production. Nevertheless, this stands in no relation to the grain price explosion. While ethanol production in the U.S. and in other producing countries ran at full speed during all of 2008, the prices for corn and wheat in the second half of 2008 dropped by nearly 70 percent and even fell under the 2006 level. Prices remained comparatively low during the following year although the production of biofuel continued to rise. Development of biofuel may have contributed to the food crisis.

The document further says that many experts then cited the overall situation with grain as the most important explanation for 2008 price spikes. One indicator for agricultural economists is the stock-to-use ratio (ratio of reported stock levels to consumption). In the 2007-2008 crop year, this had actually fallen to a historic low for wheat and was only 22.5 percent, for corn and other feed grains, only 14.9 percent of annual consumption was in stock.

But this indicator is not good enough to explain the development in prices. The ratio for corn was at the same low level during 2006-2007 crop year without triggering a surge in prices. For wheat, the ratio rose back to 28 percent by June 2011, thereby lying more than five percentage points above the level four years earlier. Nevertheless, wheat on the global market in June 2011 was just as expensive as in June 2007.

All of these apparently absurd price movements cannot be blamed solely on the increase in speculation itself. Far more decisive was that the financialization of commodity trading made commodity markets for all kinds of raw materials part of the entire global capital market. As a consequence, changes in interest rates, currency exchange rates, bank crises and the general herd instinct of asset managers became the key factors that governed price development.

The rise in commodity prices after the financial crisis began just at the moment when U.S. central bankers in May 2009 switched over to buying government bonds themselves for 300 billion dollars based on system with cheap dollars. Government bonds became a negative business because their yields fell below the rate of inflation. Major investors banked even more strongly on commodities and triggered a renewed surge in prices. When the Federal Reserve repeated the same action from August 2010 and funnelled another 600 billion dollars into the market until June 2011, a new price explosion was sparked.

#### The Spread of Hunger

In this chapter, the report points out that a poor harvest, a decline in oil production or rising demand no longer has an influence on the development of prices. But it is conspicuous that the mobilization of many hundreds of billions of dollars for commodity speculation can nullify fundamental factors at least for long phase - and inflict a lot of damage.

It has explained why this is possible in spite of what the financial industry claims. First, investment in commodity index funds that buy long positions only, which are not intended to hedge prices for trading in physical goods, structurally drive futures prices up to a level they would not have reached without these investments. On the other hand, because futures prices demonstrably affect prices on the spot markets, these structural price rises are reflected in higher food prices. At the same time, the futures market has disconnected even more from the real supply and demand for commodities because it has become part of the global capital market. This means that interest rates, stock prices, and monetary policy all play a role in determining futures prices and ultimately the price of foodstuff commodities.

The document says that economist Christopher Gilbert calculated that during the first half of 2008, prices for crude oil alone were inflated by 20 to 25 percent through the activity of index funds investors. For wheat, corn and soybeans, he calculated that index speculators contributed about 10 percent to price increases. Gilbert's colleague in Bremen, Hans Bass, indicated that speculation hiked the prices for wheat, corn and soybeans at the time of the major food crisis in 2008 up to 15 percent. The World Bank estimates that during 2007/2008 period of high prices, an additional 100 million people had to suffer from hunger because they could not afford to pay for food. The German aid organization Welthungerhilfe calculated that in 30 countries alone that rely on external food aid, seven to eight million people suffered from malnutrition during the first half of 2011 because of price increases generated by speculation. There is no economic benefit to be gained from massive capital investment in commodities markets. Not one dollar or euro that flows through investment banks to commodity futures exchanges serves as an investment in the production of raw materials or food. It is all about placing bets.

Financial managers at exchanges and investment banks, who maximize their sales volumes and fee revenues with the help of commodity markets, thereby potentially causing humans to suffer from hunger, perhaps even die, should prove that their business activity does no harm. But that is precisely what they can't do and have not even tried to do so far. Why then don't governments and parliaments put an end to the commodity casino? Why don't they set strict regulations to push the financial industry out of commodity futures exchanges? The answer is shameful for democracies in the

#### western industrialized world.

In **Chapter IV**, under the title 'Power Struggle over Pricing Power - Who will Tame Commodity Speculators?' The report says that France's President Nicolas Sarkozy was the first statesman of worldwide recognition to focus on the harmful effects of financial speculation in commodity markets. In January 2011, he warned in the G20 meeting that if we did not do anything we run the risk of food riots in the poorest countries and a very unfavourable effect on global growth. He further added that rules were needed to curb the influence of speculative investors, either by having investors to pay more collateral or by limiting the number of positions they held. In addition, a tax on financial transactions that had long been called for was urgently needed.

#### G20 - Global Governance at the Lowest Level

The report points out that the major agricultural exporters Brazil and Canada opposed Sarkozy's call for global regulation of the commodity exchanges from the very start. Brazilian's minister of finance, Guido Montega even insinuated that Sarkozy and his allies wanted to regulate the price of commodities, but warned that Brazil totally opposes the mechanism to control or to regulate commodity prices. Brazil's then minister of agriculture, Wagner Rossi, went out of his way to mobilize his colleagues from Argentina, Uruguay, Paraguay, Chile and Bolivia, bringing the South American economic community Mercosur into position against Sarkozy's initiative.

At first this sounds absurd. Neither Sarkozy nor other critics of commodity speculation have ever spoken of price controls or even called for them. Commodity investors, whose long-only investments on futures markets reinforce the rise in prices, also effectively boost these countries' export earnings. Exporting countries interpret any measures taken against this as a violation of their economic interests.

The document further says that although the UK has always been a net importer of agricultural goods, Britain's rulers traditionally see themselves as advocate of the financial industry. Caroline Spelman, the environment and agriculture minister, used a visit to Brazil in April 2011 to provide support in good time against the initiative from Paris. Together with Rossi, she spoke out in favour of "open, transparent efficient" commodity market. Neither minister said a single word about the massive commodity speculation organized by the financial industry. To avoid price spikes, they called on all states to end restrictions on exports similar to the export ban Russia's government had enacted in the summer of 2010 on wheat, and the Indian government in 2007 on rice. Although a ban on such unfair protection policies would be an important move, it would do very little to amend the excesses of speculation. But this is what the British government wants to avoid at any price.

The German government does not do any better, even though the situation initially seemed to be quite supportive of Sarkozy's initiative and deplored that "profuse speculation led to excesses on the markets, and foodstuffs should not become the object of gamblers".

The background to this consciously naive argument is the fact that Europe's grain producers and dealers believe they are disadvantaged anyway compared to competitors in the United States and elsewhere. Agricultural trade groups like Cargill, ADM and Bunge have long since entered there into the marketing of speculative investments, setting up their own de facto investment banks, and earning good profits. When it comes to the interests of the European agricultural sector, Europe is expected to follow the American model, even though Congress and regulatory agencies have repeatedly found this model to be flawed.

The document further says that all this does not mean that the French President did not find supporters among G20 states. Russia's finance and agriculture ministers stood unequivocally behind the French proposals, even though Russia is one of the largest commodity exporters in the world. Even the three most populous countries in the world, China, India and Indonesia, signalled their support.

It is foreseeable that the G20 group will seek only to improve information practices, falling back on financial over-thecounter (OTC) derivative trading in monitored clearing centres, registering all players, and recording market reforms that were already agreed on in the wake of the crisis such as centralizing over- their transactions in official statistics.

The issue of limiting investments in commodities in the United States is at the centre of a die-hard struggle between regulators, Congress and lobbyists.

#### Wall Street Against Main Street - The Dispute Over Reforming Commodity Markets in the United States

The document says that when the price of crude oil rose to 125 dollars per barrel in mid-April 2011, and the cost of gasoline went up to five dollars a gallon, the American President said that it was true that a lot of what's driving oil prices up right now was not the lack of supply. There is enough supply out there for world demand. He also said that speculators betting on prices were much more to blame for high prices. According to him the speculators say that there is 20 percent chance that something might happen in the Middle East that might disrupt oil supply, so we are going to bet that oil is going to go up real high. And that spikes up prices significantly.

Unlike for most Europeans, this dispute is of vital importance for millions of Americans, because United States is mercilessly dependent on gasoline and diesel. That is why the majority of representatives and senators in Congress seized the opportunity in July to reverse the deregulation of commodity exchanges and thereby push back the dominance of the financial markets by adopting a comprehensive reform package for financial markets called the Dodd-Frank Act. With this reform, Congress renewed and made legislation on commodity exchanges more precise in the Commodity

Exchange Act (CEA), which mandates the Washington-based regulatory agency, the Commodity Futures Trading Commission (CFTC), to diminish, eliminate or prevent excessive speculation on futures exchanges.

The mandate was clear and the law even set dates for enforcement. But Wall Street banks, together with commodity trading companies and oil groups, set their powerful lobby machinery into motion to thwart the introduction of new rules. There were 2000 registered congressional lobbyists for the financial sector alone.

Representatives from the Republic Party served as twilling helpers. They made it their job to bring down the reregulation of financial markets. A leading role was played by House Representative Spencer Bachus. Bachus and his colleagues used their majority rule to systematically weaken the regulatory agency.

The document says that the consequences are bizarre. The CFTC bears the responsibility for a main element of the financial market reform. Its central task is to regulate the market for financial derivatives of all kinds, especially those that are not traded at exchanges but sold directly by banks as control in this dark zone of the finance industry is seen as one of the key reasons why the failure of just one bank could bring the entire global financial system to the brink of collapse in the fall of 2008.

At the same time, opponents of reform organized resistance inside CFTC, whose director, Gary Gensler, was formerly a manager at Goldman Sachs. He was clear about the objectives of financial market reform and publicly admitted that deregulation, which he had once pursued himself, was a mistake. He was allowed to put forward a compromise proposal for commodities for public debate. Nevertheless, the finance industry raised a veritable storm against the proposal. The commodity speculation business is basically in the hands of a good two dozen banks and trading companies. The CFTC proposal would deprive them of exceptional status which has exempted them from all limitations. "This would significantly reduce the business", admitted the chief strategist of a leading investment institution.

As stubborn as resistance to reform is, support for reform is equally high. Parallel to the financial industry's "lobbying storm" (Bloomberg), an equally strong counter-lobby has emerged. The Commodity Market Oversight Coalition (CMOC) is an unusual alliance of about 50 organizations whose membership ranges across American society.

Indeed, it is still not clear what the outcome will be on the political dispute over regulating commodity speculation in the United States. But the public pressure is so great that the government and Congress will not be able to escape it.

#### EMIR, MIFID and ESMA - A Tug of War Around Commodity Markets within the Maze of EU Institutions

The report says that in the expert group for regulating financial and commodity derivatives, 34 out of 44 members came from businesses in the financial sector and related associations. Twenty five were connected to the International Swaps and Derivatives Association, the central lobby association for the derivatives business. The remaining ten were representatives of national regulatory authority. Critical and independent experts are not invited or consulted.

The intensity of the struggle over commodity speculation was revealed when in January 2011, Michel Barneir, an EU Commission wanted to publish its position paper on the issue and put forward the reforms it was aiming for. EU Commissioner Barneir's civil servants had taken the standard argument of the financial lobby for its own, stating that there was no conclusive evidence of a link between increased speculative investment in commodity derivatives and the price of raw materials on physical markets. The official document published later said that it was interactions still difficult to assess fully the interactions and the impact of movements in the derivative markets on the volatility of the underlying physical markets and further work was therefore needed to deepen understanding of these developments.

The report further says that three European laws are supposed to undergo reform to make for financial and commodity derivatives in Europe transparent and controllable. The Commission foresees their adoption in 2011. The first is, European Market Infrastructure Regulation (EMIR). It is designed to remove all kinds of derivatives trading from the dark zone of over-the-counter business and place it in clearing centre where all participants have to deposit collateral and oversight authorities can monitor risks. But the Commission shrank back from that. This will not happen until there is a reform of two other directives. The first is the directive on insider dealing and market manipulation, known as the market abuse directive, and the second is known as the MiFID (markets in financial instruments directive). But how these will take shape is so controversial within the Commission and between governments that Barnier, contrary to original planning, postponed the submission of legislative proposals until October 2011. At the heart of the dispute is the question of whether, in order to curtail the volume of speculative investment, regulatory authorities - as in the United States - should set permanent limits in advance on the number of commodity futures contracts that banks and commodity traders could buy. Britain finance minister, George Osborne, notified the Commission that his government would accept such position limits only as a possible instrument that national authorities could use from case to case, but not make them mandatory. Christine Lagarde, finance minister in France until June 2011 and now the head of the IMF, said that setting such limits was "indispensable" for her government, as she wrote to Commissioner Barnier. But even if the Commission would follow the American example, and called for mandatory position limits in the legislative proposal, another barrier standing in the way of effective regulation would have to come down - the dispute over the executive competence between national and European authorities. It is already foreseeable that national authorities, and in particular the U.K. Financial Services Authority (FSA), will do all they can to combat this restriction of their own roles. It can be expected that the Commission will incorporate the introduction of position limits into its legislative proposal, but leave that calculation and enforcement to national authorities.

The report further says that draft of the proposed directive, which was leaked to the press in September 2011, is formulated in this way. Accordingly, the new EU regulatory authority for security, the European Securities and Markets Authority (ESMA), should simply "coordinate" the regulation of position limits which in turn are to be determined individually by national authorities. The draft does not make it clear whether the intention is to curb the overall extent of commodity speculation by setting such limits, or simply to avoid single players having too much influence. If it says that way, the British regulatory authority could leave everything as it is and London would finally become the centre of the global commodity casino.

If Europe's parliamentarians keep to their decisions, then the great political dispute over commodity speculation in Europe is still to come. Its outcome will depend essentially on the extent to which citizens and civil society organizations interfere and take a stand.

This position ultimately also dictates European law. The Treaty of Lisbon, which is the valid constitution of the European Union, enshrines the precautionary principle as a constitutive element. It prescribes preventive action to protect life and limb, even if there is still no conclusive scientific clarity about the causal relationship between a disgraceful situation to be combated, and its potential consequences for human health.

## Broken Markets: How Financial Market Regulation Can Help Prevent Another Global Food Crisis

By:

World Development Movement

September 2011

## **Bird's Eye View**

This 47-page document is divided into eight chapters. Besides these chapters, the document also contains an Executive Summary. Chapter I refers to 'Introduction'; Chapter II refers to 'The urgent need for action'; Chapter III talks about "A financial takeover: how speculation has taken hold; Chapter IV deals with 'Broken markets: the effect of excessive speculation'; Chapter V tells 'How futures markets change the price of food'; Chapter VI discusses 'What else is causing food prices to rise?'; Chapter VII refers to 'Fixing broken markets'; and Chapter VIII contains 'Conclusion'.

In the Executive Summary, the document says that enormous amounts of capital are flooding the markets, causing sudden food price spikes that can be lethal for low-income families in developing countries. Increased volatility caused by the influx of 'hot money' into and out of commodity markets is also causing havoc for farmers.

The document further says that the world is facing a global food price crisis. In 2008, food prices reached record levels, rising 80 percent in 18 months, pushing the total number of people going hungry to over one billion. Following this peak, food prices rapidly declined. However, since 2009, the cost of food has been climbing again on global markets, with food prices reaching record highs once again in early 2011.

The huge increase in the cost of food and a sharp increase in food price volatility over recent years have triggered a global debate on the causes and solutions to this crisis.

The role of financial speculation in contributing to this crisis has been much more controversial. Many have argued that the huge increase in financial participation in commodity derivative markets has played a central role, fuelling price inflation and increasing price volatility. The 2010 report The Great Hunger Lottery introduced the issue to the UK public, highlighting the role of banks and other financial speculators in pushing up the price of food during the last food crisis, prompting significant debate.

Some commentators have questioned the very premise that financial speculation can affect the price of food. Others, proponents of 'efficient market theory', have argued that rather than contributing to food price

rises, financial speculation stabilises food prices.

The US, the European Union (EU) and the G20 are all considering rules to regulate commodity markets, to ensure their effective functioning and curb excessive speculation. This report argues that these reforms are urgently needed to prevent a global food price crisis driving millions more into hunger and poverty throughout the global south.

Broken Markets seeks to counter the arguments put forward by those sceptical of the influence of financial speculation. It shows how financial speculation has boomed, turning commodity derivatives into just another asset class for investors, distorting and undermining the effective functioning of agricultural markets.

Broken Markets reveals how financial speculation has overwhelmed commodity markets once designed as tool to manage risk. It finds that:

- Financial speculators now dominate the market.
- In the last five years alone, the total assets of financial speculators in these markets have nearly doubled from \$65 billion in 2006 to \$126 billion in 2011. This money is purely speculative, with none of it being invested in agriculture.
- The nature of traders in the market has changed with the introduction of commodity index funds and an enormous growth in opaque, deregulated 'over-the-counter' trading.

The document says that huge growth of financial speculation has:

- Led to prices no longer being driven by supply and demand for food, but by the sentiments of financial speculators and the performance of their other investments.
- Created huge inflationary pressure in the market, forcing food prices up.
- Caused prices of unrelated commodities to move together.

The consequences have been devastating. In the last six months of 2010 alone, 44 million people were pushed into extreme poverty by rising food prices. The price of food for households in developing countries in now 55 percent higher than it was just four years ago.

Richer countries are also being hit hard by rising food prices. In the UK, food price inflation in June 2011 reached 6.9 percent, increasing the average annual household food bill by 260 pound and forcing up overall inflation.

The document further says that effective regulation can tackle excessive financial speculation and prevent it from driving food prices higher. Broken Markets calls on regulations in the US, at the G20 and EU to introduce:

**Market Transparency -** Moving trading of derivatives from deregulated 'over-the-counter' (OTC) markets onto well regulated public exchanges and introducing 'position reporting' so that regulators and analysts can properly assess the functioning of the markets.

**Position Limits -** Strict limits are needed on the amount of the market that can be held by individual traders and by financial speculators as a whole, to prevent them from overwhelming the markets.

Regulators should seize this unique opportunity to tackle the dominance of financial speculators and contribute to ensuring fairer and more stable food prices for consumers throughout the world.

In Introduction, the document states that food is a fundamental human right and essential to our survival. Yet many are unaware of the powerful position that financial markets have come to hold in the global food system. Alongside markets for trading food (physical markets), financial markets for futures and other derivatives play a central role in setting the prices of the world's food.

Futures markets were originally developed for the benefit of those involved in the production of food and management their risk, yet they have now changed almost beyond recognition. Over the last ten years, financial markets for agricultural commodities have become dominated by speculators who simply use them as another form of investment.

Moreover, most of the world's food producers, the majority of whom are small farmers in developing countries who lack access to credit, do not have access to nor rely on commodity futures markets to manage risk.

Regulating agricultural commodity markets alone will not tackle the many challenges of global food production. But in the wake of the financial crisis, there is unique opportunity to introduce financial market regulation, taking the first steps to improving the global food system for the benefit of food producers and consumers. The enormous influx of financial speculation into agricultural commodity derivative markets has effectively needed to restore these markets back to their normal functioning and to help to prevent repeated global food crises.

## The Urgent Need for Action

The document says that according to the UN Food and Agriculture Organization (FAO), food prices have recently exceeded those seen during the last food crisis in 2007-2008, rising by 39 percent in the year to July 2011.

In just three months at the end of 2010 and early 2011 the price of maize, a key staple food, rose by 27 percent in Kenya, by 25 percent in Uganda and by 20 percent in the Democratic Republic of Congo. South American countries also saw dramatic increases in the price of maize during the same period, with prices in Mexico rising by 37 percent, in Brazil by 15 percent and in Argentina by 14 percent. In a survey of 58 developing countries in late 2010 local food prices were around 55 percent higher than May 2007.

## **Human Impact**

The document says that the human impact of rising food prices can be devastating, increasing hunger and malnutrition. According to some estimates, as many as 1.3 billion people currently go hungry. Rising food prices have impacts beyond hunger. Increased food prices also force people to eat less fruit, vegetables, dairy and meat in order to afford staple foods; reduce any savings, sell assets or take loans; reduce spending on healthcare, education or family planning; and have disproportionate impact on women.

## Social Unrest

Sudden food price rises also frequently lead to social and political unrest; during the 2007-2008 food price crisis, food riots took place in 31 countries. In 2011 food price rises have been one of the key triggers for the protests in Tunisia, Egypt and Jordan and elsewhere in the Middle East and North Africa, eventually leading to the overthrow of the Tunisian and Egyptian governments.

## **Economic Impact**

Rising food prices also have a huge impact on the economies and government budgets of developing countries. High food prices increase the cost of food assistance and critical subsidy programmes as well as decreasing government revenue from lower taxes and tariffs in food import-dependent countries. The last food crisis forced governments to cut expenditure on areas such as education and health, pushing the financial burden onto individual households already hit directly by rising food prices.

## Volatility

Increases in price volatility have a hugely damaging impact on food producers. They rarely gain from price increases when markets are volatile. When prices fall the reductions are passed down the supply chain to producers whose costs and margins are squeezed. However, when prices recover, benefits are absorbed by other participants in the supply chain, such as food processing corporations, leaving food producers still suffering from lower prices.

## A Financial Takeover: How Speculation Has Taken Hold

The document says that according to the President of National Farmers' Union, Scotland, " It is deeply alarming that the greatest proportion of activity in the futures markets no longer involves those in the supply chain but is, instead, taken up by speculators.. Food commodities are too important to be played about with by day traders and speculators".

The document points out that in order for futures markets to function effectively a degree of financial speculation is needed. It says that financial speculation can provide liquidity to the market and can also play an important role in transferring price risk away from food producers. However, in recent years, rather than just providing liquidity to help markets' core functions of hedging and price discovery, financial speculation has come to dominate them.

#### **Financial Domination**

Deregulation of commodity markets in the US in the late 1990s and early 2000s has allowed an enormous growth in financial speculation in these markets, allowing purely financial actors a much greater role in the markets and facilitating the development of new financial products that allow investors to treat commodities as another asset class, like equity (shares). Over the course of the last decade agricultural commodity markets have become dominated by financial speculators, overwhelming the normal functioning of these markets. In 2011, 61 percent of the market is held by purely financial speculators and commercial hedgers

only make 39 percent of the market.

This dominance of financial speculators is also reflected in the size of the market held by financial institutions; in the last five years alone, the total assets of financial speculators in agricultural commodity markets have nearly doubled from \$65 billion in 2006 to \$126 billion in March 2011. The money is purely speculative, with none of it being invested in agricultural production.

## **Massive Passives**

One of the key innovations that facilitated the enormous growth of financial speculation has been the use of commodity index funds, first pioneered by Goldman Sachs in 1991. Commodity index funds work to transfer commodity contracts into asset that can be bought by other financial institutions such as pension funds. These funds are passive; their trading does not respond to price changes in the market. Commodity index funds were highly attractive to a range of investors, notably pension funds, because they allowed investors to gain exposure to a wide range of commodities markets without having to engage in costly and risky direct trading in the market. This led to an enormous growth in index funds holding in agricultural commodity markets, increasing 26 fold from around \$3 billion in 2003 to \$80 billion in 2011, with index funds now making up over 60 percent of overall financial holdings in agricultural futures markets.

## **Active Speculators**

The document says that while passive investment has remained popular amongst investors, a survey in December 2010 found that 43 percent were planning to choose active management to engage in commodity markets in 2011. These active strategies can include the use of other investment vehicles, such as Exchange Traded Products (ETPs), which are traded on stock markets and track either one or a set of commodities.

It also says that the active speculators approach the market in a radically different way from investors using index funds to gain long term exposure to commodity markets; seeking to profit short term price changes in the markets. One strategy increasingly used by active speculators is the use of computerised high frequency trading. The dangers of this form of trading are most clearly seen in the 'flash crashers' that took place in the international sugar market in late 2010 and the cocoa market in early 2011.

While high frequency trading has been hugely profitable for commodity exchanges, which profit from the increased trading volume, it has been heavily criticised for providing little if any benefit to commercial hedgers. The huge growth in high frequency trading has led to outcry from commercial traders in the market.

Over the past ten years there has been a radical change in the make up of agricultural derivative markets. Whereas previously markets were predominantly made up of commercial buyers and sellers involved in the production of food, these markets are increasingly dominated by index funds, traders using investment products like ETPs and high frequency algorithmic driven speculation.

## **Broken Market**

## Dark Markets: Over-the-Counter Trading

The document says that at present only futures and some options trading takes place on exchanges, the rest of the derivative market, such as swaps, is traded through unregulated bilateral deals known as 'over-the-counter' trading (OTC). As OTC trading takes place bilaterally and without effective regulatory oversight, prices are not reported publicly. This has led OTC trading to be referred to as the 'dark markets' due to the lack of market transparency.

This lack of transparency and regulation is thought by many to have been at the heart of the 2008 credit crisis and G20 has now resolved to bring more transparency to these markets. The value of outstanding OTC derivatives for all commodities stands at nearly \$3 trillion, nearly one and half times the UK's GDP.

As OTC trading does not go through a central exchange, margin requirements are often very low, reducing the costs to both the parties but taking away the vital risk management function served by margin payments. The other significant feature of OTC trading that has made it attractive to financial and commercial traders is the opportunity to produce highly customized swaps. Rather than benefiting the overall market, OTC trading also allows a tiny group of financial institutions dealing in large volumes of swaps, such as investment banks like Goldsman Sachs, to maintain and exploit information asymmetries at the expense of their clients; as the swaps dealers are central to the market they have access to information unavailable to all of their clients. As OTC trading does not require publicly quoted prices for contracts , there is also no guarantee that swaps dealers are offering fair and equal pricing between their clients.

The subprime crisis clearly showed the dangers of unregulated trading in OTC derivatives, yet the risks of

this trading in dark markets still exist for agricultural commodities, with potentially even greater risks.

In **Chapter IV**, under the topic titled 'Broken markets: the effect of excessive speculation', the document says that proponents of efficient market theory have argued that speculation is inherently stabilizing. By buying when prices are low and selling when prices are high speculators are believed to help smooth volatility in the market. In practice this has not been the case. Increasing financial speculation has in fact:

- Distorted prices away from expectations of supply and demand.
- Increased price volatility.
- Caused the prices of unrelated commodities to move together,
- Increased costs for traditional hedgers, forcing them out of the market.

## **Supply and Demand**

The document says that financial speculators are much less likely to trade based on information regarding supply and demand but are motivated by a desire to diversify a range of investments. Commodities are simply seen as an investment alternative to 'traditional' investment asset classes such as equities (shares), bonds (debt) or property. If traders based their trading purely on supply and demand information there would be little or no change in prices.

By using commodity markets as another asset class financial speculators distort the price of agricultural commodities. When combined with the dominance of financial speculators in the market this undermines the ability of futures markets to provide effective informed price signals for the physical market.

## How Index Funds Cause Price Inflation

While the increasing presence of financial speculators as whole has moved prices away from expectations of supply and demand, index funds have been singled out by many commentators for their particularly damaging effects; driving price inflation in commodity market.

Due to index funds' size and long only positions they place a structural upward pressure on prices in futures markets, with huge amounts of money speculating on rising prices.

In order for a transaction to take place, traders on both the long and short side of the contract must reach a price they both agree. If there is huge demand on one side of the market, traders will demand that they are paid a premium to enter a contract on the other side, inflating the price.

## Oils, Metals and Food: Price Movements of Unrelated Commodities

The document says that commodity index funds not only work to push up commodity futures prices, they also cause the prices of previously unrelated commodities, such as oil, metals and food, to move together.

Empirical research into price trends across a range of commodities found that the prices of non-energy commodities, such as agricultural commodities, became increasingly correlated with oil during the mid-2000s, in parallel with the huge growth in financial speculation in commodity index funds. At the end of the 1990s there was almost no correlation between food and oil prices, however, by 2008 this correlation had become extremely high.

## Herding Upwards

The document further says that the increased presence of financial speculators in commodity derivative markets has also facilitated greater herding behavior amongst traders. Herding behavior is most common in situations of uncertainty, a key feature of commodity markets due to the lack of standardized and reliable data on commodity supply and demand

The impact of the beliefs and sentiment of traders can be clearly seen in the sharp rise in commodity prices following the financial crisis of 2008. However, following the 2008 economic crash, commodity prices rose much earlier in the economic cycle, significantly ahead of increasing physical demand. Rather than being driven by rising demand, market participants' belief that commodity prices would rise as a result of the recovery drove prices up, completely unrelated to supply or demand.

Another form of irrational herding as a result of greater participation of financial speculators has been that of trading based on price based technical analysis, or 'trend chasing', by active speculators. These traders add significantly to the volatility in commodity futures markets, increasing the likelihood of markets overshooting both when prices rise and fall.

Collectively these forms of herding lead to increased price volatility as traders buy into upward trends and sell out of downward price trends, exacerbating the volatility that already existed in the market. Given the current

context, where commodity prices are expected to rise following the financial crisis and a widespread sentiment that food prices will rise due to long term population pressures, these price deviations serve to inflate prices. In other words, increasing financial speculation fuels and sustains price bubbles within commodity derivative markets.

## **Persistence of Bubbles**

The document says that according to the market theory, any traders that seek positions that are not driven by information about fundamentals will not profit and therefore be driven out of the market. Through this analysis of commodity markets, financial speculators could only move prices away from the levels indicated by supply and demand in the very short term, but there can be no lasting price bubble in commodity prices.

In the market where index funds, hedge funds and investment banks hold such a large influence over the market, exerting a sustained influence on prices, it also may not be possible for informed traders to trade against them.

The end result of this is that bubble prices can be sustained in commodity markets for at least the medium term, if not over the long term. Currency speculation can be seen to move exchange rates away from the fundamentals for extended period of time. Given that information on fundamentals is much less clear in commodity markets, there is little reason to believe that food price bubbles could not persist for as long, if not longer. The 2007-2008 food price spike lasted less than two years yet had a devastating impact on people throughout the global south.

## When Rain Becomes a Flood: Damaging Liquidity

The document says that according to the same efficient market theory, the increase in liquidity associated with the increase in financial speculation should exert a stabilizing role on prices. However, in practice, the increase in liquidity has now become a flood, facilitating herding and increasing price volatility within the market.

While it is true that ensuring markets have sufficient liquidity can reduce volatility, it does not hold that more liquidity always reduces volatility. A recent study of agricultural commodity markets from 1990 to 2011 found that:

- Volatility was relatively steady prior to the significant increase in liquidity between 2003 and 2008.
- The highest levels of volatility are associated with the rapid increases in liquidity towards the end of this period.
- There is strong evidence that the rise in liquidity is associated with higher levels of volatility.
- There is no evidence that prices on food commodity markets that were observed behaved in a more volatile way when markets were less liquid.

## Forcing Hedgers Out of the Market

The document further says that increased volatility in futures markets also makes it more expensive and more risky for commercial traders to hedge risk. On a futures exchange all traders are required to provide 'margin' on their contracts. The level of margin required is closely linked to volatility in futures markets, so as volatility rises, so do the margin payments for commercial hedgers. These increased costs of hedging being passed onto consumers through higher prices, increased margin costs are likely to drive out the very commercial traders these markets are designed to help.

## **Commercial Speculators and Opaque Exchanges**

The document says that while the enormous influx of financial speculators has had an enormous impact on agricultural commodity markets, damaging speculation is also undertaken by some large agricultural multinational corporations such as Glencore and Cargill. These firms can take significant advantage of their role in the physical markets to add to their profits through speculating in the derivative markets.

One of the clearest examples of this was the revelation that Glencore, one of the world's largest commodity traders, took out large speculative positions betting on rising grain prices in the summer of 2010. The company then encouraged Russia to introduce a wheat export ban which drove up the price of wheat.

The document further says that one of the challenges of assessing the impact of financial speculation, particularly in European agricultural commodity markets, is absence of detailed market data to provide a basis for analysis. Lack of rigorous market data is exacerbated by the lack of dedicated regulatory expertise for commodity markets in many European countries such as UK.

In, Chapter V, the document discusses 'How futures markets change the price of food'

It says that financial speculation has overwhelmed agricultural derivative markets. It has inflated prices, increased price volatility and created bubbles completely unrelated to supply and demand.

The document further says that a view based on the economic theory that the pricing of commodities is led only by the supply and demand relationship of the physical commodity. However, this is not the case. Taking data from the US Department of Agriculture on global supply and demand for wheat and maize, there is no significant shortfall of supply or excessive demand associated with the sharp price spikes seen in these markets in recent years. Rather than prices being affected only by changes in supply and demand of the physical commodity, futures markets are at the heart of changing commodity prices. Futures markets affect the price of food in the physical commodity markets through:

- Influencing the expectations of buyers and sellers in the physical market.
- The incorporation of futures prices directly into contracts for food.
- Traders taking advantage of differences between prices in futures and physical markets.

It is also important to recognize that financial investors do also trade in the physical market. This was seen in 2010 when the hedge fund Armajaro attempted to corner the physical market by trying to buy huge amounts of the world's supply, forcing up prices.

#### **Great Expectations**

The document says that according to the International Cocoa Organization "Futures markets for cocoa in London and New York play a vital role in the formation of prices for physical cocoa throughout the world. Indeed, in this respect, London and New York function as the benchmark for prices paid".

The document further says that this is due to the fact that futures markets are generally more liquid and transparent than the physical markets, and are believed to be better able to react to emerging market information and reflect this through changing prices.

Prices in the futures markets provide information and help set the expectations of traders in the physical markets. If futures market prices are high and rising this then changes the expectations of both buyers and sellers in the physical markets, pushing up the price of physical commodities. If food producers, informed by prices in the futures markets, believe that they will be able to gain a higher price in the future they will be likely to withhold their supply anticipating a higher price in the future. This withdrawal of supply then pushes up the price.

#### **Physical Commodity Contracts**

The document says that in addition to informing the expectations of participants in the physical markets, futures prices are often used as the basis of pricing physical market contracts. By incorporating the futures price directly into physical commodity contracts the price discovery process takes place entirely through the futures market, completely separate from the supply and demand of the commodity. Through their incorporation into physical market contracts, increases in futures prices as a result of financial speculation directly increase the cost of food.

#### Arbitrage

The document points out that arbitrage is the process through which traders can take advantage of an asset being quoted simultaneously at different prices in two different markets.

If futures prices are higher than physical prices, traders seeking to buy physical commodities, who hold futures near their delivery date will close out their positions in the futures market and seek to take ownership of physical commodities, rather than continuing to hold more expensive futures contracts through to delivery. This increase in demand in the physical market pushes up prices.

In **Chapter VI**, under the title of 'What else is causing food prices to rise?', the document talks about a range of other factors that are contributing to high and volatile prices. These are:

**Harvests and Stocks -** Market economics would dictate that high prices are driven by a mismatch between supply and demand. But analysis by researchers from the Consultative Group on International Agricultural Research argues that the 2007-2008 food crisis occurred amid "rather minimal shocks" to supply.

**Export Bans -** Export bans by major food producers following weak harvests are commonly cited as a major cause of rising prices. Whilst important, the impact of export bans can only explain part of the price increases triggered by other factors.

Climate Change - Climate change is already affecting food production by altering temperature and rainfall.

Research published in Science estimated that the impacts of climate change have only added five percent to food prices. But theses impacts do not correspond with the price rises and volatility in food commodity markets, such as the 102 percent increase in maize prices in the year to April 2011.

**Biofuels -** Biofuels are contributing to higher food prices, as well as harming local communities and increasing greenhouse gas emissions. Globally, though, biofuel production is rising steadily over the long term. This contrasts with the rapid swings in food prices witnessed since 2007.

**Oil Prices -** Rising oil prices are contributing to higher food costs by making oil based fertilizers and transport fuel more expensive. Oil prices are also subject to the inflationary impacts of financial speculation.

**Demand from China and India** - The growing size and wealth of China and India's populations are often said to be driving up demand and global food prices. However, as the FAO notes, "Because these changes are gradual, it is not correct to consider them as an underlying cause for any sudden price increase such as the one experienced in 2007-2008.

**Monetary Policy -** Low interest rates and other sources of cheap money, such as quantitative easing, in the US, EU and China are also associated with higher inflation. This can fuel commodity speculation as finance becomes cheaper and traders seek high returns on the large amounts of money available, which can be better achieved through speculation in markets such as commodities, rather than lower return on investment in the productive economy.

In **Chapter VII named Fixing Broken Markets**. The document says that excessive speculation on food prices is having a devastating impact in the global south, increasing hunger, malnutrition and poverty. In order to effectively combat excessive speculation, regulators need to ensure market transparency by moving commodity derivative trading onto well regulated exchanges and to place strict limits on the overall amount of the market that can be held by financial institutions

## Transparency: Exchange Trading and position Reporting

Introducing proper market transparency through exchange trading and effective position reporting will allow regulators to address excessive speculation. It will also allow the public to effectively assess the impact financial speculation is having in financial commodity markets and to ensure these markets work effectively for the food buyers and producers who rely on them.

#### **Exchange Trading**

Regulators need to work with commercial and financial participants to standardize OTC derivatives so as to ensure that greater liquidity can be achieved in a smaller number of standardized derivatives.

Without effective work to pre-emptively close loopholes and ensure standardization, there is significant risk that OTC trading could continue to make up a large part of financial commodity markets. If this were to continue it would benefit a handful of financial institutions at the expense of other market participants and effective functioning of derivative exchanges.

## **Position Reporting**

Position data should be provided frequently and regularly, preferably daily, by exchanges to regulators. Data should be aggregated and made available to the public frequently and on a daily basis. Such position reporting is vital for regulators, analysts and public to clearly assess the impact of different categories of traders, such as financial speculators, on commodity prices.

Position reporting from commodity exchanges takes place in the US through CFTC, yet no such reporting currently takes place for European commodity markets.

## **Controlling Speculation: Position Limits**

The document says that improving transparency alone is not enough to tackle excessive financial speculation. Regulators also need the power to limit the amount of market share financial speculators can hold, reducing their influence on food prices.

## **Position Limits**

Individual position limits cap the amount of the market that can be held by an individual trader. These position limits can be used to prevent market manipulation where one participant corners the market by holding the majority of the market for the underlying commodity and squeezing up prices. Such limits can be useful in preventing large financial firms from having too great an influence on the market through holding excessive positions and can tackle 'commercial speculators' - large multinationals who use commodity markets for speculation as well as hedging.

Without effective regulation to limit the impact financial speculators can have within the futures market, it is

likely that prices will become increasingly disconnected from supply and demand fundamentals, become more volatile and continue the dramatic upward trend seen in recent years.

## Position Management: Deregulation by Another Name

The document says that critics of position limits, such as the UK government, have argued that these measures are inflexible and that a more flexible system of 'position management' by regulators or exchanges would better suit the fast changing, dynamic environment of modern derivative markets. Such a system relies on the judgment of the exchanges. However, this creates a significant conflict of interest as they have a strong incentive not to intervene in the market as they profit from the trading volume they are responsible for controlling.

The failures of this system are all too apparent. For example, in July 2010, the hedge fund Armajaro nearly cornered the entire European cocoa market the London based cocoa exchange - pushing prices to a 33 year high. Again, in May 2011, Frontier Agriculture, one of the UK's major grain marketing businesses, bought all the futures contracts available on the London feed wheat market, effectively buying up the whole market. Had position limits been in place, these incidents would simply not have been possible.

### **International Action**

The document says that the World Development Movement is not alone for reform. The director general of the FAO, the UN special rapporteur on the right to food, the UN Conference on Trade Aid and Development (UNCTAD), governments including those of France, Indonesia, and the Dominican Republic, the Pope, amongst others, have all now call for action to tackle excessive financial speculation.

The document further says that in early 2011, over 100 NGOs called on the G20 to introduce effective market transparency and position limits and in the US over 450 organizations lobbied the US Congress to ensure effective rules were introduced.

### G 20

The G20 has focused on reforming derivative markets. In 2009, the G20 committed to introduce central clearing and exchange trading standardized OTC derivative contracts by the end of 2012. Among the measures the hosts of the summit aim to achieve is a common set of rules for commodity markets. The G20 should call for all its member states to move commodity derivative trading onto well regulated exchanges and to introduce permanent effective position limits to tackle financial speculation.

## U.S.

Since the financial crisis the US has been the first country to propose new rules to reregulate commodity derivative markets, as part of a wide ranging package of financial reforms signed into law by President Obama in July 2010. The Dodd-Frank Wall Street Reform and Consumer Protection Act:

- Introduces mandatory clearing and exchange trading for commodity swaps, that until now had been traded OTC.
- Allows for the introduction of individual aggregate position limits across futures, swaps and options with the stated purpose of tackling excessive speculation.

The US regulator, the CFTC, is currently developing and consulting on a wide range of proposed rules to implement the measures included in the Dodd-Frank Act, much to which is being heavily opposed by financial lobbyists and some parts of the US congress. It is essential that the CFTC fully implements the measures laid out in Dodd-Frank to tackle excessive financial speculation, including individual and aggregate position limits, to ensure that the major US markets are restored to their proper functions free from the damaging impact of excessive financial speculation.

## **European Union**

The European Commission is also developing proposals for the regulation of commodity derivative markets as part of the wide ranging review of the Markets in Financial Instruments Directive (MiFID). The Commission's consultation on the review of MiFID outlined proposals for a range of measures to regulate commodity derivative markets, including:

- Requiring all "clearing eligible and sufficiently liquid derivatives" to be traded on regulated markets.
- Requiring all derivative markets to make available data on position reporting available to regulators, to the public, in aggregate.
- Introducing hard position limits for commodity derivatives on exchanges and OTC markets, including

aggregate limits for categories of market participants such as financial speculators, or for specific investment vehicles such as commodity index funds.

Action in Europe is vital to achieving effective regulation internationally. The rules proposed in the US to tackle excessive speculation are at risk as traders threaten to move to less regulated exchanges.

Bu introducing effective transparency and effective position limits, the review of MiFID can ensure commodity derivative markets work better, for the benefit of commercial market participants, food producers and food consumers throughout the world.

In the conclusion, the document says that excessive financial speculation in any market can cause harm. Now it is all too apparent in food commodity markets. Speculation on food prices has led to price inflation, increased price volatility and most importantly, has caused massive harm to the people most at risk of hunger and poverty. Around 100 billion people currently go hungry and millions more are at risk of hunger, malnutrition and poverty if prices rise further.

Effective regulation of financial commodity markets is urgently needed, to prevent excessive speculation leading to further hunger and poverty and to make markets work for the commercial traders who rely on them.

The financial services industry, which has capitalized on agricultural commodity markets at the expense of commercial traders and the world's consumers, is lobbying hard to prevent regulation. With Banks like Goldman Sachs making over \$ 1 billion and Barclays making as much as \$550 million from speculation on food in one year alone, it appears that motivation to oppose reform is driven more by financial self-interest than a concern for the effective functioning of these markets.

Those who oppose clear and strict regulations to tackle excessive speculation, including UK government, risk condemning millions of people to a future of hunger and poverty. In the US, at the G20 and through the European Commission's review of the MiFID, there is a unique opportunity to put in place the regulation that is so urgently needed. Regulation of agricultural derivative markets would end the dominance of financial speculators, and make these markets work for the benefit of food producers and consumers throughout the world.

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