



Reforming financial markets III: commodity trading

Standard Note: SN/BT/5872

Last updated: 28 August 2014

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Section Business & Transport Section

This is one of a series of notes which looks at actual or proposed reforms of either certain parts of the financial services sector or reforms of certain activities.

The entire sector has received worldwide attention from regulators, governments, consumer and intra-industry and professional groups following the financial crisis which began in 2007. Whilst the 'rescue and recovery' phase of the crisis is (mainly) past, and the consultation and consideration phase nearing its climax, the legislative phase is still to come.

This note looks at the arguments surrounding commodity speculation and its impact on the real world of commodity prices. A growing number of economic commentators and charity groups have highlighted what they see as a link between growing and ever more sophisticated forms of financial speculation (distinct from the traditional, real, commodity trading and hedging activities) and the volatility of food and other commodity prices.

The statistical evidence from various surveys presents a more mixed picture on the links between speculation and price increases. Financial speculation does appear to make commodity prices more volatile but does not provide much of an explanation for the specific movement of individual prices in the short term.

Regulators have their own concerns over the methods used by traders and dealers. Most trades are carried out using derivative swap instruments outside of the more open, transparent regulated exchanges. The note outlines what measures are being promoted to improve the regulation of the financial markets involved with these matters.

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1 Introduction

Take the highest stakes, riskiest economic behaviour ever devised, and marry it to the most fundamental basic need of humankind, and you have the subject of this report.¹

Thus begins *The great hunger lottery* a recent report by the World Development Movement (WDM). Commodity speculation is nothing new. It was rife in the later BC centuries of the Roman Empire. Maybe even on a pyramid somewhere in Egypt there is a hieroglyphic frieze railing against it.

It is in the nature of commodity markets that prices are volatile. This is largely due to the long lead time in adjusting supply to demand. High corn prices one year lead to more corn being grown – but it takes months for supply to adjust – the corn has to grow; high demand for oil can be met but it takes time to drill wells or even move supplies to where they are needed.

Over time, advanced economies have developed ways of trying to lessen this consequence. Many have agricultural stabilisation policies, the EU common agricultural policy being one obvious example. Strategic stockpiling of commodities, like oil, is another. Such policies, however, can only do so much. Price volatility will always offer opportunities for trade for speculators. Obviously if there is a commodity whose price is fairly constant in real terms, over a long period, it will not attract much in the way of financial speculation: companies often hedge their gas and electric prices but are less worried about their water bill.

The favourable conditions that commodity markets present for financial speculation encourages the inventiveness of the financial community to develop financial products and markets that meet investors' needs. Over the last 20 years or so this trend has accelerated due to a combination of theoretical mathematics, increased computing capability and globalised capital markets producing a market that some critics feel has no true value or worth but simply allows financial speculation that has bad side effects on important commodity markets. Put simply, if Goldman Sachs can devise a financial instrument that allows a pension fund exposure to commodities, and the fund decides that commodities are a good long run investment then the amount of money chasing limited resources obviously goes up, which, in turn, it is argued, raises the price of the underlying commodity. In the real world Goldman Sachs, and others, have, and the pension funds, and other investors now take advantage.

It is the increase in purely financial speculation – i.e. investment divorced from any real involvement with real commodities but which fundamentally affects their market prices, which is the particular focus of the WDM, and others, complaints'.²

2 The growth of synthetic investments

If there is an 'acceptable' face of commodity speculation, it is the traditional hedging activities of commercial commodity producers and consumers. A coffee grower, following a cold winter, thinks that the price coffee will rise to \$3 a pound at the next harvest. But, they would be happy to receive a certain \$2.85 a pound. Coffee manufacturers, who want to limit price rises and fearful of paying \$3 might be willing to guarantee purchase at \$2.85. A futures contract of a certain volume at \$2.85 between the two has benefits for both. This futures

¹ World Development Movement; *The Great Hunger Lottery*, July 2010

² For convenience this Note will refer to the assertion that financial speculation has played a significant part in setting commodity prices as 'the WDM view'. Of course they are not alone in holding this point of view.

trading is not the main concern of critics such as the WDM. They outline what they see as the unacceptable face of purely financial speculation:

Over the past decade, 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. A derivative is not based on an exchange of tangible assets such as goods or money, but rather is a financial contract with a value linked to the expected future price movements of the underlying asset. Derivative contracts are traded on a growing number of underlying assets, from share prices, to mortgages, bonds, commodity prices, foreign exchange rates, and even index of prices.

[...]

In *The great hunger lottery*, World Development Movement has compiled extensive evidence establishing the role of food commodity derivatives in destabilising and driving up food prices around the world. This in turn, has led to food prices becoming unaffordable for low-income families around the world, particularly in developing countries highly reliant on food imports.

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, and describes the terrible immediate impacts on vulnerable families around the world, as well as the long term damage to the fight against global poverty.³

An American study highlights how the financial markets, in this case for oil futures, has changed in recent years.

Leading up to 2008, oil prices experienced a steady, upward trend. Then, in 2008 oil prices climbed to unprecedented highs of \$147 per barrel in July, only to fall dramatically in a very short period of time to a low of \$30 per barrel in December 2008. Since the end of 2008, oil prices have risen in 2009 and are now near \$70 a barrel. The relatively recent dramatic movement in oil price has caused everyone from U.S. congressmen to ministers from the Organisation Of Petroleum Exporting Countries (OPEC) to call into question the role of speculative traders in the crude oil market. The Commodity Futures Trading Commission (CFTC), the main regulator of U.S. oil futures markets, recently announced that a new review of the role of speculators in oil futures markets traders would be forthcoming in late August. Early reports indicate that the CFTC, in its new study, is likely to pin oil price swings more squarely on speculative index trading. The Obama administration has already indicated that it will pursue greater regulation of the market and is negotiating with the United Kingdom about possible co-ordination.

While the question of what has produced sharp swings in oil prices since 2005 is a complex one that requires further and deeper study, there are inescapable facts that need to be part of the debate about regulating the activities of institutions betting on movements in oil price purely for financial gain. Specifically, non-commercial traders – who the CFTC designates as any reportable trader who is *not* using futures contracts to hedge – have increased their footprint in the marketplace dramatically since the late 1990s. Hedgers are typically producers and consumers of the physical commodity who use futures markets to offset price risk. By contrast, non-commercial traders seek profits by taking market positions to gain from changes in the commodity price, but are not involved in the physical receipt/delivery of the commodity. These financial players

³ [The Great Hunger Lottery](#), p4

generally referred to as 'speculators' – have come to account for a significantly greater proportion of activity in the U.S. oil futures markets than physical players in the oil industry in recent years. In addition, trading strategies of some financial players in oil appear to be influencing the correlation between the value of the U.S. dollar and the price of oil. Moreover we contend that the observed trading behaviours were supported during the 2000s by the policies surrounding the way governments approached the use of strategic government oil stocks.⁴

A related concern for market regulators, since the financial crisis has been the way in which these financial contracts have been traded. The new securities devised by the investment bankers are derivative contracts. Derivatives are a 'bet' on the movement of some index that reflects price movements rather than contracts for a quantity of a commodity – a pension fund doesn't actually want to be left owning 100 tonnes of corn!

The new feature was the realisation by the banks that they do not need to trade these contracts over an exchange. Exchanges cost money to run so the difference between buying and selling – the margin – is a cost on all trades. Therefore, they started to trade these things between each other on behalf of clients. This is what is known as the over the counter trade – OTC. What the financial crash brought home to financial regulators was how little they knew about the \$trillions of derivative contracts – and hence liabilities – floating around the system. Regulators, and indeed some market makers, had very little idea about, what they were worth, or what (if any) threat they posed to financial stability, since OTC trades were outside much of the supervision of traditional regulators who were institutionally (exchange) based.

There are therefore two distinct strands to the call for reform.

- One, calling for a limit on the impact of financial trades on real commodity prices.
- The second calling for reforms to the way the trades are made and where they are effected.

2.1 New trading patterns

That there is something 'new' in the trading activity of commodity markets is supported by a number of studies. The Commodities Futures Trading Commission (CFTC) report referred to in the quote above concluded:

Major changes in the composition of futures market participants have developed over the last 20 years. Specifically, there has been an influx of new traders into the market – commodity index traders (including pension and endowment funds) that seek exposure to commodities through passive long-term investment in commodity indexes, and swap dealers that seek to hedge price risk resulting from their over-the-counter (OTC) activity. In addition to those changes, volume growth on futures markets has increased fivefold in the last decade, and in the last year, the price and volatility of oil and other commodities have reached unprecedented levels.⁵

The report sets out the development of swaps market activity, originating in an unlikely initial transaction:

From the inception of U.S. futures trading in the mid 1800s until recently, regulated futures exchanges offered the primary means by which commercial entities could

⁴ Kenneth B Medlock III; *Who Is In The Oil Futures Market And How Has It Changed?; August 2009*

⁵ Commodity futures Trading Commission; *Commodity Swap Dealers & Index Traders*, p1, September 2008

manage their physical market price risks. During the 1980s, however, financial institutions began to develop non-exchange-traded derivatives contracts that offered similar risk management benefits. In 1981, the World Bank and IBM entered into what has become known as a currency swap. The swap essentially involved a loan of Swiss francs by IBM to the World Bank and the loan of U.S. dollars by the World Bank to IBM. The motivation for the transaction was the ability of each party to borrow the funds they were loaning more cheaply than the counterparty, thus reducing overall funding costs for both parties. This structure of swapping cash flows ultimately served as the template for swaps on any number of financial assets and commodities.

Financial institutions then looked at the fixed income markets and found that swaps that provided for the exchange of a fixed rate for a floating rate (e.g., the interest rate on Treasury Bills —swapped for the London Interbank Offer Rate (LIBOR)) served as an effective hedging vehicle in much the same way that financial futures contracts do. For example, a typical futures contract has many of the same characteristics as a swap in that it is essentially a contract where the buyer of the contract agrees at the outset to pay a fixed price for a commodity in return for future delivery of the commodity which will have an uncertain or floating value at the time of expiration of the contract.

The party offering the swap, typically called a swap dealer, takes on any price risks associated with the swap and thus must manage the risk of the commodity exposure. In the early development of swap markets, investment banks often served in a brokering capacity to bring together parties with opposite hedging needs. The currency swap between the World Bank and IBM, for example, was brokered by Salomon Brothers. While brokering swaps eliminates market price and credit risk to the broker, the process of matching and negotiating swaps between counterparties with opposite hedging needs could be difficult. As a result, swap brokers (who took on no market risk) evolved into swap dealers (who took the contract onto their books). As noted, when a swap dealer takes a swap onto its books, it takes on any price risks associated with the swap and thus must manage the risk of the commodity exposure. In addition, the counterparty bears a credit risk that the swap dealer may not honor its commitment. This risk can be significant in the case of a swap dealer because it is potentially entering into numerous transactions involving many counterparties, each of which exposes the swap dealer to additional credit risks. As a result of these risks, there has been a natural tendency for financial intermediaries (e.g., commercial banks, investment banks, insurance companies) to become swap dealers.

These firms typically have the capitalization to support their creditworthiness as well as the expertise to manage the market price risks that they take on. In addition, for particular commodity classes, such as agriculture and energy, large commercial companies that have the expertise to manage market price risks have set up affiliates to specialize as swap dealers for those commodities. The utility of swap agreements as a hedging vehicle has led to significant growth in both the size and complexity of the swap market. During the early period in the development of the swap market, the majority of swap agreements involved financial assets. In fact, even today the vast majority of swaps outstanding involve either interest rates or currencies. The Bank for International Settlements (BIS) estimated that at the end of 2007, a total of \$156 trillion of notional value in OTC financial derivatives was outstanding, compared to approximately \$9 trillion in physical commodity-related contracts. Thus, the financial-related portion of the OTC derivative market was, and is, significantly larger than the physical commodity-related portion.

The OTC swap market has grown significantly because, for many financial entities, the OTC derivatives products offered by swap dealers have distinct advantages relative to futures contracts. While futures markets offer a high degree of liquidity (i.e., the ability to quickly execute trades due to the high number of participants willing to buy and sell

contracts), futures contracts are more standardized, meaning that they may not meet the exact needs of a hedger. Swaps, on the other hand, offer additional flexibility since the counterparties can tailor the terms of the contract to meet specific hedging needs.

As an example of the flexibility that swaps can offer, consider the case of an airline wanting to hedge future jet fuel purchases. Currently there is no jet fuel futures contract available to the airlines to directly hedge their price exposure. Contracts for crude oil (from which jet fuel is made) and heating oil (which is a fuel having similar chemical characteristics to jet fuel) do exist. But while these contracts can be used to hedge jet fuel (in what is referred to as a —cross hedge), the dissimilarities between jet fuel and crude oil or heating oil mean that the airline will inevitably take on what is known as —basis risk. That is, the price of jet fuel and the prices of these futures contracts will not tend to move perfectly together, diminishing the utility of the hedge.

In contrast, swap dealers can offer the airline the alternative of entering into a contract that directly references the cash price for jet fuel at the specific time and location where the product is needed. By creating a customized OTC derivative product that specifically addresses the price risks faced by the airline, by taking on the administrative costs associated with managing that contract over time, and by assuming the price risks attendant to that contract, the swap dealer facilitates the airline's risk management. Swap agreements have also become a popular vehicle for non-commercial participants, such as hedge funds, pension funds, large speculators, commodity index traders, and others with large pools of cash, to gain exposure to commodity prices. Recently, portfolio managers have sought to invest in commodities because of the lack of correlation, or even negative correlation, that commodities tend to have with traditional investments in stocks and bonds. In addition, swaps, because of the ability to tailor transactions, can represent a more efficient means by which these participants can enter the market. Hence, many of the benefits that swap agreements offer commercial hedgers also attract non-commercial interests to the swap market. Since swap dealers are willing to enter into swap contracts on either side of a market, at times they will enter into swaps that create offsetting exposures, reducing the swap dealer's overall market price risk associated with the firm's individual positions opposite its counterparties. Since it is unlikely, however, that a swap dealer could completely offset the market price risks associated with its swap business at all times, dealers often enter the futures markets to offset the residual market price risk. As a result of the growth of the swap market and the dealers who support the market, there has been an associated growth in the open interest of the futures markets related to the commodities for which swaps are offered, as these swap dealers attempt to lay off the residual risk of their swap book.

A more recent phenomenon in the derivatives market has been the development of commodity index funds and exchange-traded funds for commodities (ETFs) and exchange-traded notes (ETNs), which are mainly transacted through swap dealers. Both products are designed to produce a return that mimics a passive investment in a commodity or group of commodities. ETFs and ETNs are traded on securities exchanges and are backed by physical commodities or long futures positions held in a trust. Commodity index funds are funds that enter into swap contracts that track published commodity indexes such as the S&P Goldman Sachs Commodity Index or the Dow Jones AIG Commodity Index. The vast majority of commodity index trading by principals is conducted off-exchange using swap contracts.⁶

The report also points out that there is no neat division between purely 'real' commodity based transactions and those that are financial speculation only:

⁶ Ibid p10-12

Since 1991, the Commission has granted hedge exemptions to swap dealers (in regulated futures markets that have Federal speculative position limits) to manage the price risk on their books that results from serving as a market maker to OTC clients. Separately, the Commission has classified the trading activity of swap dealers as commercial rather than non-commercial in its weekly public Commitments of Traders report (COT) because swap dealers use futures markets for the commercial purpose of hedging their price risk. As this survey shows, futures market trades by swap dealers are essentially an amalgam of hedging and speculation by their clients.

Thus, any particular trade that a swap dealer brings to the futures market may reflect information and decisions that originated with a hedger, a speculator, or some combination of both. A commodity index trader, which includes pension and endowment funds seeking exposure to commodities, is a passive, transparent investor in commodity markets. The investment objective of a commodity index trader is to track an index of commodities over time by acquiring long positions via OTC swap contracts, index funds, or exchange-traded futures. The larger commodity index traders typically gain commodity exposure through swap dealers.

[...]

This preliminary survey is not able to accurately answer and quantify the amount of speculative trading occurring in the futures markets. The current data received by the CFTC classifies positions by entity (commercial versus non-commercial) and not by trading activity (speculation versus hedging). These trader classifications have grown less precise over time, as both groups may be engaging in hedging and speculative activity.⁷

2.2 What impact did the new trading make?

In May and June 2008, the CFTC conducted a survey of off-market, OTC activity (described as a 'call' in the text) for oil, corn and wheat. The basic data on size and activity of markets between December 2007 and June 2008 is shown below:

- Net notional value of commodity index trading, which includes the portfolios held by swap dealers doing index business with their counterparties, plus the notional value of positions held by index funds trading directly on exchanges, was reported to be:
 - December 31, 2007: \$146 billion;
 - March 31, 2008: \$168 billion; and
 - June 30, 2008: \$200 billion.
- Approximately 80% of these trades were on U.S. markets regulated by the Commission (DCMs). The call therefore covered the following trade values
 - December 31, 2007: \$118 billion;
 - March 31, 2008: \$133 billion; and
 - June 30, 2008: \$161 billion.

⁷ Ibid p1

- By way of context, on June 30, 2008, the total of all major commodity futures and options open contracts on US exchange-traded markets was \$946 billion.
- Of the commodity index business in U.S. markets on June 30, 2008, about 24% was held by index funds, about 42% institutional investors, 9% sovereign wealth funds, and about 25% was held by other traders. The other category is largely made up of retail investors holding ETFs, ETNs, and similar instruments that are publicly traded.⁸

Taking the two commodities of most concern to WDM – agricultural crops – wheat and corn, the call found little to obviously link ‘speculation’ with price volatility. Wheat first:

Both the net notional values and the equivalent numbers of futures contracts reported for commodity index trading in wheat changed very little over that time period. Wheat futures prices, however, experienced a great deal of volatility over the 6-month period. The nearby futures price was at around \$8.85 per bushel on December 31, and traded near \$13.00 in late February and early March, before declining to \$8.44 at the end of June. Based upon this limited amount of data, there is no clear relationship between the small changes in numbers of futures equivalents related to commodity index business and the movement or volatility of wheat futures prices.⁹

The findings for corn were even less supportive of the case for a link between financial speculation and price volatility:

Corn futures prices were also volatile over the 6-month period and increased sharply. The nearby futures price was at around \$4.56 per bushel near January 1, closed at \$5.67 on March 31, and moved even higher to about \$7.25 at the end of June. The net notional values associated with commodity index trading increased significantly from December 31 to March 31 (by about 36 percent) and increased again from March 31 to June 30 (by about 27 percent). The estimated numbers of futures contracts associated with commodity index trading increased from December 31 to March 31 by about 11 percent. However, from March 31 through June 30, 2008, as the nearby futures price increased by about 28 percent, there was a net 3 percent **reduction** in the equivalent long corn futures contracts held by commodity index traders.¹⁰

In the oil market, much larger than its agricultural equivalents, while the net notional value of commodity index business in increased by about 30 percent over the six-month period ending on June 30, the actual number of equivalent long futures contracts **declined** over that same period by about 11 percent. In other words, the sharp rise in the net notional value of commodity index business in crude oil futures appears to be due to an appreciation of the value of existing investments caused by the rise in crude oil prices and not the result of more money flowing into commodity index trading.

This one study though is not a definitive rebuttal of the WDM view. Both the CFTC and WDM acknowledge that there are significant issues with the data and that not all activity was covered by the call. Further, the CFTC study looked at only a short period of time. WDM work is based on far longer time trends of increased investment activity and food price increases.

⁸ Ibid p21

⁹ Ibid p25

¹⁰ Ibid p28

The number of derivative contracts in commodities increased by more than 500 per cent between 2002 and mid-2008. Between 2006 and 2008 it is estimated that speculators dominated long positions in food commodities. For instance, speculators held 65 per cent of long maize contracts, 68 per cent of soybeans and 80 per cent of wheat.

In a major 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. Taken together, these findings support the view that financial investors have accelerated and amplified price movements driven by fundamental supply and demand factors, at least in some periods of time.”*¹¹

The WDM view also appeals to common sense and or economic theory. It is difficult to think of any market where increased demand does not lead to higher prices in some form or other. WDM is also able to mobilise many comments from market commentators and participants who generally accept that the effect of the ‘financialisation’ of commodity trading has a positive relationship to prices. For example:

At the start of the food price boom, one hedge fund manager told the Financial Times: *“There is so much investment money coming into commodity markets right now that it almost does not matter what the fundamentals are doing. The common theme for why all these commodity prices are higher is the substantial increase in fund flow into these markets, which are not big enough to withstand the increase in funds without pushing up prices.”* As the food price spike reached its height in 2008, another hedge fund manager quipped that speculators held contracts in enough wheat to feed every *“American citizen with all the bread, pasta and baked goods they can eat for the next two years”*.¹²

However, the precise linkage between the movement of index linked funds and the cost of a loaf of bread on the streets is difficult to pin down – partly because of the data problems mentioned already (OTC markets are opaque) – and the arguments over causality rapidly become arguments over statistical veracity and interpretation.

Even the UNCTAD study quoted by WDM above is less confident of the linkage than the above quote would appear to indicate. An extract from the same 2009 Report illustrates the level of statistical technicality that the issue can descend to:

[Comparing changes in trader activity with price levels] for crude oil, copper, wheat, maize, soybeans and soybean oil, as well as the net long index-trader positions for wheat, maize, soybean and soybean oil, for which separate data from January 2006 onwards began to be published by the CFTC. The chart confirms that market participants in the commercial category account for an overwhelming proportion of index trader positions.

However, [the results] provides only scant evidence of a correlation between position and price changes. While there clearly are periods and commodities where positions and prices have moved together, especially during the recent downturn and occasionally during the previous price upturn, there are other times when positions have not risen during periods of rapid price appreciation. For example, in the wheat market there was no increase in either non-commercial positions or index trader

¹¹ *The Great Hunger Lottery*, p4

¹² *Ibid* p10

positions during the steep price increase from mid-2007 to the end of the first quarter of 2008. By contrast, during the same period there appears to have been a positive correlation between market positions and prices in the maize and soybean markets, while the evidence is mixed for the soybean oil market.

For oil and copper, for which separate data on index trader positions are not available, non-commercial positions declined along with prices in the second half of 2008. On the other hand, evidence for the earlier price increase does not suggest a correlation between non-commercial positions and prices: non-commercial copper positions declined during the period of the sharpest price increases – roughly from the beginning of 2004 through mid-2006. For oil, non-commercial positions exhibited strong volatility, even as oil prices rose almost continuously from the beginning of 2007 through the second quarter of 2008, by which time net oil positions had dropped roughly to zero.

Since the beginning of 2009, there has been an increase in the net long positions of both index traders and non-commercial participants excluding index traders. This may indicate that after the strong decline in their positions during the second half of 2008, both these groups are once again taking large positions on commodity markets.

While the evidence does not point to a long-standing correlation between position and price changes, for most commodities some correlation is present over sub-periods, as peaks and turning points seem to occur around the same time across the two series. This suggests that any analysis of a relationship between position and price changes may be sensitive to the choice of time period.

Generally, Granger causality tests, which examine causal lead and lag dynamics between changes in the positions of financial investors on commodity futures exchanges and changes in commodity prices, have not found evidence of a systematic impact on prices of positions taken by non-commercial traders. However, they have tended to find a statistically significant causal relationship between the movement of commodity futures prices and measures of position changes (see, for example, IMF, 2008b). However, the results of these studies suffer from a number of data problems. These include the aggregation of trader positions across maturities, the fact that weekly data cannot identify very short-term effects, even though intra-week trading activity may be significant (for example when index traders roll over their positions), and the fact that they usually concentrate on non-commercial positions thereby ignoring the positions of index traders.¹³

What the UNCTAD study did find, albeit in a weaker form, was that index commodity funds did appear to affect price movements in all commodities as a group. In other words, the relationship between speculation and the price of individual commodities was weaker than the relationship between investment and the index price of commodities generally:

In sum, the above findings suggest that part of the commodity price boom between 2002 and mid-2008, as well as the subsequent sharp decline in commodity prices, were due to the financialization of commodity markets. Taken together, these findings support the view that financial investors have accelerated and amplified price movements driven by fundamental supply and demand factors, at least in some periods of time. This acceleration and amplification of price movements can be traced for commodities as a group.

Regarding the impact of financial investors on individual commodities, some effect can be observed in the oil market, but it appears that most of the impact occurred in the smaller and less liquid markets for agricultural commodities, including food products.

¹³ UNCTAD; *Trade and Development Report 2009*, p68, UNCTAD

Some of these effects may have been substantial and some persistent. However, the non-transparency of existing data and the lack of a comprehensive breakdown of data by individual commodity and trader category preclude more detailed empirical analysis.¹⁴

UNCTAD last revisited this subject in its 2011 report. This later study gave a much greater appreciation of the way in which ‘financialisation’ affects (and disrupts) the underlying markets. It points out the obvious fact that financial markets work to different strategies. For example, for financial markets ‘commodities’ are part of a portfolio of investment opportunities so what happens in , for example, property, has an influence on how investors value commodities even when there is no correlation between the two. It also points out that investors often target trends and try to ‘get out’ just before the trend ends. The impact of both the observed ‘herd’ antics of financial investors and then the sudden withdrawal, all with no connection to fundamentals confuses market signals given to producers which ‘pure’ commodity trades should give. A rise in prices on the markets could be due to increased demand for the product, or the collapse of the London super property market: how can a Brazilian coffee grower decide which. In short, as a result of its later work UNCTAD came down further towards the WMD view than it did previously.

Its recommendations are for greater transparency on markets – both physical commodity and financial exchanges; tighter regulation of financial investors and broad economic levers capable of defusing asset ‘bubbles’.¹⁵ It notes however, that stricter rules on financial investors are easier said than done:

Regulation of commodity exchanges needs to find a reasonable balance between imposing overly restrictive limits on speculative position-holdings and having overly lax surveillance and regulation.

Being too restrictive could impair the hedging and price discovery functions of commodity exchanges. On the other hand, if surveillance and regulation are not strict enough, prices could move away from levels warranted by fundamental supply and demand conditions, and would thus equally impair the basic functions of the exchanges. However, finding such a compromise has become increasingly difficult. Financial investors are increasingly engaging in physical market transactions (such as by owning warehouse inventories or even agricultural land) and physical traders are also taking financial positions more frequently, so that the difference between these two types of traders is becoming blurred.¹⁶

Any bibliographical search will reveal a number of academic financial papers that attempt to model the impact of the financial sector on price movements. Results vary. One study found that “within a plausible numerical illustration we find that financialization accounts for 11% to 17% of commodity futures prices and the rest is attributable to fundamentals”.¹⁷

3 Regulatory changes

While the debate about whether or not financial speculation affects commodity prices continues, regulators have, in the wake of the financial crisis, their own (related) reform agenda. Their principal concern is the lack of transparency of much of the financial activity;

¹⁴ Ibid p73-74

¹⁵ UNCTAD [Trade & Development Report 2011](#); Chapter V

¹⁶ Ibid p140

¹⁷ Basak & Pavlova; [A Model of Financialization of Commodities](#), p1 May 2013

the fact that it is conducted off-exchange and hence is less regulated; and the lack of financial safety nets should any of the big market makers come under financial pressure.

The global push for structural and regulatory reforms to the commodity markets has come from successive G20 conferences. Much of the technical work and recommendations have come from the International Organization of Securities Regulators, also known as the International Organization of Securities Commissions (IOSCO). IOSCO had actually begun working on examining how to reduce oil futures speculation before the G20 interest in July 2009. The IOSCO Technical Committee created the Task Force on Commodity Futures Markets (Task Force) in September 2008 in response to global concerns, including those voiced by the G-8 Finance Ministers, concerning price increases and volatility in oil prices. It produced a [report in March 2009](#), which the G20 leaders endorsed its recommendations in September 2009, and further ones in June and November 2010.

Part of the June 2010 report is shown below. It summarises the IOSCO recommendations from March and outlines what further work has begun. In the text the acronym CMD refers to a group of major commodity dealers active in the OTC market it includes Bank of America-Merrill Lynch, Barclays Capital, BNP Paribas, Citigroup, Credit Suisse AG, Deutsche Bank AG, Goldman Sachs & Co, HSBC Bank USA N.A., JP Morgan Chase, Morgan Stanley, RBS Sempra, Société Générale, UBS AG and Wachovia Bank, N.A.

The IOSCO Technical Committee created the Task Force in September 2008 as a response to global concerns, including those voiced by the G-8 Finance Ministers, concerning price increases and volatility in oil and food products. The G-8 Finance Ministers specifically called for “national authorities to examine the functioning of commodity futures markets and to take appropriate measures as needed.” Responding to these concerns, the Task Force held meetings in Washington, DC in December 2008 and in London in January 2009.

The primary focus of the Task Force was whether supervisory approaches were keeping pace with market developments, including the participation of new categories of traders such as index funds, whether transparency in commodity markets was sufficient in light of current concerns, and whether supervisory and enforcement cooperation could be improved.

The Task Force’s March 2009 Report set out the following recommendations:

- Continued monitoring of the futures markets in order to improve understanding of futures price formation and the interaction between regulated futures markets and related commodity markets;
- Improvements in transparency with respect to the availability and quantity of information on commodities;
- Greater cooperation and the sharing of information among futures market regulators;
- Ensure that futures market regulators have the necessary legal framework to detect and take enforcement action with respect to manipulation; and
- Meeting regularly for the purpose of informal sharing of concerns on trends and developments in commodity markets as well as the sharing of market surveillance and enforcement approaches.

Implementing the IOSCO Task Force Recommendations

The G-20 Pittsburgh Statement endorsed these recommendations and called for IOSCO members to implement them.

In order to assess compliance with these recommendations, the Task Force conducted a survey of its members. The survey (attached) reveals a high degree of compliance by Task Force members with these recommendations: a majority of all members monitor large concentrations, have the authority to order reductions in positions, and have the authority to collect information on related OTC and cash market positions. In instances where authority is lacking, members are reviewing steps to request such additional authority. All Task Force members have the authority to share surveillance information and have a compliance program, including the powers to discipline both exchange members and non members that engage in abusive trading.

Prioritizing Work in Oil OTC derivatives

The IOSCO Task Force's 2009 Report recommended greater transparency to enhance the quality of information in the organized futures markets and in the related OTC and cash commodity markets. Because transparency in the organized futures markets is well established, and the physical commodity markets are beyond the jurisdiction of IOSCO's securities and derivatives regulators, the Task Force focused its most recent work on the OTC markets.

The Task Force initiated work on multiple fronts to prompt better transparency of OTC oil derivatives data. The co-chairs contacted the Bank for International Settlements Committee on the Global Financial System (CGFS) to request that OTC energy/oil is reported separately from aggregated quarterly OTC commodity derivative statistics. This work remains under consideration by BIS.

In addition, the Task Force has been working with major OTC derivatives participants who had already made initial commitments to bring greater transparency and standardization to the OTC derivatives markets in a variety of asset classes.⁷ The Task Force's objective has been to determine (1) if work could be expanded and accelerated with respect to transparency in oil OTC derivatives and if so, (2) to broaden the participation in this work to include a geographically diverse group of dealers, producers and end-users.

In this respect, the Task Force is pleased to report commitments from the industry to assist in bringing needed transparency to this marketplace. The CMD and the ISDA COSC, collectively referred to as "major commodity participants" have agreed to:

- Work with and report to the Task Force in pursuing greater transparency in OTC oil derivatives;
- Deliver by the end of May 2010 a timeline for deliverables that will facilitate greater transparency and operational efficiencies in OTC oil derivatives;
- Conduct a survey of the ISDA COSC to assess the size and composition of the OTC oil financial derivatives market, thus informing consideration to introduce existing CMD metrics to non-dealer members of the ISDA COSC and work to understand the extent of electronic confirm matching;
- Accelerate work on previous commitments (outlined in the CMD's December 7, 2009 letter), which are intended to strengthen the resilience and robustness of the OTC commodity derivatives infrastructure in the global OTC commodity derivatives markets, including increased transparency, electronic processing and standardization;

- Build consensus for a trade repository for OTC oil financial derivatives among dealers and non-dealers; and
- Expanding participation in this work to include a broad, diverse group of dealers, industry groups and buy-side participants (including producers and end-users) in geographic areas where OTC oil derivatives markets exist.

Publication of Exchange-Traded Energy Derivatives Data

In order to advance the publication of large futures concentration information to the public as a means to enhance oil futures market transparency, the Commodity Futures Trading Commission (CFTC), is holding a seminar for interested regulators. The CFTC, which has published “commitments of trader” (COT) reports for many years, is arranging a meeting in June at which it will share its large trader and COT report procedures with interested Task Force members. Through such sharing of experiences the Task Force hopes to facilitate greater publication of aggregated large trader information in oil futures markets.

Continuing Challenge of Transparency of Underlying Physical Commodity Market Transactions

As noted in the Task Force’s Report:

Commodity futures markets are price discovery markets, in which the futures price tracks the prices of and signals information and expectations about the direction of the underlying markets.

The quality of the price which the futures market discovers reflects the extent of the market’s understanding of the available underlying data, and the quality of that data. If data is inadequate or of poor quality it makes it difficult for futures market regulators to determine accurately whether or not certain activity or price movements are unusual. *Accordingly, information about the underlying commodity is key for the satisfactory functioning of the futures market and reliable price discovery.[Emphasis added]*

The securities and derivatives regulators who comprise the IOSCO Task Force regulate the *financial markets* and have limited ability to influence physical market transparency other than to engage in educational efforts that help publicize the need for greater transparency. A February 2010 seminar co-sponsored by the IEA and the Institute of Energy Economics of Japan, with the support of Japan’s Ministry of Economy, Trade and Industry (METI), and in cooperation with the IOSCO Task Force illustrates such efforts. That meeting concluded, among other things, that:

The issue of data transparency is paramount for a better understanding of oil market dynamics. Improved data on demand, supply and stocks are key to a better grasp on market fundamentals, notably in the emerging markets that are now playing an increasing role, such as Asia. However, equally important is greater granularity on financial market information...

As described above, the IOSCO Task Force is making concrete progress in increasing the granularity on financial market information (*i.e.*, futures and OTC derivatives). However, Task Force members have no authority to mandate greater transparency in the cash markets. Notwithstanding this, following discussions with PRA, the Task Force recommends that further effort to assess their role in the form of an impact study, which would inform any decision to address their influence in physical markets, would be beneficial. The Task Force considers that this work could be most appropriately undertaken by an international body with involvement in physical energy markets with collaboration from appropriate interested parties.

Efforts are required by relevant authorities with regard to the enhancement of data on underlying cash market (physical) commodity market transactions. We do not underestimate the barriers to achieving greater transparency in the cash markets. However, unless such transparency is achieved, it will remain difficult for national authorities to understand the relationships between transactions in the financial markets and transactions in the cash markets. Moreover, the relative imbalance in the degree of transparency between financial markets versus physical markets leads to greater scrutiny of financial markets -- which are, ironically, by far, the most transparent markets -- and obscures analysis of the many complex inputs into commodity prices.¹⁸

Because nearly all of the key commodity markets and market makers are in the United States, the single most important body for actually implementing new rules is the American [Commodity Futures Trading Commission](#) (CFTC). Aside from the political inputs from G-20 noted above, it has the domestic imperative for reform of the Dodd Frank Act.

The [Dodd-Frank Wall Street Reform and Consumer Protection Act](#) is the omnibus legislative response to the financial crisis in the United States. It provides a framework for reforms in a large number of different markets. Sections 711 to 774 of the Act include new rules with respect to derivatives and swap activity. It is the task of the CFTC to translate these new rules into rules and practices on its regulated exchanges and to extend these to OTC markets. There has been considerable debate between market participants and the CFTC over the exact form of the new rules. However, the CFTC Chairman, Gary Gensler, gave a bold response to the Dodd-Frank Act:

“The Wall Street reform bill will – for the first time – bring comprehensive regulation to the swaps marketplace. Swap dealers will be subject to robust oversight. Standardized derivatives will be required to trade on open platforms and be submitted for clearing to central counterparties. The Commission looks forward to implementing the Dodd-Frank bill to lower risk, promote transparency and protect the American public.”¹⁹

The main areas for future rule writing are set out briefly below:

The [Dodd-Frank Wall Street Reform and Consumer Protection Act](#) brings comprehensive reform to the regulation of swaps. These products, which have not previously been regulated in the United States, were at the center of the 2008 financial crisis. The historic Dodd-Frank bill authorizes the CFTC to:

Regulate Swap Dealers

Swap dealers will be subject to capital and margin requirements to lower risk in the system.

Dealers will be required to meet robust business conduct standards to lower risk and promote market integrity.

Dealers will be required to meet recordkeeping and reporting requirements so that regulators can police the markets.

Increase Transparency and Improve Pricing in the Derivatives Marketplace

Instead of trading out of sight of the public, standardized derivatives will be required to be traded on regulated exchanges or swap execution facilities.

¹⁸ IOSCO [Report to G20](#) June 2010

¹⁹ CFTC website at: <http://www.cftc.gov/LawRegulation/DoddFrankAct/index.htm>

Transparent trading of swaps will increase competition and bring better pricing to the marketplace. This will lower costs for businesses and their consumers.

Lower Risk to the American Public

Standardized derivatives will be moved into central clearinghouses to lower risk in the financial system.

Clearinghouses act as middlemen between two parties to a transaction and take on the risk that one counterparty defaults on their obligations.

Clearinghouses have lowered risk in the futures marketplace since the 1890s. The Dodd-Frank bill will bring this crucial market innovation to the swaps marketplace.²⁰

A detailed list of the proposals to be enacted under Dodd-Frank can be found [here](#).

The CFTC proposals included limits on the size of positions in 28 commodity areas that dealers could take, however, like other parts of the financial reforms in the US, intense lobbying resulted in successful legal challenges to the initial proposals. Final rules were eventually made in 2014 and governed a range of trading activities, the transparency of trades and the governance of the firms. These can be found [here](#).

A legislative programme similar to that in the United States is underway at the EU level. There is a genuine difficulty in describing this programme since it is split over a number of different directives and other initiatives including the

- Capital markets directive
- Markets in Financial Instruments Directive
- Market Abuse Directive
- Creation of the European Systemic Risk Board
- Regulation on credit ratings agencies

An outline of the original EU position can be found in an EU Commission document: *Ensuring efficient, safe and sound derivatives markets: Future policy actions* published in October 2009. EU Reform is spread amongst a number of the financial regulation directives – MiFID, MiFIR, MAR and CSMAD. A very brief summary of where the EU is on this can be found [here](#). Within the EU there is an ‘Expert Group on Agricultural Commodity Derivatives and Spot Markets’. Its workload and papers produced by it can be found [here](#).

An excellent summary of both US and EU initiatives can be found in an article in the Business Law Review December 2010 – *Derivatives: Regulatory Reforms and New Rules* by Peter Yeoh. The Library does not have access to an electronic copy of this article but hard copy can be provided to Members on request.

²⁰ Ibid