



THE HUNGER-MAKERS

How Deutsche Bank, Goldman Sachs and
Other Financial Institutions Are Speculating
With Food at the Expense of the Poorest

IMPRESSUM

Publisher: Thilo Bode (responsible for content)
foodwatch

Brunnenstrasse 181
10119 Berlin
Germany
Phone: +49 (0) 30 / 24 04 76 - 0
Fax: +49 (0) 30 / 24 04 76 - 26
info@foodwatch.de
www.foodwatch.de

Account for donations:
foodwatch e. v.
GLS Gemeinschaftsbank
Account number: 104 246 400
Bank code: 430 609 67

Design and layout:
Annette Klusmann_puredesign.berlin
Graphics: Fabian Bartel

Photos:
Title and back pages:
Fotolia_Great Divide Photo and
Heino Pattschull, fotoflash
Pages 6–10: Fotolia_Elena Schweitzer
Page 86: Mike Wolff

TABLE OF CONTENTS

04	Forward
06	Observations
10	foodwatch-calls for action
12	I. What is bread doing on the exchange?
16	II. The global commodity casino
16	Money and grain – a long story
18	HOW FUTURES TRADING WORKS
23	The financial revolution
24	HOW FUTURES EXCHANGES WORK
27	The birth of commodity index funds
29	HOW INVESTMENTS IN COMMODITY INDEX FUNDS WORK
32	The big deregulation
38	III. Prices and proof – the impact of speculation on the commodities boom
40	Good and bad speculators – how much liquidity is needed?
46	Futures markets are (not) a zero-sum game – Paul Krugman’s storage hypothesis
51	Apples and oranges – how the impact of speculation on prices can and cannot be measured
55	Beyond supply and demand – commodity prices in the maelstrom of capital markets
59	Beyond all measure – grain prices and the speculation boom
64	The spread of hunger
66	IV. Power struggle over pricing power – who will tame commodity speculators?
66	G20 – global governance at the lowest level
71	Wall Street against Main Street – the dispute over reforming commodity markets in the United States
76	EXCURSUS: INSTRUMENTS AGAINST COMMODITY SPECULATION
80	EMIR, MiFID and ESMA – a tug of war around commodity markets within the maze of EU institutions
84	Further Reading

>> FORWARD

About one billion people around the world today are going hungry and suffering from malnutrition, with permanent damage to their health and little perspective for their lives. In 2010 alone, food prices rose by one-third, causing an additional 40 million people to plunge into absolute poverty. There was another record high: by the end of March 2011, capital investors like insurance companies and pension funds had invested 600 billion dollars in bets on commodities, including corn and wheat, in the form of securities launched by investment banks and hedge funds. Is there a demonstrable relationship? Does a financial industry that has gone out of hand harm the life and health of the poorest by driving up food prices?

foodwatch wanted to know the extent to which these allegations are substantiated and to clarify the debate by documenting the situation and the arguments used in detail. We therefore commissioned Harald Schumann, journalist and recognized expert on the world of finance, to review the most important analyses, speak with actors involved, interview researchers, and summarize the current state of the debate. foodwatch is now calling for specific political action to be taken based on the information Mr. Schumann gathered.

The foodwatch report, *The Hunger-Makers: How Deutsche Bank, Goldman Sachs and Other Financial Institutions Are Speculating With Food at the Expense of the Poorest*, provides overwhelming evidence that speculation with foodstuffs 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.

The German government must clearly commit itself to regulation. So far it has avoided taking this step, bowing to the dictates of the financial industry and the interests of farmers and agricultural exporters who benefit from high production prices. The government and lobby groups argue that there is no hard evidence for a connection between speculation and the adverse increase in food prices, whereby they ignore a multitude of documentation and are unable to prove that speculation is harmless. This attitude is not only morally reprehensible, especially when it comes to the life and limb of people. It also violates the precautionary principle enshrined in the constitution of the European Union, which calls for preventive action even if complete scientific evidence is still lacking.

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. We want to provide supportive arguments to the European Parliament, a majority of whose members are calling for the stringent regulation of speculation on food. We also want this report to make a complex issue, dominated by the specialist language of experts, more accessible to the public. 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 interests of powerful lobbies.

The funding for this report would have gone beyond foodwatch's means. The generous support of Alexander Szlovak in Hamburg made this foodwatch investigation possible. We are extremely grateful for Mr. Szlovak's commitment and wish to thank him here.

Berlin, October 2011 – foodwatch e.V.

HIGH FOOD PRICES MAKE PEOPLE GO HUNGRY

1) 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 2011, global average prices for wheat, corn and rice were 150 percent higher (after adjustment for inflation) than they had been in 2000. 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. This concerns us all. If we are paying into a pension fund or life insurance plan, then we may be financing our retirement by speculating on rising food prices. Even though banks and insurance companies reject accusations of wrongdoing, there is growing evidence that investments on markets for raw materials and food are making people go hungry.

THE HUNGER-MAKERS

HOW DEUTSCHE BANK, GOLDMAN SACHS AND OTHER FINANCIAL INSTITUTIONS ARE SPECULATING WITH FOOD AT THE EXPENSE OF THE POOREST

OBSERVATIONS

COMMODITY TRADING AS A CAPITAL INVESTMENT STRATEGY

2) Since the beginning of the last decade, the commodity markets – for metals, crude oil, wheat, corn and soybeans, among others – have been a favored target of investors. 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. At any rate, this is what is said, and investors have this expectation. As a consequence, pension funds, insurance companies, foundations and a large number of individual investors have invested more than 600 billion dollars at commodity exchanges.

EXCHANGES NEED SPECULATORS

3) These investments are not being made however to participate in the production of commodities or in farming operations. Instead, investors buy futures that are traded on commodity exchanges. Futures are contracts for raw material purchases or sales which are transacted on a date in the future. 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. A baked goods manufacturer, for example, could reserve a supply of wheat six months in advance at a fixed price and therefore didn't need to be concerned about losses in bread production. To make sure that buyers and sellers always find their counterpart for these future transactions, there have to be enough market participants present who trade only with these futures, looking to earn money in this way. 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.

FROM USEFUL TO EXCESSIVE SPECULATION

4) Most investors active on exchanges today differ however from these traditional speculators. Both the volume of their business and their investment strategy have nothing to do with the actual business of commodity producers and processors, or with needed price hedging. 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 today.

LEGAL PRICE RIGGING

5) 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. Commodity futures exchanges were originally established to allow producers and processors to hedge against price fluctuations. They were never intended to be instruments for capital investment, and due to the limited volume of physical goods involved they are not suitable for this purpose. 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.

PRICES DISCONNECTED FROM SUPPLY AND DEMAND

6) 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. This doesn't mean that failed harvests, a decline in oil production or the increased consumption of crops to produce biofuels do not also affect commodity prices. But it does mean that the activity of financial investors can greatly prolong and intensify price hikes triggered by these factors and events.

FUTURE PRICES DICTATE TODAY'S PRICES

7) Futures prices at the exchanges for physical trade serve as reference prices for buyers and sellers of commodities. It would make no economic sense for a grain producer to sell goods significantly cheaper than the price guaranteed by futures one or two months ahead. Similarly, it makes no sense for a grain processor to buy goods expensively now when he can obtain those more cheaply in the near future. The spot price, the price used in physical trading, therefore parallels relevant futures prices. 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.

HOW BETTING ON COMMODITIES DRIVES UP THE PRICE OF BREAD

8) Respected economists, among them Nobel laureate Paul Krugman, argue that investments in futures on commodities exchanges are only bets, comparable to a zero-sum game, and that they cannot distort spot prices. This argument does apply to traditional speculators whose trading with futures is based on the actual development of supply and demand for raw materials on the physical markets. It overlooks, however, 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. Currently available analyses of exchange data gathered in the United States show that growing capital investment at commodity markets has raised prices for grains, edible oil and gasoline over long periods by up to 25 percent. This has had serious consequences mainly for poor populations in developing countries, whose food and energy supplies depend on imports and global market prices.

BANKS ALWAYS WIN BY ORGANIZING BETS ON COMMODITIES

9) Using commodity markets for investment has no economic value. Unlike investment activity in stocks and bonds, it does not serve to place capital in businesses or countries for productive purposes. Rather, it is all about betting on the performance of the commodities traded. Indeed, returns to investors are rather modest and the same returns could be achieved through other investment strategies. 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. That is why they have the greatest interest in keeping things the way they are.

NO LACK OF EVIDENCE

10) 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. This contention is not tenable. 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. Because oil prices, reflected in expenditures on fuel and fertilizer, make up about a quarter of the cost of grain production and marketing, the influence of speculation on food prices is thought here to be unquestionably direct. Numerous empirical and econometric studies by experts from prestigious institutions and universities, cited in this report, also provide evidence of speculation influencing the food sector.

REGULATION SAVES LIVES!

11) foodwatch believes these studies provide enough evidence to see to an end of the abuse of commodity exchanges for capital investment. But even if those responsible in the financial industry and governments do not recognize this evidence as conclusive, they are not absolved of the responsibility to stop the use of these financial products so strongly suspected of doing harm to other human beings and their welfare. 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. It prescribes preventive action to protect life and limb if there is sound evidence calling for such a step, even if there is no conclusive scientific clarity about causal relationships. Article 191 explicitly includes the protection of human health. The precautionary principle means that the burden of proof must be reversed when we assess the impact of financial market investments on commodity prices – 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.

IMPOSE POSITION LIMITS

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. When the United States Congress in July 2010 adopted the reform of financial market laws, it mandated the regulatory authority to enforce such position limits. There is no comparable legislature in the European Union however. The forthcoming reform of the EU directive on markets for financial instruments does open the possibility of imposing mandatory limits on positions at European commodity exchanges. foodwatch therefore calls on the German government to join the majority vote already decided by the European Parliament, and to urge the European Commission and governments of other EU states to impose effective position limits for trading with commodity futures.

EXCLUDE INSTITUTIONAL INVESTORS FROM COMMODITIES TRADING

Whether defining limits on positions is enough to curtail speculation is by no means certain. To use limits effectively, regulatory authorities 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, Deutsche 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.

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.

STOP BANKS FROM SPECULATING ON FOOD

Major banks like Goldman Sachs and Deutsche 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 financial institutions to do justice to the social responsibility postulated in their own documents: “Our second priority as a good corporate citizen is to earn money in a manner that is both socially and ecologically responsible.” (Deutsche Bank, 2010 CSR Report 2010.) foodwatch calls on major banks to take a first precautionary step by refraining from speculation with food commodities like soybeans, corn and wheat in their financial strategies.

.....

THE HUNGER-MAKERS

How Deutsche Bank, Goldman Sachs and Other
Financial Institutions Are Speculating With Food at the Expense of the Poorest

by
Harald Schumann

.....

WHAT IS BREAD DOING ON THE EXCHANGE?

The level of suffering is enormous. 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. With alarming routine, governments, aid agencies and United Nations organizations issue warnings almost every week that the situation is continuing to deteriorate. The prices for staple foods on a global scale have been going up since 2000, a trend which was interrupted only once by the slump in demand generated by the huge 2008 financial crisis. Whether grain, edible oils, sugar or milk – 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.¹ Prices for the most important grains, wheat, corn and rice, were on average 150 percent higher than they had been in 2000. In wealthy industrialized countries, where consumers spend less than 10 percent of their income on food, and commodities contribute only a fraction to retail prices, this is not significant for most people, and indeed many do not even notice. 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.

Prices for wheat, corn and rice are 150 percent higher than they were in 2000. For some two billion people in developing countries who need to spend the major share of their income on food, this increase in prices poses serious limitations, and for many it means illness and death.

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 a result. This disastrous development created a “toxic brew of real pain contributing to social unrest,” warned Robert Zoellick, president of the World Bank. If prices were to rise by a third again, as many experts feared, another 30 million people would be threatened with famine.² The world was at a “real tipping point,” said Zoellick, and food riots could unsettle entire states, similar to what happened in 2008. Price explosions for all kinds of grain led to massive protests in 61 states in Asia, Africa and Central America, which did not subside until the onset of the financial crisis caused commodity prices around the world to tumble. Donald Kaberuka, head of the African Development Bank in Tunis and respected expert on African development, had the same concern. The combination of rising prices for both food and oil was creating a “Molotov cocktail for Africa,” he warned. Particularly hard hit were the impoverished populations in cities who could no longer pay for their food and transportation. This had already led to social unrest in Uganda and Burkina Faso, and other countries could follow.³ It also severely affected populations in poor Central American states, whose main food made of corn bread, tortillas, became 70 percent more expensive

¹ FAO Food Price Index, May 2011, <http://www.fao.org/worldfoodsituation/wfs-home/foodpricesindex/en/>.

² “World Bank chief warns on food threat,” Financial Times, 14 April 2011.

³ “Commodity prices threaten Africa’s recovery,” Financial Times, 8 May 2011.

within a year. At the same time, staff working for the United Nations World Food Programme, which provides around 90 million people around the world with food, complained that the enormous increase in the cost of buying grain was creating a huge budget deficit for the organization. More funding was urgently needed to avoid disasters or at least mitigate them. Germany's aid organization Welthungerhilfe also noted that the world was heading "full speed into the next famine."⁴

While agricultural prices were reaching new highs and more and more warnings were coming from poverty-stricken regions, the other side of the world community was listing a new record as well. Barclays, a major British bank, reported that by the end of March 2011, investors of all kinds, ranging from billion-dollar pension funds and insurance corporations to many thousands of small investors, had invested more than 400 billion dollars in securities, by which they benefited from rising commodity prices. If we add the investments made outside the exchanges in financial instruments based on commodity prices, the figure comes to far more than 600 billion dollars. This was more than ever before, and more than 40 times more than was invested in this sector of the capital market at the beginning of the preceding decade. Nearly a third of this sum went into investments for agricultural commodities, even more than for crude oil and natural gas, and this sum went up every month by 5 to 10 billion dollars, reported the analysts at Barclays Bank, which counts itself among the leading investment houses in the commodities markets. The agricultural sector was not only attracting the most money, it was also the "best performing sector" and had brought in up to 50 percent returns since early 2010. All in all, investment strategists noted that "now is precisely the time when the potential for that asset allocation decision to pay off is at its greatest."⁵

By the end of March 2011, investors had put more than 600 billion dollars into securities, expecting to benefit from rising commodity prices.

Booming commodity markets and rising destitution on one side, and euphoric investors gaining billions in profit on the other side – these parallel developments raise a suspicion that is as simple as it is monstrous. 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 Sarkozy, 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

⁴ "Brennpunkt Nahrungsmittelpreise" [Food Prices Hotspot], Welthungerhilfe, Bonn, February 2011.

⁵ "The Commodity Investor, Hold on..." Barclays Capital Commodities Research, London, April 2011.

Ababa.⁶ He was the first head of government of a large industrial country to take up a demand that many North-South activists and numerous development agencies have been making for years – that speculation is driving up prices and must be limited by the introduction of new regulations on the exchanges and markets for commodities investments.⁷ 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 increases 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 middle class 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, the leading American investment bank in the commodities trade, knowing that many economists at all institutions involved, from the OECD (Organisation 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.⁸

"Long-term trends, including increased meat consumption by the growing middle class in the emerging markets and the increased use of biofuels in the developed markets, have created a backdrop for global food shortages."

.....
Steve Strongin, Goldman Sachs

This argument can't be denied on principle. Many different factors do indeed contribute to the rise in the price of food, among them the increase in demand, which could be balanced basically by increasing production, a generally successful strategy throughout past centuries. 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.⁹ It is also undeniable that the use of corn and oilseeds to generate biofuels substantially increased demand for grains, while at the same time crude oil and natural gas became more expensive, which in turn raised the price of fertilizers and diesel, making grain production more expensive.

But none of this answers the real questions associated with the rise of commodity investments to the top of the market for capital investment. Why is

.....
⁶ "French Anger at Speculators Hits G20 Hopes," Financial Times, 2 February 2011.

⁷ See, for instance, Peter Wahl, "Spekulation untergräbt das Recht auf Nahrung" [Speculation undermines the right to food], World Ecology, Economy and Development (WEED), Berlin, 19 September 2008, <http://www.weed-online.org/themen/finanzen/1834223.html#note9>.

⁸ Steve Strongin, "Letter to the Editor," Harper's Magazine, 8 July 2010.

⁹ Tobias Reichert, "Wirkungen der Europäischen Agrarpolitik auf die Ernährungssicherheit in Entwicklungsländern mit Schwerpunkt Afrika" [Effects of European agricultural policy on food security in developing countries with a focus on Africa], Misereor, Aachen, 2010.

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? Who ultimately pays the profits of investors, if not consumers? 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?

The mantra recited for years by the financial world and its economists is that there is “no evidence”¹⁰ for this claim, noted again by commodity analysts at Barclays Capital in a study released in February 2011. But at least as many independent experts have published extensive studies with detailed evidence to support the observation that speculation drives up food prices, and a bitter academic dispute continues to this day.

Anyone who wants to find out which side has the better arguments encounters a highly complex meshwork of banks, stock exchanges and financial investors who describe their controversial business using terms like futures, forwards, OTC swaps and index funds, countering all criticism with a mountain of data which a lay person can barely assess. Along with this however, governments, parliaments and regulatory agencies in the United States and the European Union are engaged in a power struggle with the financial industry over the re-regulation of commodity markets. And even at this level, players work with concepts and methods which keep this extremely important conflict largely away from public debate. That is why this report seeks to give comprehensive and intelligent information to readers who are not put off by the complexity of the debate and wish to form their own opinions.

Anyone who wants to find out which side has the better arguments encounters a highly complex meshwork of banks, exchanges and financial investors who describe their controversial business using terms like futures, forwards, OTC swaps and index funds, countering all criticism with a mountain of data which a lay person can barely assess.

¹⁰ “Commodity Cross Currents,” Barclays Capital Commodities Research, 24 February 2011.

II. THE GLOBAL COMMODITY CASINO

MONEY AND GRAIN – A LONG STORY

Speculation with our daily bread is an activity almost as old as the written memories of humankind itself – and it has been morally condemned ever since it began.

Speculation with our daily bread is an activity almost as old as the written memories of humankind itself – and the battle against speculation has been going on for nearly as long. Ever since states and kingdoms came into existence, rulers and governments have tried to tightly control business dealings with food.

Even the first Egyptian pharaohs in the third millennium B.C. are said to have maintained a state grain administration. The Biblical story of resourceful Joseph, commissioned by the pharaoh to build granaries and thus prepare for times of scarcity, probably goes back to this period. Whether this made Joseph the “first speculator”, as he has been described, is not revealed in the Bible text.¹¹ But it is very likely that Egypt’s early rulers made use of grain stocks to fill their coffers and secure their power. Until the reign of Ptolemy I at the end of the fourth century B.C., an entire system was in place for state control of the grain market. Everything was regulated, from land allotment to grain storage and trading, including the prices that were prescribed by decree.¹²

The government of ancient Athens, heavily dependent on grain imports from present-day Italy and regions around the Black Sea, managed the grain trade with an iron hand. Ship cargoes could be unloaded only in the port of Piraeus, and storage and prices were under close control. Exports were expressly prohibited. Anyone who chanced violating these rulings had to reckon with harsh punishment. Contemporary chroniclers in 386 B.C. reported on a group of grain dealers who faced public trial because of “hoarding and collusion.” Likewise, the Roman republic looked after providing its population with grain and flour very soon after its founding and held firmly to this regime for centuries. The emperors of China did the same. As early as the Zhōu 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. Talmudic law expressly forbade Jews the “hoarding” of grain, flour or any kind of fruit. Islamic law also saw speculation as a sin and still forbids it today, at least formally. Thomas Aquinas, author of the most important philosophical and ethical Christian writings in late medieval times, even turned against all trade and damned the “buying of goods in the market with the intention to resell them at a higher price.” This attitude was in line with the feudal order of his day, when rulers allowed very little cross-border trade.

¹¹ See, for instance, Hermann Unterstöger, “Der allererste Spekulant” [The first speculator], *Süddeutsche Zeitung*, 9 December 2008.

¹² This brief outline of the history of grain speculation is based essentially on a description by Ann Berg, “The rise of commodity speculation, from villainous to venerable,” in: Adam Prakash, *FAO (ed.), Safeguarding Food Security in Volatile Global Markets*, Rome, 2011.

Not until the invention of the money economy during the Renaissance were these old rules broken. International trade flourished, merchants established exchanges in new commercial centers in Italy and the Netherlands, and with that, all kinds of speculation became part of everyday economic life. In Antwerp and Amsterdam, for instance, exchanges for the grain trade came into being in the 1530s. Prices for wheat and rye were set on a daily basis, and members of the exchange began for the first time to negotiate in advance on business they expected. This meant that dealers bought and sold ship cargoes that were supposed to come into port at some time in the future. But even then, 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 labor across 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 businesses 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) 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 center of the global debate on speculation in the commodity markets and their state regulation – the Chicago Board of Trade (CBOT). Located on the southwestern shore of Lake Michigan, Chicago was at the junction of major railways and waterways from New York to the Gulf of Mexico, an ideal location for trading in grain and other commodities. In 1848, a group of 82 grain traders founded an exchange company there to set up a central trading center for business. Prices were to be negotiated publicly and in an understandable way, based on defined standards and enforceable rights for all parties involved. It was here in the trading rooms of Chicago that dealers 11 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. An idea which their predecessors in the Renaissance had briefly tried, before being forced to give it up, became a central instrument for these pioneers in modern commerce. Using standardized contracts that expired on dates in the future, farmers, processors and dealers bought and

>> HOW FUTURES TRADING WORKS

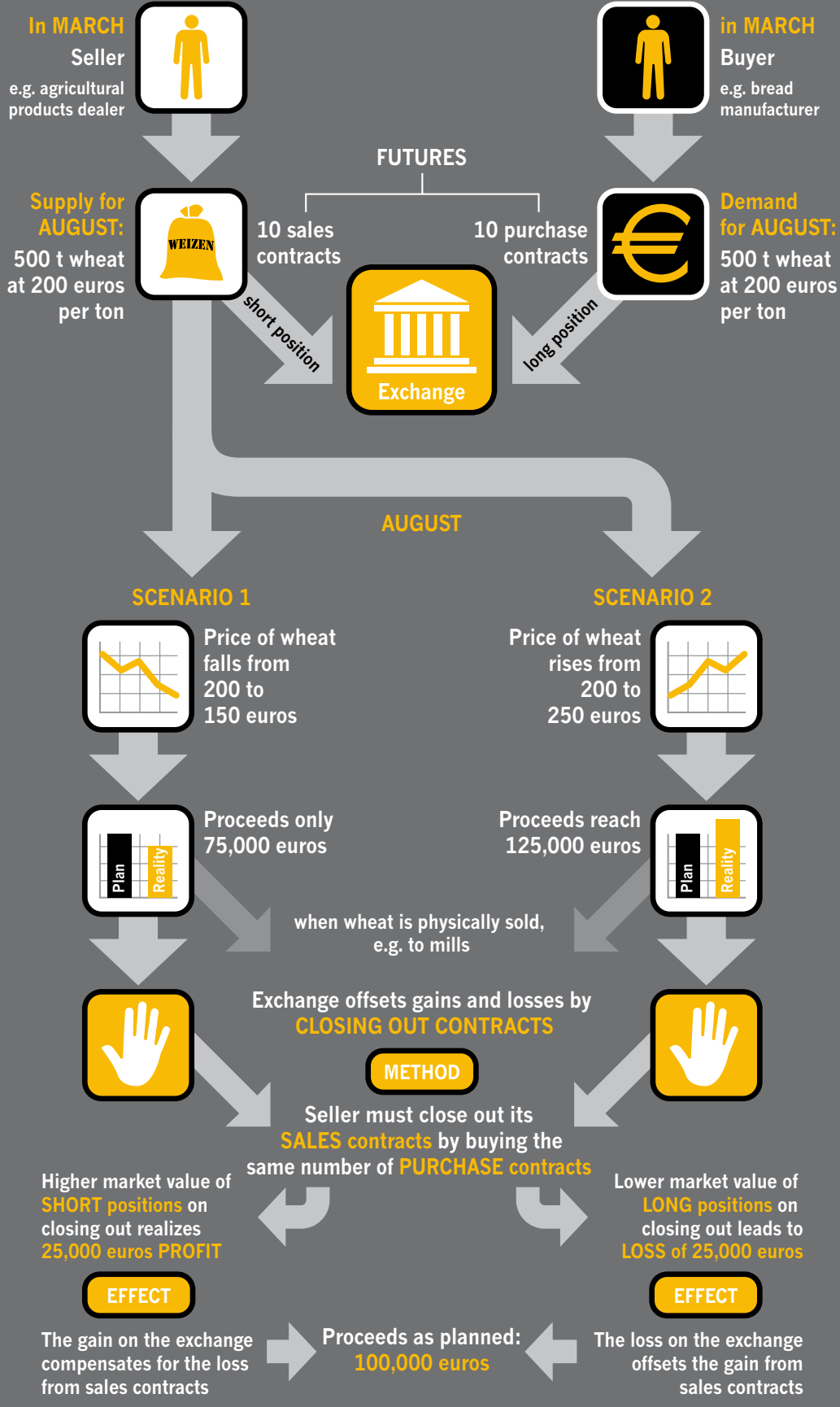
Futures on commodities are standardized contracts for future business in commodities, which anonymous buyers and sellers on a commodities exchange use to agree on the delivery of a fixed quantity of a commodity on a certain date at a fixed price. In general, such contracts also determine at which warehouses supplies can be delivered and picked up. But it is only in exceptional cases that futures contracts are actually settled with a physical delivery since they are mostly managed financially. The exchange is the central contract partner for both buyers and sellers. Thus there is trading with physical goods as well as purely financial trading, each of which can be done independently.

AN EXAMPLE

A grain dealer knows in March that he must sell 500 tons of milling wheat in August to free space in his grain elevator for the new harvest. A look at prices quoted on the European grain exchange in Paris, the MATIF (Marché à Terme International de France), shows him that 200 euros per ton are being offered for deliveries made in August. To secure this price in advance, he puts down an offer via his terminal connecting him with the MATIF for the acquisition of 10 standard sales contracts for the delivery month of August, each for 50 tons of milling wheat at the price of 200 euros per ton. This meets the expectations of a buyer, such as a bread manufacturer, offering a corresponding purchase contract. Both bids meet electronically and the transaction through the exchange computer automatically validates both contracts. The contracts subscribed have a nominal value of 10 (contracts) x 50 (tons) x 200 euros = 100,000 euros. The grain dealer has taken the so-called short position, and the buyer the long position.

SCENARIO 1

The price of wheat falls in August to 150 euros per ton. The grain dealer would realize proceeds of only 75,000 euros for selling his 500 tons of wheat to a buyer on the physical market, a mill, for example, although he wanted to get 100,000 euros. At the same time, his sales contracts with the exchange have gained 2,500 euros in value per contract because with these futures he originally purchased the right to sell for 200 euros per ton. The grain dealer could now theoretically buy wheat on the physical market for 150 euros per ton and immediately resell it for 200 euros to one of the exchange's warehouses – and thereby offset his loss on the physical sale. Because this is too complicated in practice, the transaction is settled



by payment through the exchange, which functions in this way: before purchase or sale contracts expire, their owners are obliged to 'close out' their contracts. In this case, the grain dealer must buy the same number of purchase contracts for 500 tons of milling wheat on the exchange. This balances out the long and short positions and contracts are thus neutralized. Since these purchase contracts now cost only 7,500 euros instead of 10,000 euros because the price of wheat has fallen, there is a difference of 2,500 euros between his expensive sale contracts (short) and the cheaper purchase contracts (long). In this way, he makes a profit of 25,000 euros from his 10 contracts and can make up for the loss from the physical business. This amount is credited to his account at the exchange. The bottom line is that his revenue is the exact sum he hedged in March by buying futures at that time. Trading with futures on the exchange is a kind of price insurance for the grain dealer. The exchange charges about one euro per future for this insurance service.

suffered by the grain dealer selling his commodity becomes the profit gained by owners of long positions. In practice, these transactions are processed through automated computer programs. Buyers and sellers must be registered with the exchange and hold an account there. A bank manages this service for most market participants. Screens for terminals linked to an exchange's computer display a template where the bank can enter at which price it wants to buy how many contracts, long or short. A contract is automatically concluded when a dealer elsewhere buys the opposite position.

For these hedging transactions to work, it is important to find enough buyers and sellers for sales and purchases in the future. Therefore, a certain number of speculators are needed for futures markets to function. They contribute to the price hedging of sellers and buyers (see following page).

SCENARIO 2

The price of wheat rises in August to 250 euros per ton. Now the dealer can sell his wheat for 125,000 euros. But the value of his 10 sale contracts has fallen by a total of $10 \times 2,500$ euros, or altogether 25,000 euros. He now needs to close out his sale contracts by buying 10 purchase contracts at 250 euros per ton, for a nominal price of 12,500 euros per contract. The difference between the value of his short positions and of the long positions he acquired for closing out comes to 25,000 euros, and he makes a loss of 25,000 euros on the exchange. But again, the bottom line in this case is that his revenue is the same sum that he hedged when he bought futures in March.

Processors of commodities, in the case of wheat this would be bakeries and other food manufacturers, also rely on the same mechanism. They typically take long positions (purchase contracts) and secure prices in advance for the raw materials they need. In Scenario 2, the loss on the exchange

sold grain in advance; prices were negotiated through the exchange by their representatives. The new feature was that the exchange itself became the contract partner for both buyers and sellers, and thereby guaranteed contract compliancy. Buyers and sellers had to deposit collaterals, called margins, into an account set up for this purpose at the exchange.

Initially this had very little to do with speculation. The intention was rather to avoid wild fluctuation of prices on the grain market between times of surplus after fall harvests and times of shortage in the spring. At the same time, large granaries were built; their use was directly linked to the futures. An investor who bought a futures contract was given the right, in the event of a purchase, to procure the contractual amount of wheat, corn or oats from these granaries on the agreed date at the agreed price. On the other side, sellers had to deliver the contractual amount to the granary by the same date or buy it out of the stocks. This system remains basically unchanged today. Wherever futures are traded on commodities, the contracts can be fulfilled with the delivery of physical goods.

This system served, and in principle still does serve, the 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. Similarly, buyers such as mills and bread manufacturers could plan their production and calculate their costs based on assured amounts and prices (see information box on how futures trading works on page 18). Within a few years, this system was imitated around the world. From Mumbai and Frankfurt to Rosario in Argentina, commodity exchanges were set up around the globe.

But as obvious and practical as the idea is and was, it was also vulnerable from the very beginning to manipulation and speculative excesses.¹³ 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.

In 1882, the United States Senate for the first time set up an investigative commission to look into numerous “corners and squeezes”, the speculative hoarding and artificial shortages generated by means of CBOT contracts. One spectacular case occurred in the winter of 1898 when wheat speculator Joseph Leiter grandly bought wheat deliveries months in advance and thus drove up the market price by 50 percent. Not until one of his opponents used special boats to open a channel through frozen Lake Michigan, allowing supplies from northern regions to get through, did prices slump again, and Leiter had to declare bankruptcy.

MARGIN

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.

Commodity exchanges play an important role, serving to hedge prices for buyers and sellers. Business with commodity futures has been susceptible however to manipulation and speculative excesses from the very beginning.

¹³ Exactly when a speculative excess has been reached is never clearly defined in advance, but always detectable when prices suddenly slump although the relationship between supply and demand for physical goods has changed very little or not at all. The probability that such bubbles form rises however with the share of futures trading done for financial reasons only on commodities exchanges without traders having any interest in the physical commodity itself.

LONG AND SHORT

The positions held by a trader in the securities market are called 'long' or 'short.' A trader going long buys a security and holds it, expecting prices to rise. A trader going short appears as a seller and makes a profit when prices fall because he can buy the security again at a later date for a lower price. For futures, those who expect prices to rise and therefore appear on the buying side are going long. Traders go short who sell today for a fixed price in the future, thereby making a profit if prices later fall.

Franklin D. Roosevelt reformed financial markets in the wake of the Great Depression in 1936, setting up effective oversight of commodity exchanges. The regulatory agency set limits for the first time on the maximum number of futures contracts that individual trading companies could hold.

Similar operations jolted agricultural exchanges around the world again and again between the world wars. Sometimes it was cotton speculators in India, sometimes wheat dealers in Europe, and Chicago was consistently the scene of spectacular market manipulation. Even back then, this activity led to heated political debates following the same pattern that still characterizes the conflict today. While critics blame speculators for excessively driving prices up or down, proponents argue that agricultural exchanges are beneficial to all because they provide security to producers and processors in futures contracts, protecting them against price fluctuations. This fierce seesaw was reflected in statements by Herbert Hoover, president of the United States from 1929 to 1933 at the time of the Great Depression. First he voiced support for the hedging function because "it cheapened the cost between farmer and consumer by reducing the [price] risk." Later, aware of new speculation scandals, he was angry because there was no more "glaring exhibit than these millions taken by sheer manipulation of the machinery provided by the [Chicago] Board of Trade."

But it was the government of Hoover's successor, Franklin D. Roosevelt, that in 1936 reformed financial markets in the wake of the Great Depression and as part of the reform package established effective supervision of the commodities exchanges. These set limits for the first time on the maximum number of futures contracts that individual trading companies could hold. Accordingly, all businesses or dealers who were not themselves active in physical grain trading were prohibited from buying more than 500 standard contracts per type of grain. This corresponded to a volume of 2 million bushels of grain, which is nearly 55,000 tons of wheat or 51,000 tons of corn. From then on, these position limits proved for more than 60 years to be a highly effective instrument in keeping grain speculation to a limit.¹⁴

¹⁴ In the late 1970s, the United States Commodity Futures Trading Commission (CFTC) raised the limit to 600 contracts and 3 million bushels. Not until after 1990 were limits raised again in several steps.

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. In 1973, the system of tight regulation in international financial markets, originally negotiated by the victors of World War II at the American resort Bretton Woods, collapsed. For nearly three decades until then, western industrial countries had pegged their currencies to fixed exchange rates with each other. At the same time, international capital transfers were subject to strict national controls so that no one could speculate against the fixed exchange rate system. However, the system was based on the United States government keeping the value of the dollar stable as a lead currency and backing it with gold reserves as collateral. Under pressure to finance the war in Vietnam, U.S. President Richard Nixon's administration inflated the dollar and abandoned the gold standard. As a consequence, all members of the Bretton Woods Agreement were forced to give up controls on exchange rates and capital, which paved the way for a downright revolution in the financial sector.

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 dates in the future. The fees or premiums incurred became one of the most important sources of revenue for the financial industry. Around the world, whether in Chicago, New York, London, Frankfurt or Tokyo, exchanges were set up for these contracts, called derivatives, their value being 'derived' from underlying currency exchange rates or bond/loan interest rates.

The development of these markets was accompanied by the electronic networking of exchanges and participants across all borders. By the mid-1990s, long before the Internet had taken popular hold, a cyberspace of global finance had come into being that visibly put countries and their economies under the spell of the financial world. A steadily 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 centers, stock exchanges, shares, bonds and currencies. The financial world became a global arena for playing with greed and fear. The valuation of securities and entire economies have become increasingly subject since then to the laws of mass psychology rather than rational economic calculation.¹⁵ From the debt crisis in Latin America in the early 1980s to the crises of emerging Asian countries and Russia at the end of the 1990s, from the bursting of the dot-com bubble on the stock markets after the turn of the century up to the global financial crisis in 2007, it has largely been actors in financial markets who have significantly shaped the world's economic events.

DERIVATIVES

Derivatives are financial instruments whose value is 'derived' from an underlying commodity, security or other future market value. Most traded derivatives relate to the performance of currency exchange rates or interest rates. They were invented to help businesses 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.

¹⁵ In fact, investment strategists always operate on the basis of endless amounts of information. Their work bays are loaded with monitors that uninterruptedly supply all kinds of financial news. Decisions by the United States Federal Reserve Bank, >

>> HOW THE FUTURES EXCHANGES WORK

Futures exchanges use standardized commodity futures contracts over fixed quantities of raw material which expire on a specified date.¹⁶ More than 95 percent of futures are bought and sold today through computer networks, with only a small share personally traded on the trading floor. This allows dealers around the world to participate in the activities of any exchange where they are registered and hold an account.

They can subscribe futures contracts as buyers or sellers. Buying positions are referred to as long positions, and selling positions as short. Contracts don't become valid until there is a buyer for a seller, and vice versa. Thus there are always just as many long as short positions in futures trading. The sum of all current contracts is referred to in exchange statistics as open interest. Futures contracts have to be closed out at the latest during the month of their due date, shortly before they expire. This is often done via the neutralization of existing positions and the financial settlement of the price difference between long and short positions (see information box on how futures trading works on page 18).

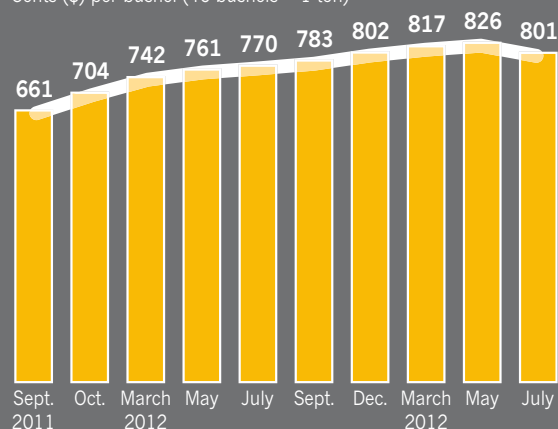
The commodity exchange is the central counterparty for all contracts. This means that whoever buys a future that goes up in value does not have to rely on a third party to redeem profits because this is paid directly by the exchange. At the same time, the exchange collects the amounts due from traders whose future contracts have lost value. The gains and losses of participants are always a zero-sum game on the bottom line. To hedge against the possible default of a trader, the exchange calls for the deposit of a security, called the margin, for each contract. The amount of margin depends on possible price fluctuations and is usually between 8 to 10 percent of the total value of a contract.

If prices move above this margin, the exchange usually stipulates that additional margin amounts be immediately deposited.

Contracts are traded with expiry dates that can be up to two years in the future. The Chicago futures exchange, for instance, offers five wheat futures each year in March, May, July, September and December. The range of prices in the successive maturity of these contracts results in what is called the forward curve. It reflects the expectations of market participants over future price developments.

Wheat forward curve

Chicago Board of Trade (CBOT), 8 August 2011
Cents (\$) per bushel (46 bushels = 1 ton)



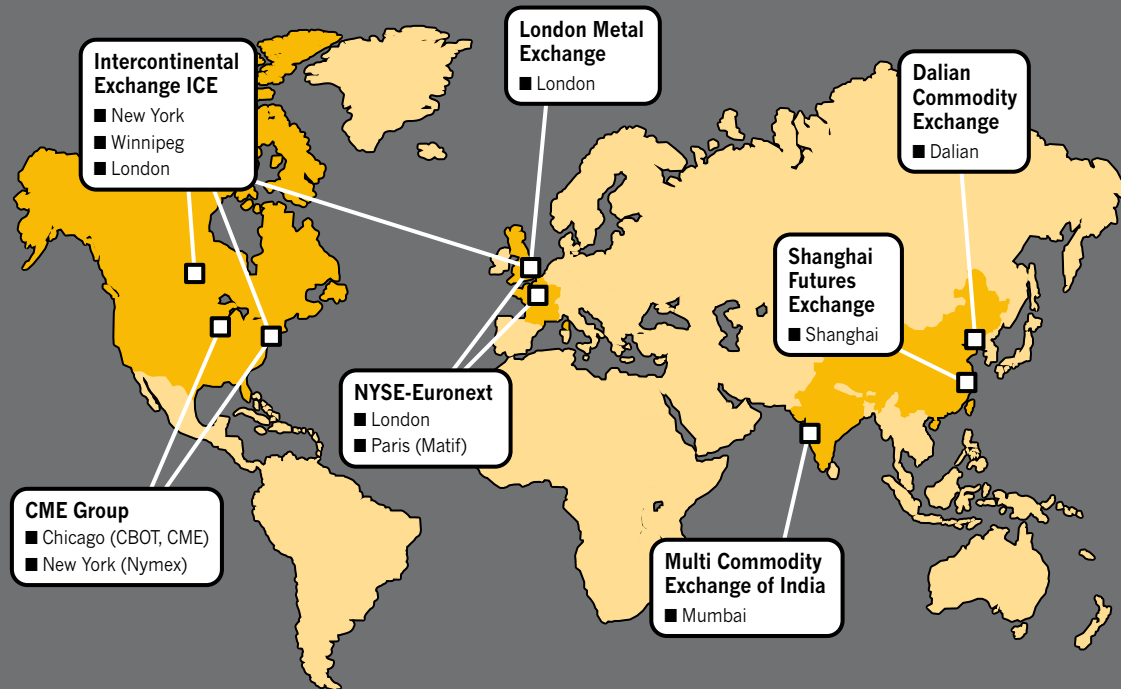
Data rounded

Source: CME Group

If the price of a contract close to maturity is lower than prices of futures that are running longer, traders then call this state "contango". The opposite case, called backwardation, characterizes a situation in which futures with later expiration dates have a lower price than the next contract due to reach maturity. Because a high influx of investors in commodity funds offered by the financial industry has increasingly activated purchases on the futures markets over long periods, states of

¹⁶ In addition to futures there are also options, financial instruments which give the buyer the opportunity to buy or sell on a specific date which is not obligatory. For the sake of simplicity, only futures trading is described here.

Leading futures exchanges



contango at futures exchanges have risen steadily over the past ten years.

In this process, the number of traded contracts is completely independent of the possible volume of physical goods actually in stock, and indeed exceeds this many times over. For example, the volume of outstanding futures (open interest) for soft red winter wheat, shown in the sample standard contract for wheat on the Chicago exchange, was about 76 million tons in March 2011. However, the annual harvest for this type of wheat is only 9 million tons. At the same time, trading with these wheat futures is so intense that on many trading days more than an entire year's harvest is bought and sold.

The most important of the world's commodity futures exchanges are the CME Group (a 2007 merger of the Chicago Board of Trade, the Chicago Mercantile Exchange and the New York Mercantile Exchange), the Intercontinental Exchange (ICE) with trading floors in New York, Toronto and London, and the NYSE Euronext group which

comprises the stock exchanges in New York, Paris, Brussels and Amsterdam as well as the leading European grain exchange, the MATIF in Paris. Each of these exchanges has a different core activity in trading with commodity futures. The CME is the leader for grains and soybeans.

The ICE is the most important exchange for oil futures and soft commodities like cocoa, coffee and cotton. The London Metal Exchange, still independent, is the leading center for trading in futures on non-ferrous metals.

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.

All of this initially appeared to be irrelevant for the trade in grains and other raw materials. Even up until the late 1990s, prices in this niche of the financial market depended mainly on weather reports and the volume of anticipated harvests or demand for oil in the course of the general economic climate, reported former exchange trader Ann Berg, who was also on the board of the Chicago Board of Trade (CBOT) until 1997. “Speculators were just smaller players in the commodity markets,”¹⁷ she recalls, and they were even welcomed by commercial buyers and sellers in the grain market. They made sure that the market for futures was liquid, in other words, that there was always a buyer or seller for all contracts, even those with expiry dates more than a year off. The share of contracts traded for speculative purposes was rarely more than 20 percent (see “Good and bad speculators – how much liquidity is needed?” on page 40).¹⁸ The ups and downs of prices hinged on news about supply and demand – the fundamentals – as this information is called in financial jargon.

This changed radically at the start of the new millennium. In the years before, the financial world had orchestrated a worldwide boom on stock markets which had driven the price of shares up to unprecedented heights. This rested on the widely spread assumption that the development of the Internet would stimulate productivity and profits for years to come, particularly in businesses that were investing in expansion and new applications for network operation. But as profits fell or completely failed to materialize, the mood swung in the opposite direction and stock prices plummeted across the board. The S&P stock index, which tracks the 500 largest corporations in the United States, dropped about a quarter of its original price indication by 2002. Many investors, among them pension funds and wealthy foundations, took huge losses. Stocks suddenly appeared far less attractive as capital investments, and investors began looking for alternatives.

.....
corporate bankruptcies, consumer trends, oil prices, terrorist attacks, even the weather – anything and everything can affect rates. But ultimately it doesn't matter whether respective analyses are based on fact or not. It doesn't even matter what the actors themselves think. “What matters is the expectation of what everybody else is thinking,” any trader will immediately admit when asked. In the end, it is the sum of all judgments that decides the price. As a result, thousands of highly qualified financial experts around the globe invest the money of their clients according to the lemming principle: always go with the flow, otherwise there is loss. Certainly every single fund manager or asset manager individually follows on rational calculation. But as a collective entity, the electronic army of traders obeys the mechanics of greed and fear that regularly breed completely irrational appraisals – a phenomenon that economists euphemistically refer to as “overshooting the markets.”

¹⁷ Ann Berg, interview on 28 March 2011.

¹⁸ According to the CFTC, see: Better Markets, Comment Letter on Position Limits for Derivatives to the CFTC, Washington, D.C., 28 March 2011.

In this situation, the financial industry began to market a new product – investment in commodities. The instrument for this purpose, the Goldman Sachs Commodity Index, known as the GSCI, had already been developed in 1991 by investment bank Goldman Sachs.¹⁹ This index reflected the development of futures prices for 25 different commodities, ranging from aluminum to sugar, and included only those raw materials for which there was liquid futures trading on the exchange. The index was calculated on the basis of the most recent prices for the next futures contracts to expire in the relevant commodity group. Goldman bankers offered to take on the management of investors' capital and on their behalf buy futures for commodities according to their weighting in the index (see information box on how investments in commodity index funds work on page 29). In this way, investors would share in profits and losses on futures markets without actually having to be involved in trading themselves. If futures contracts increased in value, the value of the capital investment would go up accordingly, and vice versa. Crude oil and other energy futures made up about two-thirds, and agricultural commodities of all kinds made up about 17 percent of GSCI-based funds, with the remainder invested in buying futures for precious and industrial metals.

Commodity index funds were initially just a niche product for a few large investors for the first 10 years after their invention. But when the dot-com bubble burst, these investments appeared quite attractive. 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). (AIG later had to be rescued from bankruptcy with 180 billion tax dollars.) Titled "Facts and Fantasies about Commodity Futures," the study contained data meant to prove that investments in commodity futures contracts over long periods of time had returns that were just as high as those for stocks or bonds. At the same time, their data seemed to show that returns from commodity futures were independent of developments in stocks and were sometimes even "negatively correlated," meaning that commodity prices rose when stocks fell, and vice versa.²⁰

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 invested in new futures with later expiry dates. But the promise of being able to take financial precautions against

INDEX

Indices measure the performance of a group of securities compiled in one basket, in which each security is given a certain weighting. For example, the Deutsche Aktien Index (DAX) [German stock index] reflects price development in the shares of Germany's 30 largest corporations. Every index refers to a base year in which the value of the index was 100. If the index goes up to 105 two years later, for instance, this doesn't mean that all shares have equally gained 5 percent in value, but that this is the average growth value, taking different weightings for individual stocks in the index into account.

¹⁹ In 2007, Goldman Sachs sold the index brand to the financial advisory and rating company Standard & Poors. Since then, the index has been officially renamed S&P GSCI, but for the sake of simplicity is further referred to here as the GSCI.

²⁰ Gary Gorton, K. Geert Rouwenhorst, "Facts and Fantasies about Commodities Futures," New Haven, 14 June 2004.

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. The financial industry marketed speculation with commodity futures as a new asset class that every money manager should add to his or her portfolio to hedge against crises in other markets.

ASSET CLASS

Dealers in securities describe an asset class as a category of investments. Stocks, bonds, mortgage bonds, and commodity derivatives each belong to a separate asset class.

crises and inflation in this way attracted many investors. That is why the financial industry around the world used the study to promote its commodity index investment idea and scored a resounding success. Heather Shemilt, a leading manager at Goldman Sachs, referring to the Yale study, praised commodity investment as a “portfolio enhancer.”²¹ 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 the funds related to these baskets of commodities. Funds differed only in their weightings of various raw materials. 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 basket, in contrast to the GSCI. 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.²²

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 markets, 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. Investment bankers however were not called upon to provide sound economic reasoning for this new diversion of capital – it was enough to talk about expected profits.

²¹ Peter Robison, Asjlyln Loder, Alan Bjerga, “Amber Waves of Pain,” Business Week, 22 July 2010.

²² In addition to the GSCI, the Dow-Jones UBS Index became an important instrument; these two indices jointly form the guideline for some two-thirds of all commodity index investments. Other relevant indices are the Reuters Jefferies Index and the Rogers International Commodity Index (RICI). These commodity baskets vary in the weighting of each commodity and therefore have different price movements.

>> HOW INVESTMENTS IN COMMODITY INDEX FUNDS WORK

Commodity index funds are primarily marketed and managed by major investment banks. Investors in these funds can benefit from rising prices on commodity markets or lose money when prices fall. The bank takes over managing the money it receives from investors by investing the same amount in the futures market. The profits (or losses) from these futures purchases determine the value of fund shares.²³

The assessment of their value is based on a basket of commodities whose value is represented by a so-called index. The index comprises up to 25 different commodities determined by the provider of the fund, and each commodity is weighted. The most commonly used index is the S&P Goldman Sachs Commodity Index (S&P-GSCI). The agricultural commodities corn, wheat, soybeans, cotton, coffee and cocoa account for 17.3 percent, while energy commodities have a representation of 66 percent. Another much-used index is the Dow Jones-UBS Commodity Index (DJ-UBSCI) in which agricultural and energy commodities each have a weighting of about 30 percent. The respective index value is measured by the current price of the next futures contract to expire for the relevant commodity. This is why indices comprise only those goods which have well-functioning, liquid futures markets on the exchanges.

Investor money accruing in a fund is managed by the fund manager, who buys only purchase contracts (long positions) on futures markets, basing these purchases on the composition of the underlying index. If a fund has 1 billion dollars of investment money, then the manager buys long futures whose nominal value are also 1 billion dollars. However, the manager does not need to expend the entire investment amount but only the money which the exchange requires for the margin, its security against possible price fluctuations. Depending on market conditions and the futures contract in question, the margin payment amounts sometimes to 8, sometimes to 10 percent of the contract, and in exceptional cases, when price movement is very volatile, even 15 or 20 percent of the contract. The rest of the money is safely deposited in short-term government bonds whose interest also accrues in the fund. The bond account serves the fund provider as security against possible losses. The banks themselves are not exposed to any risk. They also levy fees of 1 or 2 percent in advance on the entire investment amount.

If the value of a futures contract rises during its term, then the exchange credits the gain to the fund manager's account. If the value falls, then the exchange deducts the relevant amount from the margin account or demands additional payment, which the fund manager pays from the remaining fund assets deposited in bonds. The value of fund shares rises and falls to the same extent.

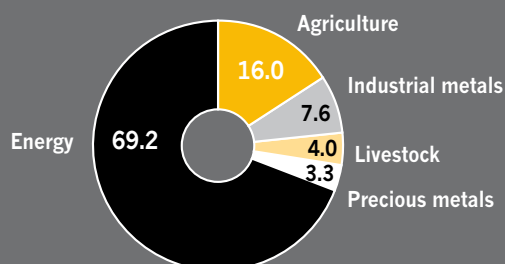
²³ For pension funds and insurance companies, investments in commodity indices are generally in the form of an arrangement tailored to their needs; these are called swaps. This arrangement has the advantage for institutional investors that, in contrast to investors in exchange-traded commodity funds, they do not need to pay the full nominal value of the amount to be invested on the commodity market. Because banks do not have security for possible losses in futures purchases, they sell swaps on commodity indices only to institutional investors who can use their assets to cover losses at any time. The bank pays investors the profits gained from positive development of the index value. If the index value has negative development, then the swap buyer must reimburse the bank for losses. In return, the bank receives from the swap buyer the interest that would accrue from investing the same nominal amount in short-term government bonds, plus a management fee of 1 or 2 percent of this amount.

S&P-GSCI

(Standard & Poor's Goldman Sachs Commodity Index)

Composition of commodity types

in percent



Commodities

in percent

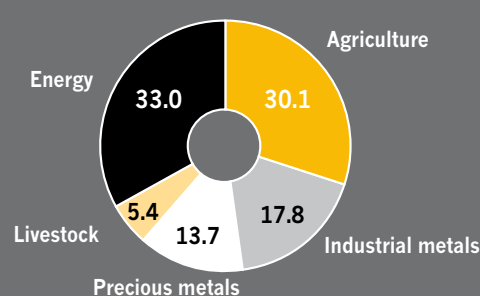
■ Energy:	WTI crude oil	33.0
	Brent crude oil	16.4
	Gas oil	6.8
	Heating oil	5.0
	Unleaded gas	5.0
	Natural gas	3.0
■ Agriculture:	Corn	4.7
	Chicago wheat	3.2
	Soybeans	2.4
	Sugar	1.8
	Cotton	1.8
	Coffee	1.0
	Kansas City wheat	0.8
	Cocoa	0.3
	■ Industrial metals:	Copper
Aluminium	2.5	
Nickel	0.7	
Zinc	0.5	
Lead	0.4	
■ Livestock:	Live cattle	2.2
	Lean hogs	1.4
	Feeder cattle	0.4
■ Precious metals:	Gold	2.7
	Silver	0.6

DJ-UBSCI

(Dow Jones UBS Commodity Index)

Composition of commodity types

in percent



Commodities

in percent

■ Energy:	Crude oil	14.7
	Natural gas	11.2
	Heating oil	3.6
	Unleaded gas	3.5
	■ Agriculture:	Soybeans
Corn	7.0	
Wheat	4.6	
Sugar	3.3	
Soybean oil	2.9	
Coffee	2.4	
Cotton	2.0	
■ Industrial metals:	Copper	7.5
	Aluminium	5.2
	Zinc	2.9
	Nickel	2.3
■ Precious metals:	Gold	10.5
	Silver	3.3
■ Livestock:	Live cattle	3.4
	Lean hogs	2.0

Sources: S&P-GSCI fact sheet (May 2011), DJ-UBS Commodity Index Handbook (April 2011)

A distinctive feature of commodity index funds is that their futures positions always have to be renewed shortly before contracts expire because the money in the fund is supposed to remain invested even after contracts come to maturity. Fund managers do this by financially closing out the expiring futures. Other speculators often take advantage of this situation by taking the counter-position shortly before the expiry date, thereby benefiting from price movements triggered by the 'rolling' activity of index investors, and buying new futures that mature at a later date. This rollover poses risks for investors. It is a procedure that is precisely spelled out in the concept for commodity index funds. If

index funds purchase a large number of new futures within a short period of time, then they initially drive up prices. Later these prices often fall. Furthermore, other speculators take advantage of rolling waves generated by index funds in that they take counter-positions shortly before futures expire and profit from the price movements triggered by such rollings. It often happens that although the underlying index has risen over the long term because expiring futures are more expensive than those of previous months, investors in index funds benefit to a lesser extent or even suffer losses because the rolling itself consumes the initial profit.

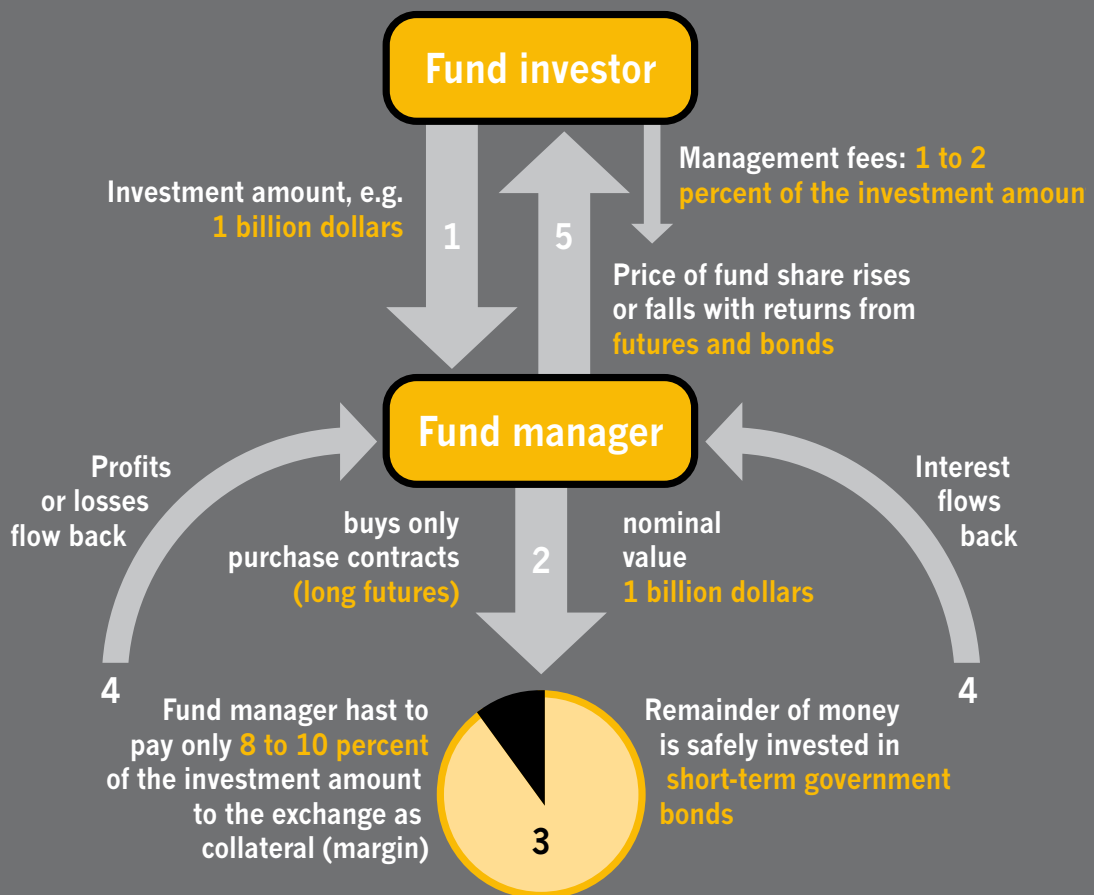
Thus the performance of commodity index funds has three components for investors:

- >> the spot return, which is the difference between the purchase and sale of futures contracts,
- >> the roll return gained by replacing expiring futures with new futures, and
- >> the collateral return, which comes from interest payments on bonds in the fund's assets.

The sum of all three components is called the total return.

Another feature of commodity index funds is that they generally purchase only long positions and continually roll them for longer periods of time, regardless of actual developments for supply and demand in the commodities involved. This activity generates significant demand for long positions in futures contracts, characterized as long-only 'massive passives.' If investors withdraw their capital and return their fund shares because they have found better investment opportunities or urgently need liquid capital, as happened during the financial crisis, then fund managers close out their long positions to the same extent on the futures markets and can thereby induce a price decline.

Payment flow in an index fund



Financial industry ‘innovations’ would have had little impact if old regulations at futures exchanges in Chicago and New York had remained in force. But the financial sector lobbied successfully for deregulation.

But 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 Glass-Steagall Act, in place in the United States since the 1930s, had until then also diminished bank risk by separating conventional banking business with deposits and loans from the business of investment banks that traded and marketed securities. Investment banks had inferior credit ratings because they could not rely on customer deposits, making them risky partners for capital market transactions. They had to pay more for needed loans than did the conventional banks assigned top grades by rating agencies whose job it is to assess the degree of creditworthiness of borrowers and issuers of securities.

This is why the financial industry pushed for the abolition of old rules – and was resoundingly successful. It was the great age of faith in self-regulating markets as taught in the neoliberal school of economics. The premise was that financial markets would be so efficient in processing information on upcoming market developments that possible exaggerations would balance out by themselves, even without government oversight. One of the few 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 begun 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. There were no data available on which financial institutions were taking which risks, nor were any regulatory controls in place. Born explained at a U.S. congressional hearing in 1998 that the complete lack of core information was allowing derivatives traders to “threaten our regulated markets or, indeed, our economy without any federal agency knowing about it.”²⁴ But her announcement that the CFTC wanted to assume the needed oversight met with massive resistance. U.S. Secretary of the Treasury, Robert Rubin, who had previously been CEO at Goldman Sachs, rejected Born’s idea outright and was joined by then chairman of the Senate Committee on Banking, Housing and Urban Affairs, Phil Gramm, who was closely linked to the financial industry through campaign donations, and who later became a vice chairman at the Swiss banking giant UBS after leaving Congress. When even Alan Greenspan, chairman of the United States Federal Reserve, joined in the chorus, Born gave up and stepped down. 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

OTC-TRADING

OTC (over-the-counter) trading is the term for doing business with all kinds of financial instruments and securities bilaterally between financial market players, outside of public exchanges.

²⁴ Quoted in “Taking Hard New Look at Greenspan Legacy,” New York Times, 9 October 2008.

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 of futures in energy commodities. At the same time, the board of the CBOT, the futures exchange in Chicago, increased the position limits for futures on grains and soybeans. Where formerly only 600 contracts per trading member and grain type had been allowed, this figure increased to 22,000 for corn, 10,000 for soybeans, and 6,500 for wheat. Individual players could conclude contracts for as much as 884,000 tons of wheat, 1.3 million tons of soybeans, and nearly 3 million tons of corn, representing about 1 percent of the total harvest volume for each type of grain per trading member.

For bankers in the business of commodity derivatives, however, these limits were still too narrow. To bypass them, they took advantage of a loophole in legislation that had been there since the CFTC was founded in 1936. This allowed businesses that could prove they had a legitimate interest in hedging prices, either because they were dealers in physical commodities or consumers of large volumes of grain or crude oil, to be freed from position limits. The first bank to claim this exemption, known as bona fide hedging, was Goldman Sachs after it began selling its commodity index funds. The head of J. Aron, Goldman's proprietary commodities division, wrote to the CFTC that his company had to hedge against price risks too, just like producers and processors, because it was offering participation in the commodities market to its customers. This claim was entirely contrary to the purpose of the ruling. The positions limit was actually meant to cap 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, not least because Robert Rubin was U.S. Secretary of the Treasury at the time. 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. In the wake of major deregulation, every financial business could claim this exemption starting in 2000, and position limits lost their significance. This didn't 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, Kevin Rich, 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. ETFs, enthused the Financial Times, "allow an investor to trade a position in crude oil or copper [or grain] as easily as buying a stock or a bond."²⁵

Position limits were actually meant to curb the influence of futures trading driven purely by profit motives. But the financial lobby exerted more pressure than this logic did.

²⁵ "Convenience proves a big attraction," Financial Times, 3 June 2011.

In this way, the market for investments tracking the prices of commodity futures has continued to expand. Funds that invest in the entire range of commodities have been joined by many others that track specific, individual raw material categories such as energy, soft commodities (cocoa, coffee, cotton), or the agricultural sector as a whole. The Deutsche Bank's flagship Commodity Index Tracking Fund, traded under the PowerShares name, holds nearly 7 billion dollars in investment capital; it is joined by another seven funds for precious metals, industrial metals, energy in general, oil in particular, and another only for agricultural commodities, which alone operates with almost 4 billion dollars. The Deutsche Bank also offers its European customers a similar fund program under its x-trackers brand, and nearly all internationally active banks do the same.

Furthermore, at least as many Exchange Traded Commodities (ETCs) are on offer, granting investors additional security because physical commodities directly underlie them.²⁶ Added to this are innumerable certificates on commodity prices, called exchange-traded notes (ETNs) in financial jargon. These are debt securities issued by banks to investors. Repayment and interest are usually linked through a special formula to the price performance of individual commodities or an index for an entire group of commodities. In this way, investors can directly bet on individual commodity prices.²⁷ Because issuing banks in turn hedge against potential losses from these bets on futures exchanges, the sale of certificates also influences prices on futures markets.

Publicly traded commodity-linked securities make up only a small share of the market. The financial industry has expanded a much larger, non-public OTC (over-the-counter) market for commodity derivatives, extending beyond the exchanges and indeed beyond any oversight.

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 derivatives beyond the exchanges and indeed beyond any control. This operates through direct agreements between banks and their customers, and between banks themselves. Commodities departments in banks function as a hub between all actors involved in commodity markets, not just financial investors, but producers and processors as well who don't wish to trade on futures markets themselves. Like exchanges, banks hedge prices for buyers and sellers alike in line with their specific needs. Because some customers are buyers and some are sellers, banks stand between these participants. Like exchanges, they can post risks against each other. But because banks serve all customer needs, regardless of whether customers want to buy long or short, these positions don't balance out the way they do on the exchanges. It might occur, for example, that more customers are buyers relying on rising prices than sellers expecting prices to fall. This creates a risk situation for banks which they in turn hedge by buying and selling futures on regulated exchanges. In this way, the purely financial commodity trading business has multiplied many times over because banks have generated an additional trading environment through OTC trading. According to Gary Gensler, chairman of the CFTC, the volume of OTC trading with commodity derivatives is seven times greater than that which runs through the futures exchanges.²⁸

²⁶ This is true in a real sense only for ETCs on precious metals. ETCs on energy or agricultural commodities usually have precious metals only as collateral, whereas price performance depends on the price of futures which banks in turn buy themselves or must hold per swap with third parties in order not to have to bear the price risk themselves.

²⁷ Because certificates are not coupled to fund assets, investors risk losing their money if the issuing bank goes bankrupt. This is what happened to Lehman Brothers' certificates when the bank went bankrupt in September 2008.

²⁸ Gary Gensler, interview with Mark Robinson on "Bubble Trouble?" broadcast, BBC, 8 June 2011.

All those banks at the center 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 of commodities. Around the world, big players like Goldman Sachs, Morgan Stanley, Barclays, JP Morgan and Deutsche Bank have bought storage facilities, tankers and pipeline 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. This has gone to the point where Morgan Stanley occasionally charters more tankers than the Chevron oil group does.²⁹ It is not known whether the situation is comparable for agricultural commodities and grain. But there is much to suggest that individual actors, whether banks, trading houses or even large farms, do the same thing in the agricultural sector. The steady influx of capital to the futures markets raises the expectation that price increases will be higher than storage costs.

This influx is the backbone of the financial sector's global marketing strategy. There is hardly an investment advisor or bank that does not strongly recommend to its clients that they should have a share of their portfolios invested in these financial products. Commodities play "a decisive role" in a "crisis-proof securities account," advised Jörg Warnecke, investment manager at Union Investment, the funds subsidiary of Germany's cooperative banks.³⁰ Analysts of all stripes steadily feed the financial press with assessments of this kind. This is why the Financial Times, for example, publishes reports daily on commodity investments and their benefits. In an article titled "Investors rush to hedge against inflation," Toby Nangle, a director at Baring Asset Management, said: "If, as central bankers say, it is the exogenous factors, such as commodities and food, that are driving inflation higher, the ones that they cannot control, then it makes sense to get exposure to them."³¹ Banking giant Barclays wrote in April 11 that "oil and food prices are already at levels that are raising inflation fears and by implication, threatening the performance of other assets." That's why "now is the precisely the time"³² for commodity investments. A "buy commodities mentality"³³ had taken over, said Terry Roggensack, a founding principal of The Hightower Report, a prestigious American analysis service for agricultural markets. Deutsche Bank even went so far as to print ads for its agricultural funds on paper bags for baked goods. "Are you happy about rising prices?" the ad questioned, adding: "The whole world is talking about commodities – our Agriculture Euro Fund offers you the opportunity to benefit from the performance of seven important agricultural commodities."

In this way, the commodity boom keeps refueling itself. As recently as 2003, only about 13 billion dollars were invested in derivatives on commodities of all kinds. By the spring of 2011, this sum had swollen to 412 billion dollars

Major investment banks in recent years have gone into the physical trading of commodities. Around the world, big players like Goldman Sachs, Morgan Stanley, Barclays, JP Morgan and Deutsche Bank have bought storage facilities, tankers and pipeline 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.

²⁹ Peter Robison, Asjilyyn Loder, Alan Bjerga, "Amber Waves of Pain," Business Week, 22 June 2010.

³⁰ Jörg Warnecke, quoted in "Es gibt keinen Big Bang" [There is no big bang], Süddeutsche Zeitung, 16 March 2011.

³¹ "Investors rush to hedge against inflation threat," Financial Times, 16 February 2011.

³² "The Commodity Investor, Hold on..." Barclays Capital Commodities Research, London, April 2011.

³³ Agrimoney.com, "Morning Markets: 'Buy Commodities Mentality' Supports Crops," 7 April 2011.

HEDGE FUNDS

Hedge funds are investment funds that are not subject to legislative restrictions in their strategy. They are typically registered in tax havens and open only to wealthy investors and financial institutions. They are usually managed by experienced traders who – often with additional borrowed money – take considerable risks and can therefore generate large profits but also spectacular losses for their clients. For their services, they usually charge 2 percent of the investment sum and 20 percent of the profits.

More than 600 billion dollars are invested in the financial industry's commodities business. This is roughly a tenth of the value of all shares traded worldwide.

according to commodity analysts at Barclays Bank. But this figure covers only the value of exchange-traded commodity investments and the data that Barclays finds from surveying investments in index swaps (see footnote 5). It doesn't include the volume invested by hedge funds to bet on the commodities markets. Around the world, about 2 trillion US dollars are invested in these largely unregulated funds that track many different investment strategies across the entire breadth of the capital market. If only 5 percent of them were invested in the commodities market, the total sum for commodity derivatives would be more than 100 billion dollars higher. Also not included in these figures is the money injected by banks and other financial institutions into proprietary trading on the commodity exchanges. This share of trading operates completely inside the OTC segment, undetected by any exchange. According to the Bank for International Settlements, the Basel-based bank for central banking authorities, the market value for OTC commodity derivatives had already reached 461 billion dollars in December 2010.³⁴ In contrast, Barclays estimates that the OTC segment only has a volume of about 180 billion dollars. It can be assumed therefore, that more than 600 billion dollars are invested in the financial industry's commodities business. This is roughly a tenth of the value of all shares traded worldwide.

Whether and to what extent investors actually gain profits from commodity investments is difficult to determine with accuracy. Because prices fluctuate strongly during the growing "financialization"³⁵ of commodity markets, and because high transaction costs are incurred, many investors have suffered heavy losses in the past five years. 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, equivalent to a good 10 percent of its total revenue.³⁶ Deutsche Bank also wrote in its 2010 annual report that commodity trading was "the most important area of growth" in its business. Banking giant JP Morgan employs 1,800 people alone in its commodity division and expects net earnings for 2011 of more than 1.2 billion dollars from this branch.³⁷ 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.³⁸

Big winners in the growing trade with commodity derivatives are the exchanges themselves. For every purchase and sale of futures and options, customers have to pay fees ranging from 30 cents to 1 dollar, depending on the volume traded. Added to this are fees, in the same order of magnitude, for the financial management of deals on the due date. In this way, the CME Group, for instance, which owns the futures exchanges in Chicago (CBOT) and New York (NYMEX), procured almost half of its total 2010 annual turnover of 3 billion euros from the trade in commodity derivatives alone.

³⁴ Bank for International Settlements, "OTC derivatives market activity in the second half of 2010," Basel, 2011.

³⁵ UNCTAD, the United Nations Conference on Trade and Development, used this concept to describe the growing penetration of financial investors into the commodity business. See: UNCTAD, *The Global Economic Crisis: Systemic Failures and Multilateral Remedies*, Chapter III, Geneva, 2009.

³⁶ Goldman Sachs, 2009 Annual Report, New York.

³⁷ "Big Banks Cash In on Commodities," *Wall Street Journal*, 2 June 2011.

³⁸ "Volatile oil markets lift profits on Wall Street," *Financial Times*, 3 May 2011.

But who has to pay for these profits, which are not fed from investments in businesses and bonds, but from futures market transactions, which 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 claimed³⁹ 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 or with the production of biofuels. The controversy sparked a bitterly fought academic and political dispute in the United States and Europe, and generated a wealth of new reports and studies on the issue. The outcomes are far from clear, but the argument that commodity speculation has no impact on the price of food is less and less tenable.

The argument that commodity speculation has no impact on the price of food is less and less tenable.

³⁹ Steve Strongin, "Letter to the Editor," Harper's Magazine, 8 July 2010.

III. PRICES AND PROOF – THE IMPACT OF SPECULATION ON THE COMMODITIES BOOM

When investment advisors and analysts recommend buying a stock or other securities, they usually add a story to explain why the investment has good prospects for high returns. Those offering commodity funds and similar financial products have been telling the same story for a decade, and it's a good one: the world's population is growing by 80 million people each year, the economies in emerging markets like China, India and Brazil are growing at a rate of 8 to 10 percent annually, and with them the demand for oil, copper, grains and other commodities. At the same time, more and more countries are turning to the cultivation of corn, rapeseed and soybeans to produce biofuel. But since the planet itself is not growing, the availability of resources and arable land remains limited. Therefore demand is rising more rapidly than supply, many analysts conclude, and it could not be otherwise – the prices for raw materials have to increase.

Investment guru Jim Rogers, who together with George Soros founded the still successful Quantum hedge fund, named this a supercycle at the beginning of the century. He meant that the upward trend in commodity prices could be largely independent of the ups and downs of the global economy, the traditional business cycle, for a long time. Developments since early 2010 seem to confirm this prognosis. The interruption of the big financial crisis in 2008 was short-lived and commodity prices rose again much more rapidly than the world economy did as a whole. "The supercycle is in full swing," proclaimed Roger Jones in February 2011; he is managing director and co-head of the global commodities division at the British investment bank Barclays Capital, which counts itself among the major suppliers of commodities funds.⁴⁰

The question of whether the increase in speculative investments is actually driving up commodity prices is always vehemently dismissed by representatives of the financial industry.

But the question of whether the increase in speculative investments is actually driving up prices in the commodities sector is always vehemently denied by representatives of interested businesses in the financial sector. Managers of the big stock exchanges are particularly good at this. 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 a 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 (LME), declared that changes in fundamentals, the data on supply and demand, were alone decisive for prices, adding that smart investors understood earlier than others that this pattern had changed. The commodities sector was simply underinvested. This was

⁴⁰ "Commodity super-cycle is back in full swing," Financial Times, 1 February 2011.

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. In other words, only because many investors are active in the market are there always buyers and sellers, and only then can futures exchanges perform in pricing and hedging. Only then, explained Durkin, were raw material producers and farmers provided with the information on future sales revenues for their products that they need to produce the quantities required. David Peniket, president and COO of Intercontinental Exchange (ICE) Futures Europe, added that criticism of speculation was nothing more than the search for a scapegoat. Speculators were only the bearers of bad news, but by no means their cause.⁴¹ And finally, Terry Duffy, executive chairman of CME Group, who has appeared before the United State Senate on several occasions, said there “was no evidence that speculators influence the prices of any particular product.” If speculators were in a market, said Duffy, “they could have short-term impact,” which he didn’t want to deny, but “fundamental data always prevailed.”⁴²



“There is no evidence that speculators influence the prices of any particular product.”

.....

Terry Duffy, Executive Chairman,
CME Group

If this reasoning is to be believed, it means that financial investors in commodity futures are not only harmless but even indispensable, enabling producers and processors to hedge their prices on futures exchanges and thereby plan their production. In addition, they are just better informed than their critics and only react to genuine scarcity. They have no influence on the real prices paid for commodities, at least none that can be definitely proven. This sounds plausible at first. 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.

.....

⁴¹ Remarks taken from contributions to the EU Commission Conference, “Commodities and Raw Materials, Challenges and Policy Responses,” Brussels, 14 June 2011.

⁴² Terry Duffy, in BBC interview, 14 February 2011, and speaking before the U.S. Senate Committee on Agriculture, Nutrition and Forestry, Oversight Hearing: “Implementation of Title VII of the Dodd-Frank Wall Street Reform Act,” 3 March 2011.

GOOD AND BAD SPECULATORS – HOW MUCH LIQUIDITY IS NEEDED?

HEDGER

Hedgers are stakeholders in financial markets who buy futures and other derivatives to hedge against price and exchange rate fluctuations in commodities, exchange rates or interest.

Even up to the turn of the century, futures exchanges actually did perform the function for which they were originally devised, and which advocates of the business still attest to today. 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. They took buying (long) or selling (short) positions, depending on how they expected supply and demand to develop. This also ensured that an exchange was always a cash market, so that, for example, grain sellers still found buyers even when processors weren't buying, and vice versa. In this way, speculators assumed some of the risk for those whose business was the buying and selling of physical goods. In this context, 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.

But this has fundamentally changed since deregulation began in 2000, followed by the entry of index investors and many hedge funds to the market. This shows up in the data on the positions held by different groups of traders, information released weekly by the U.S. Commodity Futures Trading Commission (CFTC) regulating agency.⁴³ These Commitment of Traders (COT) reports distinguish between commercial traders, those concerned primarily with the trading and processing of physical commodities, and non-commercial traders, who are only speculative players. What has changed can be seen for example in the data for wheat contracts at the Chicago Board of Trade (CBOT). Until 1999, the share of contracts held at this exchange for purely speculative purposes was about 20 to 30 percent of the total volume.⁴⁴ 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 traditional hedging account at most for only one-third of the total volume (see pie charts).⁴⁵ Data on all other commodities traded at American futures exchanges show a very similar pattern.

The share of contracts held for purely speculative purposes until 1999 was about 20 to 30 percent of all commodities futures contracts. By 2006, this ratio had completely reversed itself. Since then, up to 80 percent of positions are held by speculators, while contracts for traditional 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. The number of traded contracts blatantly exceeds many times over the volume needed by commercial traders for hedging purposes. In addition, experienced traders affirm that the market in no way suffered from a lack of liquidity before deregulation occurred and large amounts of capital seeking investment were diverted to the commodity exchanges.

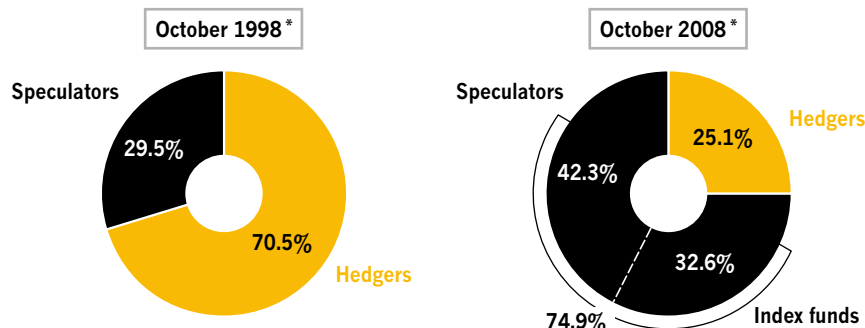
⁴³ Although these contain only data on futures contracted on U.S. exchanges, such contracts make up about two-thirds of global business turnover, so they are largely representative on a global scale.

⁴⁴ This includes spread positions where dealers combine a long position in one month with a short position in another month and thereby bet on two contracts with opposite price development.

⁴⁵ Data and the chart are based on COT data compiled by David Frenk et al., Better Markets, Comment Letter on Position Limits for Derivatives to the CFTC, Washington, D.C., 28 March 2011, <http://www.bettermarkets.com/sites/default/files/CFTC-%20Comment%20Letter-%20Position%20Limits%203-28-11.pdf>

Hedging and speculation

Shares in wheat at the Chicago Board of Trade (CBOT), before and after deregulation



* Average weekly values

Sources: CFTC, Better Markets

But even if there were a need for liquidity, it's 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 only on long-term price increases. They appear exclusively as buyers on the futures exchanges, contracting only long positions. These are financially closed out before expiration, while the fund reinvests to the same extent in new long positions for futures, a transaction called 'rolling' in market jargon. In this respect, index investors are present only on one side of the market, and thereby virtually deprive the market of liquidity. This conclusion was also reached by the authors of a study published in May 2011. Bremen economist Hans H. Bass headed an investigation of the impact of financial market players on the price of grain. "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 supplied for money. If anything, this investment strategy withdraws liquidity from the market rather than providing liquidity to the market," reasoned Bass.⁴⁶

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. How large this is was made clear as early as May 2008 by American financial market expert Michael Masters during a hearing before the U.S. Senate. He said that the volume of purchases on the wheat market subscribed by index funds at that time would be enough to "supply every American citizen with all the bread, pasta and baked goods they can eat for the next two years." The positions of

"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 supplied for money). If anything, this investment strategy withdraws liquidity from the market rather than providing liquidity to the market."

Hans H. Bass, University of Bremen

⁴⁶ Hans H. Bass, Finanzmärkte als Hungerverursacher?, Studie für die Welthungerhilfe, Bonn, 2011.

fund speculators in corn futures are equally large in number. Masters explained that in many cases the high price for corn was attributed to the massive increase in demand for ethanol produced for blending with gasoline. But at the same time, the volume purchased on the futures market by index fund managers was theoretically enough to meet the total demand of the ethanol industry for an entire year.⁴⁷

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. Masters, himself the owner and manager of a successful hedge fund and certainly not an enemy of the financial industry, believes the idea that funds buying futures would not impact on commodity prices is completely absurd. “When billions of dollars of capital is put to work in small markets like agricultural commodities, it inevitably increases volatility and amplifies prices – and if financial flows amplify prices of food stuffs and energy, it’s not like real estate and stocks. When food prices double, people starve.”⁴⁸

Because index funds appear only as buyers over long periods of time, they drive the price structure of commodities upwards.

The legendary hedge fund manager George Soros, a veteran among speculators and with decades of experience in financial markets, assesses the situation similarly. At another hearing before the U.S. Senate, Soros explained that index buyers “are piling in on one side of the market and they have sufficient weight to unbalance it.”⁴⁹ Bart Chilton, one of five commissioners at the head of the CFTC, comes to the same conclusion. He said at a panel discussion during a meeting of the Futures Industry Association lobby group that he doesn’t believe index investors “are the cruise control of prices.” But he is convinced that “they tap the gas pedal.”⁵⁰

Because they appear only as buyers for long periods of time, they drive the price level of commodities structurally upwards, says market expert David Frenk, who formerly traded with oil futures for a hedge fund and today works for the American organization Better Markets, which campaigns for the regulation of futures markets.⁵¹

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 a strong inflow of money to index funds (see chart). Many other investors, whether they are hedge funds or banks doing proprietary trading, used this as an opportunity to jump on the bandwagon. This can often happen without the active involvement of traders because these funds use automated trading programs that respond to price signals, thereby reinforcing the trend.

⁴⁷ Testimony from Michael W. Masters, Masters Capital Management, LLC, before the Committee on Homeland Security and Governmental Affairs, United States Senate, 20 May 2008.

⁴⁸ Quoted in “Global food crisis: the speculators playing with our daily bread,” *Guardian*, 2 June 2011.

⁴⁹ Quoted in “Soros sounds alarm on ‘oil bubble,’” *Financial Times*, 3 June 2008.

⁵⁰ Bart Chilton, opening remarks to the Futures Industry Association’s panel discussion on “Financial Investors’ Impact on Commodity Prices,” Boca Raton, Florida, 16 March 2011.

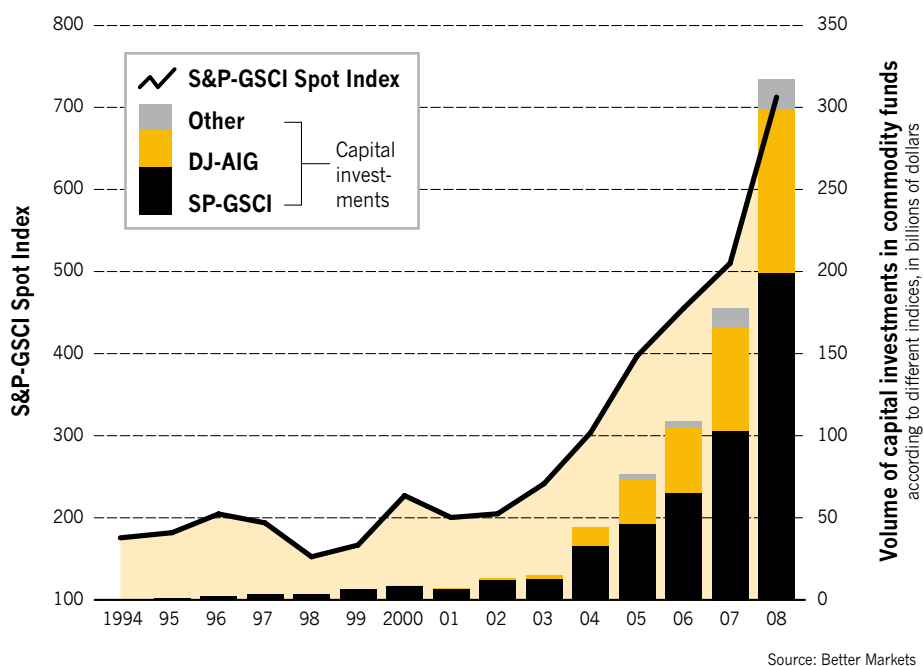
⁵¹ David Frenk, interview with the author, Washington, D.C., 3 May 2011.

Austrian economist Stephan Schulmeister looked into how the herd instinct of investors aggravated price developments in this way, using more than a thousand such programs for model calculations of futures markets. His findings showed that “in particular the widespread use of technical trading systems reinforces the trending behavior of commodity prices.” The “impact of these trading practices on price overshooting,” wrote the recognized expert in financial systems, “was particularly pronounced during the recent commodity price boom” (in 2007 and 2008).⁵²

The more that investment money flows into funds, the more this drives up prices and in turn attracts even more investors.

Investments in index funds and commodity prices

measured in Goldman Sachs commodity indices, 1994 to 2008



So it is certainly not the involvement of index investors alone that is to blame for prices rising rapidly in certain phases, and then falling again when many investors exit a fund. But index funds are the whales in the market, explains market expert David Frenk.⁵³ 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 – both in frequency and extent. Until 2004, prices for wheat futures in Chicago generally fluctuated only 20 to 30 percent during the course of a year. Since funds have entered, fluctuations of up to 70 percent have become commonplace (see chart). Whether for oil, natural gas, cotton, corn, wheat or coffee – since deregulation, producers and processors of all categories of raw materials have had to deal with much larger fluctuations in prices, not only on American exchanges. The European Commission reported that even at the relatively small MATIF futures exchange in Paris, volatility has significantly increased since 2006.⁵⁴

⁵² Stephan Schulmeister, “Trading Practices and Price Dynamics in Commodity Markets and the Stabilising Effects of a Transaction Tax,” Austrian Institute of Economic Research, Vienna, January 2009.

⁵³ David Frenk, interview with the author in Washington, D.C., 3 May 2011.

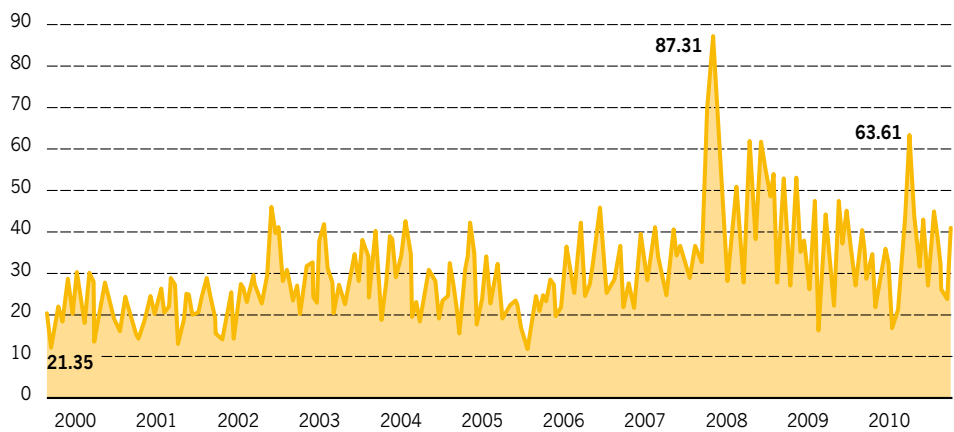
⁵⁴ Commission of the European Communities, “Agricultural Commodity Derivative Markets: The Way Ahead,” Commission Staff Working Document, Brussels, 28 October 2009.

Futures exchanges today generate the very uncertainty they were originally intended to mitigate.

In this way, futures exchanges generate the very uncertainty they were originally intended to mitigate, thereby losing their purpose for many commercial users. Wide fluctuation drives up the cost of a possible safeguard. The higher volatility is, the more users have to pay for a margin, the security they must deposit with the exchange when a futures contract is signed. At the same time, buyers for food businesses or airlines take significant losses with their futures if prices drop again. They felt these losses very dramatically in 2007 and 2008 when the price of oil went from 60 to 140 dollars per barrel within 24 months, and afterwards dropped to 40 dollars per barrel. Delta Airlines, the leading air carrier in the United States, suffered hedging losses of 1.7 billion dollars during this time, reported Delta's chief legal officer to the regulating agency CFTC.⁵⁵ Its competitor Southwest Airlines announced that within 15 days in October 2008, it lost 2 billion dollars in futures contracts.⁵⁶ The carrier US Airways even declared that it had completely abandoned hedging because margin payments claimed too many of its liquid assets.

Wheat prices in heated financial markets

Price fluctuations in front month futures for wheat on CBOT, in percent*



* = historical 20-day realized volatility

Source: Better Markets

Heating oil distributors, food businesses and cotton processors all have the same complaint. Sean Cota, for example, a heating oil supplier in Vermont, reports that before the wave of speculation started, he had hedging costs of about six cents per gallon of heating oil. Today this figure is 37 cents and he has to add this to his sale price, driving up heating costs for customers. Howard Schultz, chairman and CEO of the Starbucks coffee house chain, complained of “financial engineering” on the commodities markets to justify price increases.⁵⁷ The problem similarly affects the sellers who want to hedge on futures exchanges since they need to pay higher margins. For example, the leading exchange for cotton, Intercontinental Exchange, until 2010 required a margin payment of 1,500 to 2,100 dollars for a contract on 50,000 pounds of cotton. In 2011, the margin went up as far as 8,400 dollars. Wallace Darneille, president and CEO of the Plains Cotton Cooperative Association, one of the largest American cotton producers, reported that his business

⁵⁵ Ben Hirst, Delta Air Lines, hearing before the CFTC, Washington, D.C., 28 July 2009.

⁵⁶ David Berg, Vice President, Air Transport Association, in a letter to the CFTC, Washington, D.C., 23 April 2010.

⁵⁷ Howard Schultz, in CNBC interview, 6 April 2011.

had strongly cut back on hedging for that reason. “The market is broken; it no longer serves its purpose,” said Darneille.⁵⁸ Increasing volatility on the futures markets points out the absurdity of the assertion that speculation is useful primarily for producers and processors to safeguard prices. In reality, hedging has become more expensive and uncertainty has increased.

But this is certainly in keeping with the interests of participating financial institutions. The more prices 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. This ensures a steadily growing flow of fee income to the financial groups involved. Marketing experts at Deutsche Bank have been involuntarily honest in documenting this business model, based on knowingly induced uncertainty fueled by speculation. In a promotional brochure for industrial customers, under the heading “Shaping Commodity Prices”, the bank wrote: “Prices for some 50 commodities can now be hedged at Deutsche Bank. And there are always more being added – the price of nearly every commodity traded on a futures exchange can be safeguarded. This listing eligibility is a prerequisite for hedging, but it also makes prices more prone to speculative fluctuations – which in turn increases the need for security.”⁵⁹

Ever 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.

⁵⁸ “Companies Hedge Bets at a Cost to Consumers,” New York Times, 5 May 2011.

⁵⁹ Deutsche Bank, “Rohstoffpreise gestalten” [Shaping Commodity Prices], Results, Offprint, Frankfurt, November 2010.

FUTURES MARKETS ARE (NOT) A ZERO-SUM GAME – PAUL KRUGMAN’S STORAGE HYPOTHESIS

SPOT-MARKET

The spot market is where the price is negotiated on a commodity for immediate delivery, in contrast to the futures market, which deals with the price of deliveries in the future.

Krugman’s storage hypothesis holds that criticism of speculation is “speculative nonsense.” 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.

Despite such apparent failures, the advocates of unlimited business at futures exchanges raise an apparently weighty objection to criticism: 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 Krugman, winner of the Nobel Prize in Economics and a recognized critical intellectual. Criticism of growing speculation, wrote Krugman in his blog for the New York Times, is “speculative nonsense.” After all, futures are just bets on future prices and the bottom line is a zero-sum game, Krugman argued. For every buyer of a long position there is ultimately a seller who occupies the short position. No matter how many futures are traded, this activity does not create additional demand for commodities. Consequently, he added, it has a “no, zero, nada” effect on the spot price, although it might have an effect if high futures prices would induce producers to hoard their goods and store more grain or oil in silos and reservoirs to obtain higher prices at a later time. But, as Krugman’s thesis goes, there is no evidence that commodities storage is increasing.⁶⁰ Steffen Roth, managing director of the Institute for Economic Policy at the University of Cologne, one of Germany’s leading schools in economic science, shares this opinion. Making speculation responsible for rising prices is “pure nonsense,” says Roth. “The amount of physical agricultural commodities available doesn’t change because of the activity of financial players.” A futures contract determines “only who the owner of the harvest is in the summer, not how big the harvest will be.” Therefore, “financial market actors are not the initiators of market imbalances, but only the early messengers.”⁶¹

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. Nevertheless, the hypothesis defined by Krugman and his academic colleagues has one major flaw: it comes from the 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. This is exactly what doesn’t hold true. In fact, prices on the futures exchanges are crucial in determining prices on the spot markets.

Every modern farmer can immediately confirm that this applies to grains. Heinrich Heitmüller, for instance, has a farm on the German island of Rügen where he cultivates about 400 hectares of wheat and rapeseed. He smiles at the question of which prices he uses for his calculations and how he negotiates this with his grain dealer. He pulls his cell phone out of his pocket,

⁶⁰ Paul Krugman, “Speculative Nonsense,” New York Times, 23 June 2008.

⁶¹ Steffen J. Roth, “Hunger stillt man nicht durch Regulierung” [Hunger Can’t Be Sated Through Regulation], Süddeutsche Zeitung, 29 March 2011.

taps on the screen, and displays the results. “Here, these are today’s prices at the MATIF in Paris; they are my prices too.” He is referring to prices at the grain exchange in Paris, which in turn generally follow those in Chicago, especially for wheat, a significant share of which is traded internationally. The actual calculation for a specific deal usually also includes surcharges or markdowns for transportation costs or variations in quality. But apart from these details, says Heitmüller, the exchange price is the spot price. Detlev Kock, director of HG Nord, one of Germany’s largest grain trading businesses, agrees. Not one of his colleagues, whether in America, Australia or Europe, would disagree.

This is mainly because physically traded commodities in large production countries are traded through regional exchanges quoting prices only at irregular intervals and in small amounts, whereas futures exchanges offer buyers and sellers immediate information on overall market conditions. That’s why “it’s a good thing the exchange is there”, says Heitmüller, because he can check at any time to see whether the price offered by his dealer is correct. That is why the price quoted for the next future to expire is almost always the same as what the processing industry or the buyer from an import-dependent country will pay. Indeed, this is generally set out explicitly in the long-term supply agreements between wholesalers and the industry.⁶² It is also why information services like Reuters or Bloomberg always refer to prices for front month futures when they report on the current price of crude oil, grains or industrial metals.

But if prices for futures contracts are determined primarily by the activity of speculative investors, this certainly has direct impact on the physical commodity market. No producer 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 institution supported by 64 governments and private foundations, also came to the same conclusion after carrying out a comprehensive study. Summing up, the authors said that “the futures markets analyzed generally dominate the spot markets. Price changes in futures markets lead price changes in spot markets more often than the reverse.”⁶³

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, selected to replicate the guidelines for the relevant commodity indices. Even if they don’t, like traditional speculators, deliberately cut back the available supply of physical goods by hoarding raw materials, their investments have a similar effect on exchange prices

“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.”

International Food Policy Research Institute, Washington, D.C.

⁶² Documented in: Better Markets, Comment Letter on Position Limits for Derivatives to the CFTC, Washington, D.C., 28 March 2011.

⁶³ Manuel Hernandez, Maximo Torrero, “Examining the Dynamic Relationship between Spot and Future Prices of Agricultural Commodities,” IFPRI Discussion Paper 00988, Washington, D.C., June 2010.

“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.”

UNCTAD

because, in fact, “their hoarding is sort of virtual”, said Olivier De Schutter, United Nations Special Rapporteur on the Right to Food, who also published a study on the issue.⁶⁴ George Soros shares this assessment, stating that it was the speculators’ expectations, “their gambling on futures,” that drove up prices and distorted the market. This especially hit the trade with agricultural commodities. What was going on there, said Soros, was “like hoarding food in the midst of a famine.”⁶⁵ Economists at the United Nations Conference for Trade and Development (UNCTAD) describe things very similarly: “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,” they wrote in a study of systemic flaws in modern financial markets.⁶⁶ This mechanism took effect especially with those commodities for which consumers and producers could not choose in the short term to reduce their consumption because prices were too high for grain and, to a considerable extent, for heating oil and gasoline. People always have to eat, and most of them can reduce their consumption of heating, electricity and transportation at best in the long run only. For these reasons, “price elasticity” in consumption is extremely low. Consumers have to “accept for a time higher prices” and “no inventories appear, the market is cleared, but prices are much higher than without speculative activity,” concluded the authors of the UNCTAD study.

Another important factor comes in here. Contrary to the contention of Krugman and his academic supporters, it has not been clearly substantiated, at least for grain, whether producers and trading businesses, in the phases 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 the 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. In any case, America’s big farmers have substantially increased their storage facilities for this purpose. American agronomist Michael Swanson told the Financial Times in April 2011 that the building of grain silos had gone through “an incredible boom” for several years. “Farmers have built more on-farm grain storage in the last three to four years than they’ve built in the previous 30.”⁶⁷ 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

⁶⁴ Olivier De Schutter, “Food Commodities Speculation and Food Price Crises” Briefing Note, Brussels, 2 September 2010.

⁶⁵ Stern.de, interview with George Soros, “We are in the midst of the worst financial crisis in 30 years,” 3 July 2008.

⁶⁶ UNCTAD, The Global Economic Crisis: Systemic Failures and Multilateral Remedies, Chapter III, Geneva, 2009.

⁶⁷ “Farmers look to earn their corn with new storage bins,” Financial Times, 6 April 2011.

made it more profitable for grain elevator operators 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 (buying wheat in the cash market, selling futures contracts, and then delivering the wheat) at contract expiration.”⁶⁸ Detlev Kock of the German grain trading business HG Nord can confirm that storing grain in anticipation of the higher prices indicated by the futures market is an established practice in Europe. Many farmers sell only a portion of their harvests at first and put the rest in storage. Against this backdrop, it’s not surprising that estimates of stock vary considerably, depending on the source of information. The private agricultural consulting firm Stratégie Grains calculated the stock of global wheat inventories in the early summer of 2011 to be 16 million tons higher than the figure quoted by the U.S. Department of Agriculture – a difference which amounts to around 10 percent of the entire volume of internationally traded wheat.⁶⁹

The unreliability of published figures on grain stocks was revealed in June 2011 in Russia. A devastating drought the summer before had caused a large share of the wheat crop to wither in the fields. To protect his citizens from having to pay high prices for bread, Prime Minister Vladimir Putin imposed a ban on exporting Russian grain. While this set off a price explosion on the global market, on the Russian domestic market the price of bread wheat plummeted by 50 percent. Numerous large agricultural enterprises in the country quickly decided to store the harvest, which was damaged by drought but had not failed, and to wait for the end of the export ban and the country’s return to the global market. It quickly became known the following June that Russia had additional stocks of 18 to 20 million tons of wheat and rye that had not previously appeared in any statistics.⁷⁰

Thus the contention that speculation with futures is not relevant in the trading of physical goods stands on shaky ground for several reasons:

- >> The overwhelming share of speculative capital investment in commodities goes through index funds acting exclusively as buyers, who thereby structurally drive up futures prices.
- >> Only futures markets provide buyers and sellers with information on the overall market situation. Trading partners on spot markets therefore base their prices on their assessment of futures markets.
- >> It would make no business sense to offer a product on the physical market for significantly less than the price paid on futures markets. Similarly, no one buys on the spot market for a price that is higher than that offered on futures markets.

High futures prices make it profitable for grain dealers to purchase grain in the cash market, place it in storage, then hedge those grain purchases with the sale of relatively high-priced futures contracts, and later physically deliver the wheat.

⁶⁸ United States Senate, Permanent Subcommittee on Investigations, “Excessive Speculation on the Wheat Market,” Washington, D.C., 24 June 2009.

⁶⁹ Stratégie Grains, Issue 221, 12 May 2011.

⁷⁰ Agrimoney.com, “Russia grain losses exaggerated,” 6 June 2011.

“When the rise in prices for futures is generated by investors whose trading strategies are not coupled with fundamental data but are set on boosting the trend, it makes sense for physical dealers to hoard their commodities first.”

.....

Olivier De Schutter, United Nations
Special Rapporteur on the Right to Food

>> 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.


The arguments of textbook economists also contradict the logic of the business, as Olivier De Schutter, United Nations Special Rapporteur on the Right to Food, notes. When the rise in prices for futures is generated by investors whose trading strategies are not coupled with fundamental data but are set on boosting the trend, it makes sense for physical dealers to hoard their commodities first, says De Schutter, “anything else would be stupid. Anyone who argues that dealers would act against their own business interests should prove it, and not conversely demand evidence of an increase in stock holding.”⁷¹

.....
⁷¹ Olivier De Schutter, interview with the author, 17 March 2011 in Brussels.

APPLES AND ORANGES – HOW THE IMPACT OF SPECULATION ON PRICES CAN AND CANNOT BE MEASURED

Well aware of the actual relationships between futures market prices and spot trading, advocates of betting on the futures exchanges usually go back to another argument. 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, says Steve Strongin, senior manager for investment strategy at Goldman Sachs in New York. So 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.⁷² Experts at the Internal Market and Services Directorate-General of the EU Commission use the same argument. Although there is a “strong correlation between positions on derivatives markets and spot prices” for physical goods, 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 price increases in the underlying physical markets.”⁷³ Managers of many pension funds have used the same reasons to explain why they have invested several hundreds of billions of dollars, pounds or euros in commodity betting.⁷⁴ Exactly this hypothesis has also characterized reporting in leading business media. Whether in the Financial Times, Wall Street Journal, The Economist or even in Germany’s Frankfurter Allgemeine Zeitung – readers will almost always find articles on commodity speculation claiming that “there is virtually no evidence” of speculation affecting prices.

The basis for this argument is a standard problem in statistical analysis. If two variables develop similarly over time, this does not say whether one causes the movement of the other, or whether this happens because of a common cause, or if the values are correlated purely by coincidence. To prove that such a causal relationship does not exist, Strongin and many of his colleagues refer to a study compiled for the OECD by American economists Scott Irwin and Dwight Sanders.⁷⁵ To clarify whether index investors, holding the major share of speculative investments on futures markets, influence prices, they used a method developed by economist and Nobel laureate Clive Granger that is a standard tool today in economics, the Granger causality test. The idea is simple. The values of two variables are compared to each other, not at the same point in time in which they are measured, but deferred by a certain period of time – for days, weeks or months depending on the object of research. If the results of this comparison show that changes in one of the variables ‘predicts’ that the other one will go through similar changes with a delay in time, but the converse is not the case, then it seems very probable that there is a causal relationship between the two.



“There is no conclusive evidence on the causality between speculation in derivatives markets and excessive volatility and prices increases in the underlying physical markets.”

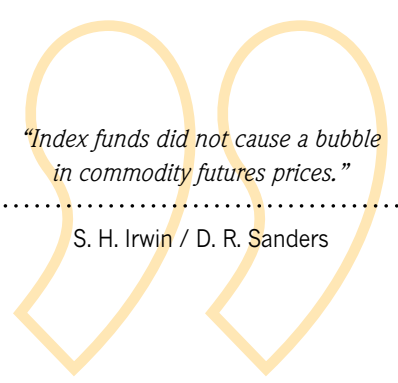
EU Commission

⁷² Steve Strongin, Letter to the Editor, Harper’s Magazine, New York, 8 June 2010.

⁷³ “Commodities daily: Spectres of speculation,” Financial Times, 28 January 2011.

⁷⁴ “Pension funds mull ethics of commodity investments,” Reuters, 22 June 2011.

⁷⁵ Scott H. Irwin, Dwight R. Sanders, “The Impact of Index and Swap Funds on Commodity Futures Markets,” OECD Food, Agriculture and Fisheries Working Papers, No. 27, Paris, 2010.



*“Index funds did not cause a bubble
in commodity futures prices.”*

.....

S. H. Irwin / D. R. Sanders

In this way, Irwin and Sanders used data published weekly by the CFTC on the positions of index investors on the 12 markets for agricultural futures, from wheat to pork bellies, over the period of 2006 to 2009, and compared these with changes in prices for the next futures contract to expire on these markets. Results were consistently negative, and the authors concluded that “index funds did not cause a bubble in commodity futures prices.”⁷⁶

But a number of other experts pointed out that the frequently cited study did not meet scientific standards in many respects. Economist David Frenk, who at one time traded on the futures market himself and today is a recognized analyst of commodities 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.”⁷⁷ 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 wouldn’t register the price effect of investor positions in commodity funds. The positions of index investors reported by the CFTC in no way referred only to the next futures contract due for a particular commodity, but to all traded futures, including those with an expiry date farther in the future. If there is a flow of money to an index fund and this is invested in futures contracts, the fund by no means buys only those contracts that are about to expire, but generally spreads investments over the entire forward curve of futures. In other words, Irwin and Sanders compared apples with oranges and did not come up with usable results.

Other scientists applying the Granger test therefore attain quite different findings. Kenneth Singleton at Stanford University researched activity on futures exchanges for more than 10 years and investigated the impact of speculation on futures prices for crude oil. He noted in his most recent study from March 2011 that trying to draw a connection by measuring “over short horizons (a few days) is of limited value... Of more relevance is whether flows affect returns and risk premiums over weeks or months.”⁷⁸ He compared the positions of index investors with prices for futures over the entire forward curve and shifted the comparison by three months. The findings were “striking”, Singleton wrote. Whenever there were inflows and outflows in index funds, the prices for oil futures rose and fell correspondingly within three months and were entirely independent of available data for supply and demand in oil. Singleton believed this could be explained by the herd behavior of market participants following big funds.

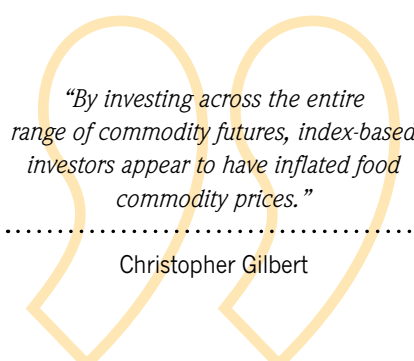
.....

⁷⁶ Scott H. Irwin, Dwight R. Sanders, “The Impact of Index and Swap Funds on Commodity Futures Markets,” OECD Food, Agriculture and Fisheries Working Papers, No. 27, Paris, 2010.

⁷⁷ David Frenk et al., Better Markets, Review of Irwin and Sanders 2010 OECD Reports Speculation and Financial Fund Activity and The Impact of Index and Swap Funds on Commodity Futures Markets, Washington, D.C., 30 June 2010.

⁷⁸ Kenneth J. Singleton, “Investor Flows and the 2008 Boom/Bust in Oil Prices,” Stanford, 23 March 2011.

Christopher Gilbert, an economist at the University of Trento in Italy, came to a similar conclusion. Gilbert developed a complex mathematical model to compile investment flows in time and applied the Granger test. His findings were clear. “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 2007–2008 food price rises.”⁷⁹ Equally clear were the findings of a research team at the New England Complex Systems Institute, who published another large study on the subject in September 2011. Four researchers led by economist Marco Lagi worked out a model calculation based on exchange data and available information on the global production, consumption and storage of grains, and they surveyed dealers and producers to identify the mechanisms of price formation on spot markets. Their calculations showed that “the two sharp peaks [in grain prices] in 2007/2008 and 2010/2011 are specifically due to investor speculation,” and for nearly a whole year speculation had caused the prices of food staples to rise as much as 50 percent above the level otherwise expected from the relation between supply and demand in the physical market. To confirm their findings, the research team asked four other experts at Harvard University and the Federal Reserve Bank of Boston to review their work.⁸⁰ Singleton, Gilbert and Lagi are the leading, but by far not the only researchers in this area who assign speculation an important role in determining commodity prices. The authors of 35 other studies have come to the same conclusion (see list of further reading on page 84).



“By investing across the entire range of commodity futures, index-based investors appear to have inflated food commodity prices.”

Christopher Gilbert

A report by economists John Baffes and Tassos Hanriotis published in July 2010 carries special weight in this context. Baffes is a senior analyst of commodities markets at the World Bank in Washington, D.C., and Hanriotis has the same function in the Directorate-General for Agriculture and Rural Development at the EU Commission. Both admit in talks that they believed for many years that markets simply reflected information on supply and demand. They saw no problem with speculation on futures exchanges and felt that criticism was just the mumbo jumbo of conspiracy theorists. But in December 2007, while Baffes was preparing his weekly analysis, he said the first doubts came. Finally, in the first half of 2008, when commodities prices and with them the prices for food continued to soar in spite of the onset of the financial crisis and the already ongoing recession in the United States, he noted there was a development that could no longer be explained by production or consumption data.⁸¹ He and Hanriotis decided to systematically evaluate all available research findings on the issue. Contrary to their original convictions, they came to the conclusion that famine in the 2007–08 crop year could not be explained by rising consumption in China or the expanding production of biofuel. Rather, they wrote that “index fund activity... played a key role during the 2008 price spike.”⁸²



“Index fund activity played a key role during the 2008 price spike.”

John Baffes/Tassos Hanriotis

⁷⁹ Christopher L. Gilbert, “How to Understand High Food Prices,” *Journal of Agricultural Economics*, Vol. 61, No. 2, 2010.

⁸⁰ M. Lagi, Yavni Bar-Yam, K. Z. Bertrand, Yaneer Bar-Yam, “The Food Crises: A Quantitative Model of Food Prices Including Speculators and Ethanol Conversion,” New England Complex Systems Institute, Cambridge, September 2011.

⁸¹ John Baffes, interview with the author, Washington, D.C., 3 May 2011.

⁸² John Baffes, Tassos Hanriotis, “Placing the 2006/08 Commodity Price Boom into Perspective,” Policy Research Working Paper 5371, World Bank, Washington, D.C., July 2010.



“Index fund activity played a key role during the 2008 price spike.”

John Baffes / Tassos Haniotis

Given the abundance of documentation presented by recognized researchers, the question arises of how much more evidence is needed to prove the damage perpetrated by increased speculation on the futures markets. “This debate is apparently like the old dispute on the harmfulness of smoking,” scoffs EU agricultural economist Haniotis, who says that “evidence is growing, but the industry concerned will deny it for as long as it can.”⁸³


⁸³ Tassos Haniotis, interview with the author, Brussels, 16 March 2011.

BEYOND SUPPLY AND DEMAND – COMMODITY PRICES IN THE MAELSTROM OF CAPITAL MARKETS

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 commodities markets.

Nowhere is this contradiction as obvious as in price spikes for crude oil. These have already occurred in the past, as for instance after the 1979 Iranian revolution when nearly a tenth of global crude oil production seemed to be endangered almost overnight, and again in 1991 during the first Gulf War when Kuwait's oil fields were burning. But what happened during the spring of 2008? No revolution and no war were threatening oil production. Although China's oil consumption increased by 12 percent during that year, oil consumption in the industrial nations dropped by more. 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, global oil production rose slightly from 85.3 to 85.7 million barrels per day.⁸⁴ 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 on rising commodity prices. During the first week of April 2008 alone, 10 billion dollars flowed into speculation with oil futures alone through index investors (see chart). 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, whose affiliation with the financial sector is usually friendly, concluded that "over the period 2000-2008,...inefficient activity in the futures market pushed oil prices about 15 percent above the level justified by (current and expected) oil fundamentals."⁸⁵ Other critics even double this figure, but the fact itself can hardly be denied.

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. Grain cultivation, especially in the major exporting regions of North and South America, Europe and Australia, is highly energy-intensive. Farm machinery uses a lot of diesel fuel and rising energy prices also make



"Over the period 2000-2008,...inefficient activity in the futures market pushed oil prices about 15 percent above the level justified by (current and expected) oil fundamentals."

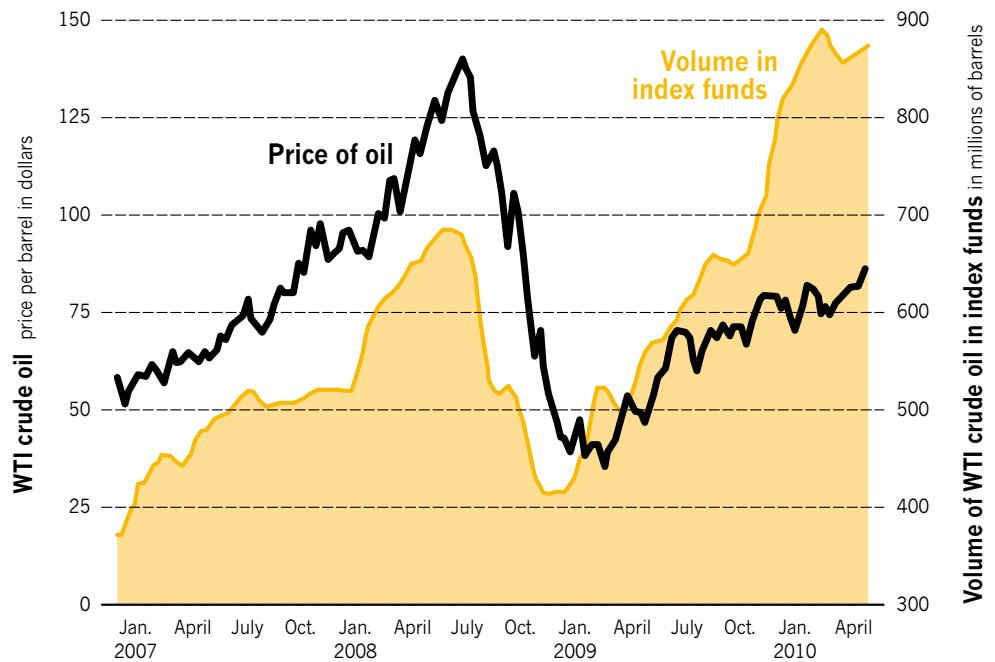
European Central Bank

⁸⁴ US Department of Energy, "World Oil Balance 2004 – 2008," 13 January 2009.

⁸⁵ European Central Bank, "Do Financial Investors Destabilize the Oil Price?" Working Paper Series 1346, Frankfurt, June 2011.

Fund investors drive speculation with oil

Volume of WTI crude oil futures subscribed in index funds, and development in the price of oil



Source: Better Markets, David Frenk

World Bank economist John Baffes has calculated that oil prices, reflected in production costs, account for more than a quarter (factor 0.28) of grain prices. This means that commodity speculation would threaten the nourishment of the global population even if speculative activity did not affect the grain markets themselves.

chemical fertilizers more expensive. Large amounts of natural gas are needed to produce nitrogen fertilizers, and the price of natural gas usually follows the price of oil. According to calculations by World Bank economist John Baffes, oil prices, through production costs, account for more than one-quarter (factor 0.28) of grain prices. 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. In traditional dealer lore, “the best cure for high prices is high prices.” But if costs eat up earnings, this mechanism doesn’t work (see chart on page 57).

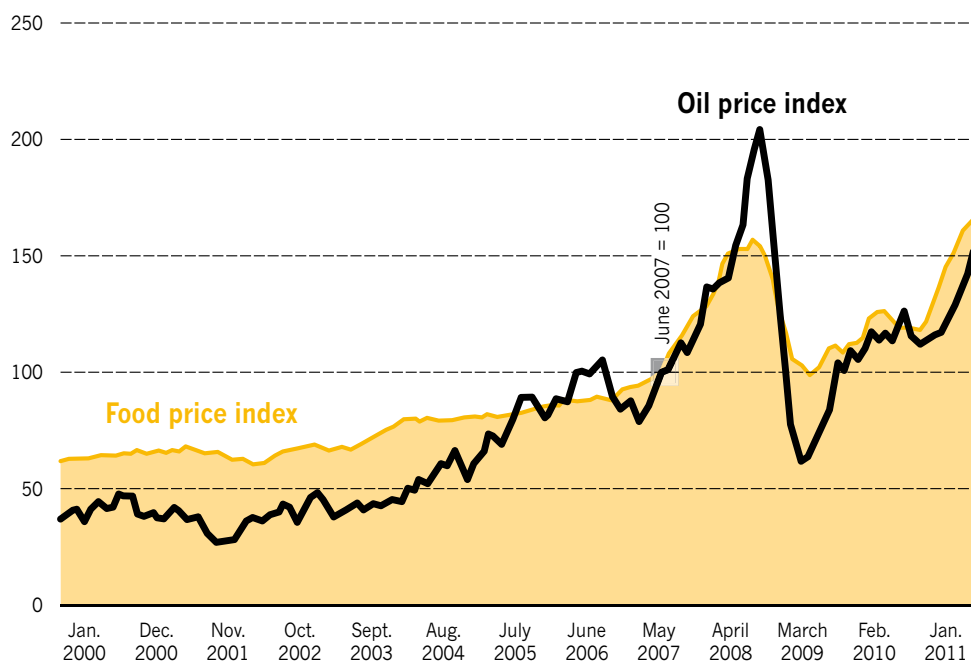
The 2008 oil price spike was not a one-time mishap. The same thing happened again in the first half of 2011. From December 2010 to April 2011, the price of Brent crude traded at the leading exchange IntercontinentalExchange (ICE) rose by more than 30 percent, from 90 to 126 dollars per barrel. Analysts in the financial sector reasoned that this was due to the loss of oil production in Libya after February 2011. But Saudi Arabia and other OPEC countries increased their production to offset these losses. Nevertheless, the rally in oil prices continued on the exchanges. The price increase was “artificial”, complained Ali Al-Naimi, Saudi Arabian Minister of Petroleum and Mineral Resources. In truth, the market was “awash with supplies” and the state-owned oil company Saudi Aramco was having trouble selling the extra quantity of oil it had produced.⁸⁶ When Japan was struck by a mas-

⁸⁶ “Shockwaves from Saudi’s crude statistics,” Financial Times, 19 April 2011.

sive earthquake in March 2011 and large parts of its economy were paralyzed, the drop in demand from the world's second largest importer of oil hardly affected the price. Rather, the inflow of speculative money to commodity futures markets was so great that even energy analysts at Goldman Sachs warned of a new oil bubble. They noted in an information service for their commodity customers that alone in contracts for WTI (West Texas Intermediate) oil, the most important grade for the U.S. market, the positions of speculators had grown to a level corresponding to a volume of 375 million barrels. With each additional million barrels subscribed on paper, the price rose by 8 to 10 cents, wrote Goldman's energy analysts.⁸⁷ Extrapolated to all speculative positions in crude oil futures registered with the U.S. regulating agency CFTC by early April, this means the price of oil had been inflated by up to 26 dollars through speculation alone. This made up just over a fifth of the price at the time.

Oil and food prices closely linked

Early 2000 to early 2011, induced values (June 2007 = 100)



Source: Oxfam

Even Rex Tillerson, who as chairman and CEO of the world's largest oil group Exxon certainly had the best access to data on oil supply, admitted that the oil price had little to do with supply and demand in the spring of 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. His company had not encountered "any particular difficulties" with replacing the break in supply from Libya through other suppliers. "So there's plenty of oil on the market," confirmed Tillerson.⁸⁸ The Exxon chief had previously stated before a U.S. Senate hearing that with current production costs and the present supply situation, crude

⁸⁷ Goldman Sachs, Global Energy Weekly, 21 March 2011.

⁸⁸ "Exxon chief on supply, demand and \$120 crude," Financial Times, 20 April 2011.

oil should actually cost “between 60 and 70 dollars a barrel”.⁸⁹ When asked why the price was as much as 50 dollars higher, Tillerson didn’t give an answer. “I really don’t know,” he claimed, thus avoiding the need to make a clear statement about events on the futures markets. But Dan Dicker, an experienced dealer who traded with futures on oil and gasoline at the New York Stock Exchange for 25 years, argued against this in plain language at the same time. “These financial influences like investment banks, hedge funds, and ETFs allow what I call ‘dumb money’ to enter the oil markets.” This “swamped out people who had connections to the physical products.” There was no question that after this “flood of money and financial industry interest in oil markets, what you come up with is an oil price that’s unfair and hits businesses and consumers equally badly,” said Dicker.⁹⁰

⁸⁹ Rex Tillerson, before a hearing at the U.S. Senate Finance Committee on 12 April 2011, http://www.youtube.com/watch?v=LY420_U4U0I.

⁹⁰ Dan Dicker, “We’re All Leveraged to the Price of Crude,” interview published at: <http://www.heatingoil.com/blog/%E2%80%9Cwe%E2%80%99re-all-leveraged-by-the-price-of-crude%E2%80%9D-an-insider-explains-how-the-financial-industry-is-driving-up-gas-and-heating-oil-prices0310/>.

BEYOND ALL MEASURE – GRAIN PRICES AND THE SPECULATION BOOM

Price spikes for grains were no less erratic. Prices for corn and wheat on the exchange in Chicago between June 2007 and June 2008 went up a full 140 percent. The depreciation of the dollar against most other currencies meant this didn't wholly affect world markets, but even on the global scale, 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 2007-08 crop year. Nobel laureate and economist Paul Krugman, for example, committed to deflecting criticism against speculation, lamented about “the march of the meat-eating Chinese – that is, the growing number of people in emerging economies who are, for the first time, rich enough to start eating like Westerners.”⁹¹ Since every calorie in beef needs seven times that amount in grain, this leads to a sharp increase in consumption. This trend can't be essentially denied, but so far China and India, together accounting for more than a third of the world's population, have still balanced this out with an increase in domestic production. It certainly can't 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. “In fact, 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,” said the FAO.⁹²

Similarly, the growing production of biofuels does not provide a supporting argument. In particular, the ethanol program in the United States has certainly created massive additional demand for corn. Annual subsidies of 6 billion dollars mean that some 40 percent of the total American corn harvest now ends up in the gasoline tanks of cars driven in the U.S. There is no doubt that biofuel production is rightly being criticized because it takes 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, reaching new record levels, 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 in biofuels may have contributed to the food crisis, “but much less than initially thought,” said economists John Baffes and Tassos Hanriotis in their study for the World Bank.⁹³

Biofuel production, growing demand for meat in India and China, and stock levels alone cannot explain the rise in grain prices in 2007 and 2008.

⁹¹ Paul Krugman, “Grains Gone Wild,” New York Times, 7 August 2008.

⁹² FAO, “The State of Agriculture Commodity Markets,” Rome, 2009.

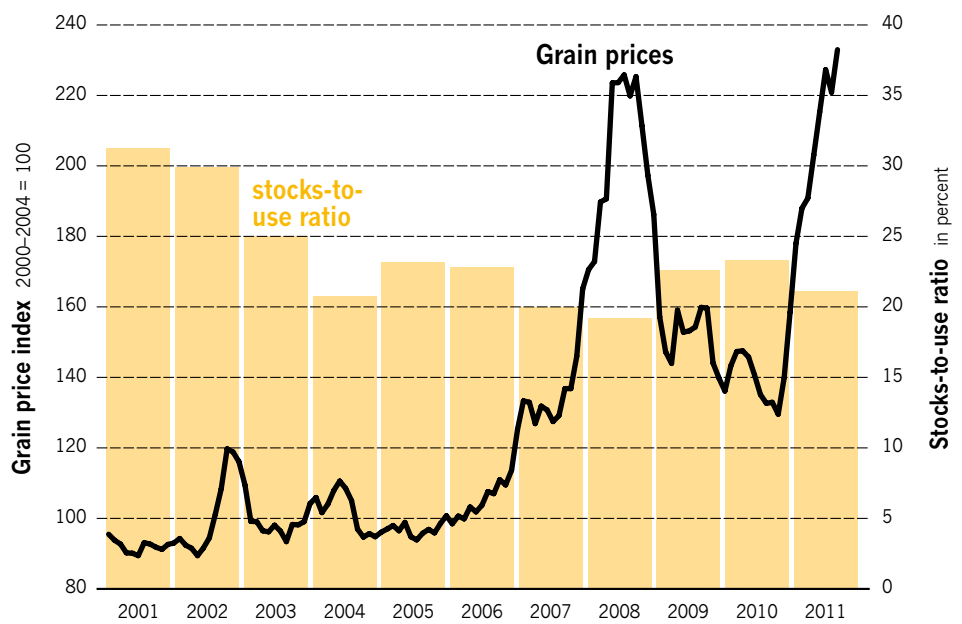
⁹³ John Baffes, Tassos Hanriotis, “Placing the 2006/08 Commodity Price Boom into Perspective,” Policy Research Working Paper 5371, World Bank, Washington, D.C., July 2010.

Many experts then cited the overall supply situation with grain as the most important explanation for 2008 price spikes. One indicator for agricultural economists is the stocks-to-use ratio (ratio of reported stock levels to consumption). In the 2007-08 crop year, this had actually fallen to a historic low for wheat and was only 22.5 percent, nearly 3 percentage points lower than in the previous year due to drought and poor harvests in Australia, a major exporter. 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. Over longer periods of time, grain prices and the stocks-to-use ratio completely diverged. The ratio for corn was at the same low level during the 2006-07 crop year without triggering a surge in prices. For wheat, the ratio rose back to 28 percent by June 2011, thereby lying more than 5 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 (see chart).

Prices beyond measure

Grain stocks in relation to consumption (stocks-to-use ratio) and grain prices (adjusted for inflation)



Source: FAO

The explanation for all of these apparently absurd price movements is not only the increase in speculation itself. What is decisive is that the financialization of the commodities trade had made the markets for all kinds of raw materials, from aluminum to wheat to zinc, 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. Nothing illustrates this correlation more clearly than the price boom leading up to the 2008 financial crisis and the subsequent crash. Economist Wei Xiong of Princeton and his colleague Ke Tang of Renmin University in Beijing investigated how this happened. They were able to clearly furnish evidence from exchange data that prices for all commodities compiled in the two most important indices

(S&P GSCI and DJ-UBS) exhibited mostly uniform rises from 2004 until the spring of 2008 and then fell back, even when supply and demand for different commodities evolved completely differently. In contrast, commodities that were not affected by index investments did not exhibit parallel behavior. That index investors played a central role showed up in the price movements for the same raw materials on Chinese futures exchanges. Because these were largely isolated from movement in global capital markets, upward and downward movements for different commodities varied a lot even though they were definitely linked with the global market through physical trade. Outside China, “the price of an individual commodity is no longer simply determined by its supply and demand,” but “by a whole set of financial factors, such as the aggregate risk appetite for financial assets and investment behavior of diversified commodity index investors,” reported the two economists.⁹⁴ Even since the banking crisis, nothing has changed in this linkage across all categories of commodities. “Want to know the price of wheat? Have a look at what copper is doing,” scoffed the online agricultural information service Agrimoney in May 2011 when prices for both commodities uniformly nosedived by 8 percent, and with them the oil price too – movements that could be explained only by the exit of investors from index investments, as analysts at the Australian & New Zealand Banking Group noted.⁹⁵

But the behavior of index investors is primarily guided by how high yields are in other financial markets and how investors assess overall risk. The most important factor upon which all commodity prices depend was therefore the amount of interest on U.S. government bonds, which the Federal Reserve Bank of the United States controls through its money creation. The Bloomberg business and financial news service documented how close this correlation is. The rise in commodity prices after the financial crisis began just at Bloomberg business and financial news service documented how close this correlation is. 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 their electronically generated money and thereby flooded the entire financial system with cheap dollars. This action, which keepers of the dollar refer to euphemistically as quantitative easing (QE), was supposed to stimulate the U.S. economy because it made loans cheaper. But America’s overindebted consumers couldn’t be helped even with lower interest rates and the American economy barely reacted. 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 funneled another 600 billion dollars into the market until June 2011, a new price explosion was sparked (see chart).

All of these apparently absurd price movements can’t be blamed solely on the increase in speculation itself. Far more decisive was that the financialization of commodities trading made commodity markets of all kinds part of the entire global capital market.

*“Want to know the price of wheat?
Have a look at what copper is doing.”*

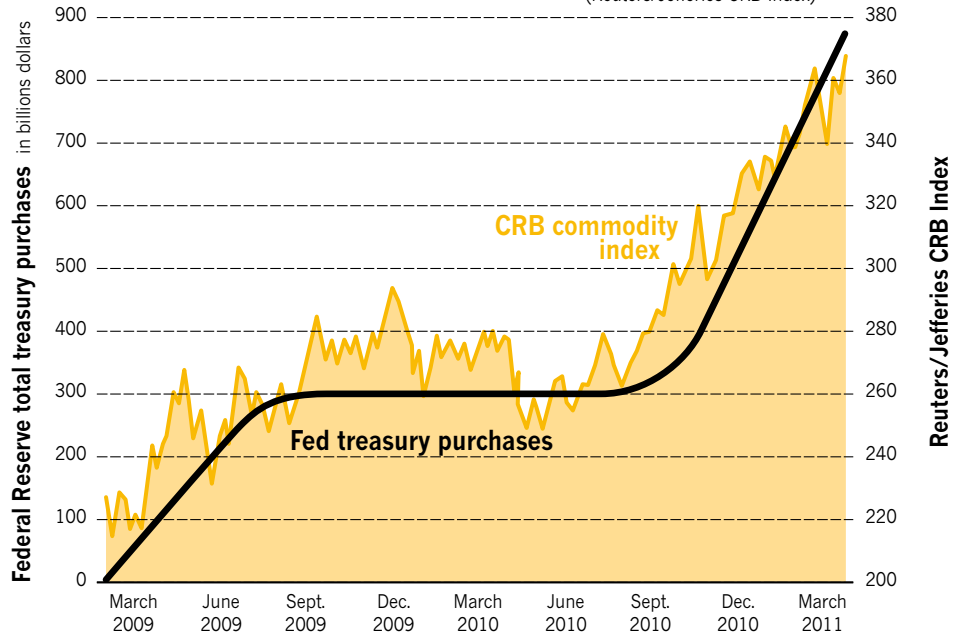
Agrimoney agricultural
information service

⁹⁴ Ke Tang, Wei Xiong, “Index Investment and the Financialization of Commodities,” NBER Working Paper Series, No. 16385, Washington, D.C., September 2010.

⁹⁵ Agrimoney.com, “Scary’ copper, wheat price tie gives clue to rout,” 6 May 2011.

Flooding market with dollars drives commodity inflation

Money creation by U.S. Federal Reserve purchase of government bonds in relation to commodity prices (Reuters/Jefferies-CRB-Index)



Source: Bloomberg

“Commodity prices are becoming less related to supply-demand conditions of each commodity, but increasingly subject to the effects of portfolio rebalancing by financial investors.”

Bank of Japan

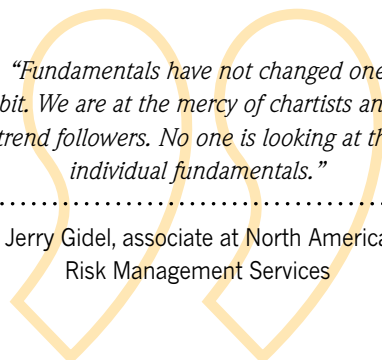
Only with the foreseeable end of QE2 (second round of quantitative easing) did commodity prices quickly collapse again in May 2011. Against this backdrop, economists at Japan’s central bank said it was noticeable “that commodity prices are becoming less related to supply-demand conditions of each commodity, but increasingly subject to the effects of portfolio rebalancing by financial investors.”⁹⁶ Even experts at finance groups engaged in commodities trading noted that American monetary policy had fueled the boom in raw materials, ironically confirming what they had always otherwise denied: the impact of speculation. “Unfortunately, the attempts [by the Federal Reserve] to reflate the housing market will also end up in reflating other assets like commodities,” diagnosed Alan Ruskin, a much-quoted investment strategist at Deutsche Bank.⁹⁷ Commodity analysts at investment bank Barclays Capital also noted in November 2010 that “QE2 has provided a tonic to commodity markets over the past few months.”⁹⁸

When financial investors are driven by interest rates and rates of currency exchange, gaining the upper hand in this way, the moods and voices of the financial world count more than any real news about changes in supply and demand. That’s why it was possible for commodity analysts at Goldman Sachs to arbitrarily drive down the prices for crude oil and wheat on U.S. futures exchanges by 5 percent on 12 April 2011 simply by advising their clients in a newsletter to immediately liquidate the profits of earlier months and exit – a market movement which infuriated even traditional speculators. “One big shop talks about taking profits...and every speculator takes their lead across all commodities,” said an annoyed Andy Ryan, a broker at INTL FC Stone. “This is what you have as a result: a big red screen.”⁹⁹ Jerry Gidel, an

⁹⁶ Yasunari Inamura, Tomonori Kimata, Takeshi Kimura, Takashi Muto, “Recent Surge in Global Commodity Prices: Impact of financialization of commodities and globally accommodative monetary conditions,” Bank of Japan Review, Tokyo, March 2011.
⁹⁷ “Investment: The Fed flood slows to a trickle,” Financial Times, 12 June 2011.
⁹⁸ “Commodity Assets Under Management Climb to Record, Barclays Capital Says,” Bloomberg, 26 November 2010.
⁹⁹ “Goldman triggers commodity retreat,” Financial Times, 12 April 2011.

associate at North America Risk Management Services, which provides services for the agriculture industry, also saw dark forces at work. “Fundamentals have not changed one bit,” he said. “We are at the mercy of chartists and trend followers. No one is looking at the individual fundamentals.”¹⁰⁰ By the way, it may be assumed that traders at Goldman Sachs also gained respectable additional profits by changing their own positions to the other side of the market before the sell-off began.

Conversely, the market initially barely reacted when at the end of May 2011 it was announced that the export ban on grain from Russia would be lifted, even though this would increase the supply of grain on the global market at one go by 15 million tons, or nearly 10 percent of global exports in a year. But prices did fall drastically from the second week in June 2011 when the dispute in Europe over Greece’s excess indebtedness escalated and spread fears of a new financial crisis. Within two weeks, wheat and corn were suddenly 20 percent cheaper on the leading exchange in Chicago.



“Fundamentals have not changed one bit. We are at the mercy of chartists and trend followers. No one is looking at the individual fundamentals.”

.....
 Jerry Gidel, associate at North America Risk Management Services

.....
¹⁰⁰ Agrimoney.com, “Evening markets: falling tide exposes crop price landmarks,” 12 April 2011.

THE SPREAD OF HUNGER

None of this means 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 phases – and inflict a lot of damage.

This chapter has explained why this is possible in spite of what the financial industry claims. First, investments 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 (see ‘Good and bad speculators – how much liquidity is needed?’ on page 40). On the other hand, because futures prices demonstrably affect prices on the spot markets, these structural price rises are reflected in higher food prices (see ‘Futures markets are (not) a zero-sum game’ on page 46). This correlation has been documented in a number of econometric analyses (see ‘Apples and oranges – how the impact of speculation on prices can and cannot be measured’ on page 51), especially of the crude oil market, whose price movements are reflected in the price of food by almost 30 percent (see ‘Beyond supply and demand – commodity prices in the maelstrom of capital markets’ on page 55). 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 (see ‘Beyond all measure – grain prices and the speculation boom’ on page 59).

At the time of the major food crisis in 2008, speculation drove up the prices of wheat, corn and soybeans by as much as 15 percent.

To what extent the money from financial investors determines prices is naturally difficult to assess and depends on the particular period being observed. With the help of a complex mathematical model, 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.¹⁰¹ Gilbert’s colleague in Bremen, Hans Bass, designed a similar computer model which 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.¹⁰²

Of course calculations like this always rest on assumptions of what the ‘right’ price would be, and can therefore be challenged. But for a political judgment of speculation on commodities markets, it is ultimately insignificant whether investors make food 5, 10 or 20 percent more expensive than it needs to be. What is relevant is that there are very good arguments that speculation has such an influence, and that this is highly likely, with potentially dramatic

¹⁰¹ Christopher Gilbert, “Speculative Influences on Commodity Prices,” UNCTAD Discussion Papers 197, Geneva, March 2010.

¹⁰² Hans H. Bass, “Finanzmärkte als Hungerverursacher?” [Are Financial Markets Causing Hunger?], Study for Welthungerhilfe, Bonn, 2011.

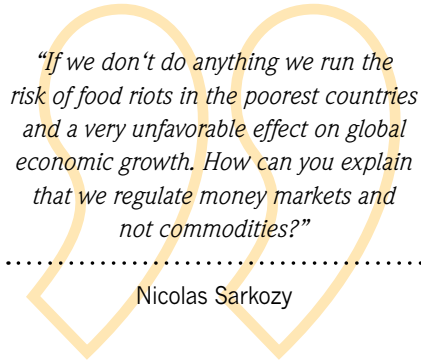
effects. The World Bank estimates that during the 2007/08 period of high prices, an additional 100 million people had to suffer from hunger because they couldn't afford to pay for food. Germany's former minister of development, Heidemarie Wieczorek-Zeul, calculated that "for every percentage point that prices rise, the number of people who are threatened by hunger goes up by 16 million."¹⁰³ This referred only to price ratios at the time, but the magnitude is no less realistic today. The German aid organization Welthungerhilfe calculated that alone in the 30 countries 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.¹⁰⁴ But even if this figure were only 100 people, each single person would still be one too many. 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's all about placing bets.

Against this backdrop, it is not only cynical that financial strategists expect their critics to incontrovertibly prove this 'alleged' damage occurs, it is also contrary to principles of international humanitarian law. Even the likelihood of endangering the life and limb of human beings necessitates exercising the precautionary principle enshrined in the European Union's constitution, which prescribes preventive action to protect human health. In this case, the burden of proof must be reversed. 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 haven't 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.

¹⁰³ "Hohe Nahrungsmittelpreise beherrschen Weltbank-Gespräche" [High Food Prices Dominate World Bank Talks], Dow Jones, 14 April 2008.

¹⁰⁴ Rafael Schneider, Development Policy Consultant, Welthungerhilfe, before a hearing of the Committee for Food, Agriculture and Consumer Protection in the German Bundestag, 27 June 2011.

IV. POWER STRUGGLE OVER PRICING POWER – WHO WILL TAME COMMODITY SPECULATORS?



“If we don’t do anything we run the risk of food riots in the poorest countries and a very unfavorable effect on global economic growth. How can you explain that we regulate money markets and not commodities?”

.....
Nicolas Sarkozy

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 announced to about 300 diplomats and journalists invited to the Elysée Palace that controlling speculation with commodities and foodstuffs would be one of three priorities in the G20 group of leading countries in the world, whose presidency was held by France this year. “If we don’t do anything we run the risk of food riots in the poorest countries and a very unfavorable effect on global economic growth,” he warned. “And how can you explain that we regulate money markets and not commodities?” He added that rules were needed to curb the influence of speculative investors, either by having investors 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. This, according to Sarkozy, was also a “moral question.”¹⁰⁵

G20 – GLOBAL GOVERNANCE AT THE LOWEST LEVEL

For the first time, the French president thereby raised the issue to the highest level in world politics. Until then, only activists and economists, as well as the United States Congress, had led the debate on questionable price betting at commodity exchanges. But now it became the subject of global diplomacy – and was caught up in a complex web of highly conflicting interests. The major agricultural exporters Brazil and Canada opposed Sarkozy’s call for global regulation of the commodity exchanges from the very start. “We have more fundamental issues to address than perhaps some degree of speculation in markets,” said Canada’s minister of finance, Jim Flaherty, dismissively.¹⁰⁶ His Brazilian counterpart Guido Mantega even insinuated that Sarkozy and his allies wanted to “regulate the price of commodities,” but warned that “Brazil totally opposes the use of mechanisms to control or to regulate [commodity prices].”¹⁰⁷ 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. “The initiatives of some industrial countries wanting to lead the fight against food insecurity by curbing international prices would only reduce agricultural production in all those countries that have a competitive advantage,” Mercosur said in a joint

.....
¹⁰⁵ “Sarkozy lays out G20 agenda, targets commodities,” Reuters, 24 January 2011.

¹⁰⁶ Rafael Schneider, Development Policy Consultant, Welthungerhilfe, before a hearing of the Committee for Food, Agriculture and Consumer Protection in the German Bundestag, 27 June 2011.

¹⁰⁷ “Chronic hunger to affect 1bn people,” Financial Times, 15 February 2011.

communiqué. There was “only one way to reduce prices and that is by increasing production, and South America is one of the few regions where conditions for increasing the supply of agricultural goods are given,” said Rossi forcefully.¹⁰⁸

At first this sounds absurd. Neither Sarkozy nor other critics of commodity speculation have ever spoken of price controls or even called for them. But there is definitely rational acumen behind such statements from countries that export agricultural products. 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 trend as a violation of their economic interests. However, since it is difficult for governments in Brazil, Canada and Australia to explain to their voters why they oppose limits on speculation, those responsible prefer to ‘play dumb’ and instead launch an attack on an idea no one has ever proposed.

The winners of the agricultural price boom can count on the British government as a loyal ally. Although the U.K. has always been a net importer of agricultural goods, Britain’s rulers traditionally see themselves as advocates of the financial industry, which generates nearly a tenth of the country’s gross national product. 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 favor of “open, transparent and efficient” commodity markets. For this purpose, she argued for “financial instruments [being] fully available to producers and consumers, to enable them to manage the risks of price volatility.”¹⁰⁹ Neither minister said a single word about the massive commodity speculation organized by the financial industry, preferring to talk about other evildoers. 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 exactly what the British government wants to avoid at any price. Finance minister George Osborne has been very clear about not wanting to curb speculation, as his ministry communicated in a letter to the EU Commission immediately after Sarkozy’s statement. There would need to be “further evidence” whether limiting the positions of individual market players was at all “feasible” and whether this wouldn’t have “unintended consequences” such as “harming

Commodity investors, whose long-only investments on futures markets reinforce the rise in prices, also effectively boost export countries’ earnings. Exporting countries interpret any measures against this as a contravention of their economic interests.

¹⁰⁸ Consejo Agropecuario del Sur, “Ministros de Agricultura de seis países anunciam estrategia para enfrentar tentativa de controle de preços” [Agricultural Council of Mercosur, Ministers of Agriculture from six countries announce strategy to deal with an attempt to control prices], Brasilia, 4 May 2011.

¹⁰⁹ Department for Environment, Food and Rural Affairs, Joint declaration of Brazil and UK Agriculture ministers, Brasilia, London, 8 April 2011.

market liquidity.”¹¹⁰ Although objections of this kind have long been proven outdated through experience in the United States before deregulation and by numerous research papers on the subject, even ministerial voices in London make use of ‘playing dumb’ to go along with their denial of the need for reform.

The German government doesn’t do any better, even though the situation initially seemed to be quite different. In January 2011, Ilse Aigner, Germany’s minister of agriculture, unreservedly stood in support of Sarkozy’s initiative and deplored that “profuse speculation led to excesses on the markets.” Foodstuffs should not “become the object of gamblers.” After all, it concerned “the basis of existence for billions of people,”¹¹¹ which made it essential to install limits on daily price fluctuations and the number of positions that market participants could hold. Even Wolfgang Schäuble, the finance minister, was at first quite critical of commodity speculation. In April 2010, he was still saying: “I want strict regulations on commodity trading by banks and the relatively high proprietary capital required for this activity.”¹¹² He also said the question of whether banks really need to “speculate with commodities in the current form or even have to become commodity dealers themselves” should be answered. Rainer Brüderle, a staunch defender of market liberalism and Germany’s minister of economics at the time, also called for taking measures against “distortionary speculation on the commodity markets.” Price trends at the exchanges were detached “from the fundamentals. This was speculation on shortages that was damaging to the production process because it drove up costs,” he lamented.¹¹³

But not much remained of this verbal involvement. In July 2011, Minister Aigner published a position paper on “Price Volatility and Speculation on the Markets for Agricultural Commodities” in which she proposed installing regulations against speculation on commodity markets only in the far future, at best. In their reasoning and similar in tone to that of financial lobbyists, Aigner and her advisors refer to allegedly insufficient knowledge about the impact of speculation on prices. After all, it was “only the presence of external capital from financial investors” that created “the conditions allowing markets for agricultural derivatives to function.” Although “problems” could “appear if speculation became an independent pricing factor,” it would be necessary at first “to empirically investigate the impact of derivative transactions on price development more accurately” to find this out. Not until this showed a “need for regulatory measures on this basis” would “a batch of specific instruments be considered, with which regulatory authorities could adequately address misguided developments,” the paper says vaguely. An investigation would include looking at “position limits for financial investors or an upward adjustment of proprietary capital underpinning.”¹¹⁴ Could, should, would – this seems unrealistic in view of numerous empirical studies on the issue. Experts at the aid agency Oxfam and at WEED, a German

¹¹⁰ HM Treasury, UK response to the Commission Services consultation on the Review of the Markets in Financial Instruments Directive (MiFID), Brussels, 22 February 2011.

¹¹¹ “Aigner will Spekulation mit Agrarrohstoffen eindämmen” [Aigner wants to curb speculation in agricultural commodities], *Financial Times Deutschland*, 20 January 2011.

¹¹² “Schäuble fordert Rohstoffregeln” [Schäuble calls for commodity regulation], *Manager-Magazin.de*, 21 April 2010.

¹¹³ “Brüderle sieht Rohstoffspekulation als Thema der Politik” [Brüderle sees commodity speculation as political issue], *Dow Jones*, 26 October 2010.

¹¹⁴ German Federal Ministry for Food, Agriculture and Consumer Protection, “Preisvolatilität und Spekulation auf den Märkten für Agrarrohstoffe” [Price Volatility and Speculation on the Markets for Agricultural Commodities], Berlin, 8 July 2011. Märkten für Agrarrohstoffe, Berlin, 08.07.2011.

think tank for development policy, had expressly referred the minister to extensive research literature proving the influence of investors on agricultural prices. But Aigner and her ministry officials preferred not to take note. Thus the German government used a slightly more subtle way of “playing dumb” to avoid making a commitment. It can only be presumed that this was done out of consideration for Britain’s position in the EU, or because of pressure exerted by the financial industry. But it is clear that Aigner’s position primarily reflects the interests of Germany’s farm lobby. Like their counterparts in Brazil and Canada, representatives of German farmers and the agricultural trade don’t want to miss the boost to their revenues from speculation. It was gratifying “for farmers that high prices were generated by high demand,” explained Helmut Born, secretary-general of the German Farmers’ Association, at a hearing in the Bundestag. But there were “no indications that the commodity futures exchanges were affected by excessive speculation.” If a limit on positions were enforced, as Aigner had initially called for, this would “only weaken liquidity in trading with futures contracts.”¹¹⁵ Likewise, Volker Petersen, vice-chief of the German Raiffeisen Association and therewith lobbyist for Germany’s largest agricultural trading company, Agravis, was strongly in favor of allowing financial investors free access to commodity markets. “At most, only short-term market exuberance or understatement” had been observed so far. Therefore he didn’t see “any reason for further regulating so-called speculation business.”

The background to this consciously naïve 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. Although exchange prices for grain in Europe generally follow the trends on American exchanges, turnovers at the grain exchanges in Paris and London are still far below those in the United States, mainly because contracts in Europe for wheat, rye and rapeseed are not in the major commodity indices on whose development investors at U.S. exchanges bet. 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. In contrast, as Petersen revealed in his written statement to the Bundestag, “the commodity futures exchanges in the EU are still in their infancy.” Restrictions “for players remote from agriculture, so-called speculators, would cause them to seek other investment opportunities and deprive the commodity futures exchanges of their capability.”¹¹⁶ “We would welcome the activity of fund investors here too in the future; that would open more options for us,” said the senior manager of a large European agricultural trade group. In other words, when it comes to the interests of the European agricultural sector, Europe should follow the American model, even though Congress and regulatory authorities have repeatedly found its development flawed.

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.

¹¹⁵ Oral statement at a hearing before the Bundestag Committee for Food, Agriculture and Consumer Protection, 27 June 2011.

¹¹⁶ Volker Petersen, testimony on the position of the German Raiffeisen Association regarding questions from German parliamentary groups at the public hearing on “Preventing Speculation with Agricultural Commodities,” 27 June 2011.

All this doesn't mean that the French president didn't 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. For rulers in Moscow, predictable prices and good relations with France were evidently more important than gaining additional profits from speculation.¹¹⁷ Even the three most populous countries in the world, China, India and Indonesia, signaled their support. Chinese President Hu Jintao even managed to persuade his Brazilian counterpart Dilma Roussef to sign a joint communiqué of the BRICS states (Brazil, Russia, India, China and South Africa) which expressly said that "regulation of the derivatives market for commodities should be accordingly strengthened to prevent activities capable of destabilizing markets,"¹¹⁸ although Brazil's ministers for finance and agriculture were simultaneously pushing for the opposite.

But even if representatives of more than two-thirds of humankind urge for tightened regulation on commodity speculation, it was already clear in the summer of 2011 that there would be no global agreement in this direction. The G20 group is a kind of discussion forum, and resolutions can be made only in consensus with all members. The global governance which this body is supposed to achieve therefore takes place only at the lowest level, using the lowest common denominator. G20 agriculture ministers demonstrated how little can be accomplished in this way when they held their first summit in Paris in June 2011. The only tangible result of months of preparation was their decision to set up the Agricultural Market Information System (AMIS), a global information system on inventory and harvest yields for the most important food staples. If reliable information on real supply were made available in this way, this would certainly mark progress and deflate fantasized prognoses by analysts in the financial and agricultural industries.¹¹⁹ To deal with the core problem of extreme price fluctuations generated by investors, agriculture ministers merely referred to a compromise in set phrases previously adopted by G20 finance ministers,¹²⁰ in which they agreed that the International Organization of Securities Commissions (IOSCO) should work out recommendations for overseeing and regulating markets for commodity derivatives. Negotiations were to continue in September 2011 on this basis. However, officials in this committee are also subject to instructions from their ministries of finance and can make decisions only in consensus. As a consequence, their recommendations will certainly not be out of line with what their governments in London, Brasilia or Berlin want.

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

It is foreseeable that the G20 group will merely seek to improve the level of information in the same manner that overall financial market reforms were agreed on in the wake of the crisis, for example by centralizing over-the-counter (OTC) derivative trading in supervised clearing centers, registering all players, and recording their transactions in official statistics. As magic words against price spikes on commodity exchanges, ministers agreed on the "creation of transparency," which Germany's agriculture minister Aigner also ultimately described as the "most important" outcome of her policies.

¹¹⁷ "Russia, France urge action on volatile commodities," Reuters, 5 April 2011.

¹¹⁸ "Commodity Price Swings Seen Threatening World Recovery, Needing Regulation," Bloomberg, 14 April 2011.

¹¹⁹ This makes sense only if agricultural enterprises have a clear obligation to report on their stocks.

¹²⁰ Ministerial Declaration, "Action Plan on Food Price Volatility and Agriculture," Meeting of G20 Agriculture Ministers, Paris, 22-23 June 2011.

When asked what all the transparency was good for if there was a lack of instruments for combating misguided developments, she granted that this would “be decided later.”¹²¹

But that’s not true. Regardless of what the G20 might agree on some day – a decision on restricting rampant speculation with the daily bread of humanity will be made long beforehand, right there at the heart of business in the United States. The issue of limiting investments in commodities is at the center of a die-hard struggle between regulatory agencies, Congress and lobbyists. The United States has its own special problem with commodity speculation – a big problem.

The issue of limiting investments in commodities in the United States is at the center 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

This time it was too much for Barack Obama too. When the price of crude oil rose to 125 dollars per barrel in mid-April 2011, and the cost of gasoline went up to 5 dollars a gallon again, the American president couldn’t hold back any longer. “There is enough oil out there for world demand. It is true that a lot of what’s driving oil prices up right now is not the lack of supply. There’s enough supply,” he said in a speech to students in Virginia. Speculators betting on prices were much more to blame for high prices. “And they [the speculators] say, you know what, we think that maybe there’s a 20 percent chance that something might happen in the Middle East that might disrupt oil supply, so we’re going to bet that oil’s going to go up real high. And that spikes up prices significantly,” Obama said angrily.¹²² It was the first time that the president publicly stepped into a debate that has been agitating the United States for many years – the controversy over restricting financial betting on commodity markets.

“It is true that a lot of what’s driving oil prices up right now is not the lack of supply. There is enough oil out there for world demand. And they [the speculators] say, we think that there’s a 20 percent chance that something might happen in the Middle East that might disrupt oil supply, so we’re going to bet that oil’s going to go up real high. And that spikes up prices significantly.”

Barack Obama

Unlike for most Europeans, this dispute is of vital importance for millions of Americans. Like no other nation, the United States is mercilessly dependent on gasoline and diesel. Almost the whole of the country’s transportation system runs on automobiles, trucks and aircraft. Because the vast majority of the population live in far-flung suburbs, many millions of people drive so far to work that money spent on gasoline is one of the biggest items in their household budgets, next to mortgage payments or rent. If the price of gasoline goes up by 50 cents a gallon, this costs American consumers an extra 70 billion dollars a year. If the price of gasoline goes up to 5 dollars a gallon or more, as happened in April 2011, millions of citizens have to choose between giving up their homes or giving up their jobs. That’s why the price of oil, and how it got up there, is repeatedly the subject of heated debate among citizens and Congress alike. That’s also why the majority of representatives

¹²¹ “Ilse Aigner warnt vor Unruhen” [Ilse Aigner warns of unrest], Tagesspiegel, 22 June 2011.

¹²² “Obama blames speculators for oil price rises,” Financial Times, 19 April 2011.

By adopting the reform of the Commodities Exchange Act (CEA), American lawmakers enacted the return to old regulations for commodity futures exchanges from the period before liberalization. Regulators have been mandated to establish and enforce position limits for futures, options and swaps, for any person as well as for any group or class of traders.

and senators in Congress seized the opportunity in July 2010 to reverse the deregulation of commodity exchanges and thereby push back the dominance of the financial sector in commodity markets by adopting a comprehensive reform package for financial markets called the Dodd-Frank Act after its initiators in the Senate and the House of Representatives. 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.

To this end, American lawmakers enacted the return to old regulations for commodity futures exchanges from the period before liberalization. The CFTC was to readopt and enforce “position limits” for futures, options and swaps, for any “person” as well as for any “group or class of traders.”¹²³ At the same time, the act abolished the blanket exemption from position limits on derivatives in the energy sector, which legislation adopted in 1999 had allowed. Above all, Congress mandated the CFTC to allow only those transactions to exceed set limits which served to hedge price risks for actual physical trading in commodities of all kinds. Players who wanted to hedge risks in purely financial transactions were not to be granted exemption from the ruling on positions. Investment banks and hedge funds should therefore be allowed to trade on commodity futures exchanges only within certain narrow limits.

The mandate was clear and the law even set dates for enforcement. The CFTC was supposed to enact and enforce appropriate regulations by the latest on 21 July 2011, one year after the Dodd-Frank Act was adopted. But what had initially appeared to be so clear had still not been turned into practice a year later. 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 are 2,000 registered congressional lobbyists for the financial sector alone, amounting to more than four lobbyists per representative and senator. Three-fourths of them formerly worked in Congress, including 73 one-time members of the House of Representatives and the Senate.¹²⁴

Representatives from the Republic Party, gaining a majority in the House in October 2010, served as their willing helpers. They made it their job to bring down the re-regulation of financial markets, one of the Obama administration’s most important projects after health care reform. Because they couldn’t undo the law itself, they quickly tightened the purse strings of the CFTC. A leading role was played by House Representative Spencer Bachus, whose campaign was sponsored by more than 1 million dollars from businesses and financial industry lobbyists.¹²⁵ He took over the chair of the Committee on Financial Services, which has congressional control over the CFTC. Bachus and his colleagues used their majority rule to systematically

¹²³ Dodd-Frank Act § 737(a)(3)(A).

¹²⁴ “Banking on Connections,” Center for Responsive Politics/Public Citizen’s Congress Watch, Washington, D.C., June 2010.

¹²⁵ According to the Center for Responsive Politics, a reliable source of data on election campaign financing, www.opensecrets.org.

weaken the regulatory agency, especially its oversight of the derivatives business. For the budget year to October 2011, the CFTC received only 202 million dollars instead of the 460 million dollars it requested.

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 OTC (over-the-counter) derivatives, including all deals which bet on commodity prices. The lack of transparency and 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. The CFTC was supposed to devise 51 executive regulations and oversee them. But now they couldn't even employ the 200 people needed for this job. The agency is not even able to pay its employees' travel expenses, and staff therefore take slow buses or spend eight hours a day on train trips between Washington and New York to save on hotel accommodation. The head of the CFTC even paid for a trip to Brussels out of his own pocket when he flew there to seek a common approach on financial reform with the EU Commission. The CFTC now lacks the means to monitor compliance with new rules once they are in place. "We spent hundreds of billions of dollars on a hideous bailout [of the banks], and now we're not going to fund reforms to prevent another one," complained Bart Chilton, one of five CFTC commissioners.¹²⁶

At the same time, opponents of reform organized resistance inside the 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.¹²⁷ But Gensler couldn't make decisions by himself and needed a majority in CFTC's five-member commission. Commissioners Scott O'Malia and Jill Summers sided with the Republicans, and Michael Dunn, one of three commissioners appointed by the Democrats, spoke out against the enactment of strict position limits although he didn't fully reject the legal mandate. In January 2011, Gensler was allowed to put forward a compromise proposal for commodities for public debate. The proposal sets very high limits however, which do not satisfy the original legal mandate to limit overall speculation. The same volume as before can still be invested if it is distributed over a larger number of investment brokers. (See information box on instruments against commodity speculation on page 76.) 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 number of investments they make in futures contracts is so high that it still exceeds by far the generous limits set in the proposal. The CFTC proposal would deprive them of exceptional status which has exempted them from all limitations. Exemptions from position limits are supposed to apply explicitly only to businesses able to tangibly prove that they really deal with large volumes of physical commodities. "This

Lobbyists in the financial industry are successfully undermining the enforcement of the Commodities Exchange Act in the United States.

¹²⁶ "U.S. Regulators Face Budget Pinch as Mandates Widen," New York Times, 3 May 2011.

¹²⁷ "Gensler Evolving in Derivatives War Sees No Deed Go Unpunished," Bloomberg, 21 June 2011.

would significantly reduce our business,” admitted the chief strategist of a leading investment institution. Attorneys for the financial industry assailed the CFTC with endless requests for appointments and overwhelmed officials with thousands of objections. Critics led by the Futures Industry Association (FIA), a lobby group, are even seeking to deny the CFTC the right to adopt any limits because there is “no evidence” of speculation having a harmful influence on the trading of physical goods – a claim that bank analysts themselves continually disprove whenever they explain that price developments depend on the inflow or outflow of investments. In the event that the CFTC sticks to its plans, the FIA has already threatened legal action before the district court in Washington, D.C.¹²⁸

As stubborn as resistance to reform is, support for reform is equally high. Parallel to the financial industry’s “lobbying storm”, an equally strong counter-lobby has emerged. The Commodity Markets Oversight Coalition is an unusual alliance of about 50 organizations whose membership ranges across American society.

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 taken shape. The Commodity Markets Oversight Coalition (CMOC) is an unusual alliance of about 50 organizations whose membership ranges across American society. It includes airlines, freight forwarder associations, consumer advocate associations, retailers for oil and gas, progressive activists, and church groups. Unlike in Europe, several farmers’ organizations have also joined the ranks, among them the leading National Farmers Union which counts more than 300,000 members. Although they benefit from high prices when they cultivate grains, farmers also lose when prices wildly fluctuate and fuel prices are high, and especially when they raise livestock and are unable to pass the high cost of feed on to their customers. The bottom line, concluded Roger Johnson, president of the union, was that “farmer and ranchers are struggling to pay these higher costs and rural communities, in turn, are feeling the pinch.”¹²⁹

He could not “think of anything where such a diverse group has come together,” enthused Jim Collura, an organizer and lobbyist for fuel retailers, after the CMOC’s annual conference in July 2010. “Some of these organizations don’t see eye to eye on other issues.”¹³⁰ On this issue, however, they share an interest in making futures exchanges usable again for ordinary business owners and commodity consumers, and in limiting price hikes for everyone. The classic conflict between Wall Street and Main Street finds tangible expression in this issue, and has the attention of the media and voters alike. Critics also exert pressure, writing letters to congressional representatives, giving interviews on television, and speaking at events to make it clear that the proposed regulations don’t go far enough. (See information box on instruments against commodity speculation on page 76.)

Whether and to what extent it will actually come to new regulations were still open questions at the time this report went to press. Like the situation in the United States Congress, a kind of societal stalemate prevails in the power struggle over the CFTC and its regulations. The situation is further complicated by the fact that a reform of the futures markets should go hand-in-hand with a reform in oversight of the entire derivatives market, in other words,

¹²⁸ “Position Limits Head for Showdown in Court,” Reuters, 31 March 2011.

¹²⁹ Press release, National Farmers Union, 24 June 2009.

¹³⁰ “Wall Street Reform: Traditional Foes Join Forces To Take On Bankers,” Huffington Post, 1 August 2010.

the much greater part that is traded outside of exchanges, where position limits should be enforced too. How and by which criteria this over-the-counter (OTC) trade should be registered and monitored was still not clear in June 2011, not least because the banks and funds involved kept raising new objections. Moreover, because a majority of the CFTC commissioners weren't in favor of enforcing new regulations, they initially decided to put off a decision until the end of 2011. When Democratic Party representatives and senators protested against this form of "breaking the law,"¹³¹ Gensler promised that new regulations might come into force "in early fall."¹³² A breakthrough could come yet from a pending change in the composition of the five-member CFTC commission. The term of office for Gensler's opponent Michael Nunn is running out, and the Obama administration has nominated attorney Mark Wetjen to replace him. As a close associate of the Senate Democratic majority leader, he was in the forefront of negotiations on financial market reform legislation. However, since he didn't hold public office during this process, he has not officially stated his opinion on regulation enforcement so far, although most observers expect he will take Gensler's side and thereby establish the needed majority.¹³³ But the needed confirmation of his appointment by the Senate had not been made at the time this report went to press.

Indeed it still isn't definitely clear what the outcome of the political dispute on regulating commodity speculation in the United States will be. But public pressure is so great that the government and Congress will not be able to escape it. On the other side of the Atlantic, however, this is far less certain. Unlike in the United States, central legislation to reform financial markets has yet to be enacted, three years after the great crisis. A bill to set limits on commodity speculation wasn't even tabled by September 2011. This essentially means that trading on commodity exchanges in Europe is subject to oversight as a pro forma exercise only. Data on the positions of individual companies are not registered and there is no monitoring of investors who are active in these markets.¹³⁴

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

¹³¹ Press release, Senator Bernie Sanders, "Stop Oil Speculation Now," 15 June 2011.

¹³² "CFTC to Consider Position Limits in Early Fall," Bloomberg, 21 July 2011.

¹³³ "New CFTC steward: novice who could break logjam," Reuters, 19 May 2011.

¹³⁴ Position limits are set at the MATIF grain exchange, but these affect only the futures next due for expiry. Fund managers say these play no role for commodity investments because these limits can be circumvented by rolling futures over into later ones in sufficient time.

>> EXCURSUS: INSTRUMENTS AGAINST COMMODITY SPECULATION

THREE INSTRUMENTS CAN BE USED TO REDUCE THE INFLUENCE OF INVESTORS ON PRICES AT COMMODITY FUTURES EXCHANGES: RESTRICTING ACCESS TO SPECULATIVE INVESTORS ON FUTURES EXCHANGES; EXCLUDING INSTITUTIONAL INVESTORS SUCH AS PENSION FUNDS AND INSURANCE COMPANIES FROM EXCHANGES; AND BANNING MUTUAL FUNDS BASED ON COMMODITY INDICES.

Currently, most reform-minded politicians, as well as activists in civil society organizations in the United States and Europe are counting primarily on the reintroduction of position limits. This refers to putting ceilings on the number of futures contracts, specifically defined for each exchange and each commodity, and the number of similar derivatives traded through banks, which individual businesses and dealers may subscribe. The call for this kind of limitation is based on past experience at American futures exchanges, where regulations to this effect were in place until the end of the previous century, and speculation was limited to less than 30 percent of the total number of futures contracts. The financial market reform legislation adopted by the U.S. Congress in July 2010 explicitly prescribed the renewed enactment of such limits. In January 2011, the U.S. Commodity Futures Trading Commission (CFTC), the supervisory agency responsible for overseeing these markets, put forward a proposal for discussion; its implementation is still pending. If the proposal is put into force, an individual company will not be able to hold more than 10 percent of all open contracts per commodity and delivery month, and not more than 2.5 percent of all futures over all delivery months together, regardless of whether it is a buyer (long) or a seller (short).¹³⁵ Measured with average values for 2010, this means that futures contracts for nearly 6 million tons of corn, 2.6 mil-

lion tons of soybeans, and 2.2 million tons of soft wheat (CBOT contract type) would be permitted per individual company. For crude oil futures, a single financial institution would be allowed to buy futures contracts for more than 100 million barrels.

POSITION LIMITS

But it is questionable whether this can reduce speculation to the extent that it no longer distorts prices. It probably would reduce the current concentration in the futures market of the major investment banks Goldman Sachs, Deutsche Bank, Barclays, Morgan Stanley and JP Morgan. They could no longer divert triple-digit billions of dollars to the futures exchanges on behalf of their clients. But a larger number of other financial businesses could appear in their place. The total volume of speculative investment, and accordingly, its impact on prices at commodity futures exchanges, would presumably not go down or only by a little. This objection has also been raised by Adair Turner, head of the Financial Services Authority (FSA), the British regulatory agency, who has spoken against taking over the U.S. model in forthcoming EU legislation. "However, even if there is an adverse effect arising from the entry into the market of a class of pure financial investors, limiting the percentage of any one contract that can be held by

any one investor would not be an effective response, since multiple investors each holding positions below the percentage limit could, conceivably, still have a large aggregate effect,” Turner wrote.¹³⁶

AGGREGATED POSITION LIMITS ARE NEEDED

The American Commodity Markets Oversight Coalition, in which commodity-consuming businesses, consumer advocates, and development action groups have joined forces, says that to gain control over speculation, it is necessary to apply “aggregate position limit rules,” in other words, to set absolute limits not only for individual businesses, but also on the allowable share of speculation in futures trading altogether. Accordingly, all financial investors together should not hold more than 30 percent of all derivatives for a commodity traded on American exchanges. If this limit is exceeded, investors have to proportionately reduce their positions. Better Markets, a think tank launched by hedge fund manager Michael Masters, also proposes introducing a specific limit for commodity index funds amounting to 10 percent of all positions to push back those long-term investors who buy many long positions, regardless of supply and demand for physical commodities, and thereby drive up prices.¹³⁷

But position limits in any form pose a fundamental problem. Applying limits works under the assumption that regulatory agencies are able to distinguish purely speculative investors from those players who buy futures contracts to hedge against price fluctuations in the purchase and sale of actual physical commodities. These hedgers and end-users of derivatives, to use market jargon, businesses such as airlines, food processors, grain dealers and oil groups, unavoidably have to deal with much larger quantities of raw materials than

position limits allow. If commodity futures exchanges are still supposed to meet their original purpose, regulatory agencies need to make exceptions on the limits for the number of futures contracts coupled with trade in physical goods. The CFTC provides for this. If this is the guideline, then all players applying for exemption from limits should accurately quantify the extent of underlying physical transactions.

BOUNDARIES BETWEEN KINDS OF BUSINESS

In practice however, this distinction can hardly be made. Unlike the situation only ten years ago, boundaries today between both kinds of business with commodity derivatives have nearly disappeared. All major investment banks now actively trade physical commodities. Conversely, business groups trading with grain, oil and industrial metals also carry out extensive financial transactions. The Cargill group, for example, the world’s largest grain dealer and processor, also does big business with pension and hedge funds that invest their capital in commodity betting.¹³⁸ Cargill’s competitors Archer Daniels Midland and Bunge do the same. The extent to which their trading activity on futures exchanges has separated from its original purpose became clear when the CFTC announced its new regulations. Because they are supposed to exempt hedging transactions from position limits, these regulations would actually be favorable for agricultural businesses. Nevertheless, major grain dealers joined forces with the financial industry against the proposed limits on positions and said they were “unnecessarily narrow.”¹³⁹

>>

¹³⁵ CFTC, 17 CFR Parts 1, 150 and 151 RIN 3038-AD15 and 3038-AD16, Position Limits for Derivatives, Federal Register, Vol. 76, No. 17, Washington, D.C., 26 January 2011.

¹³⁶ Adair Turner et al., “The Oil Trading Markets, 2003 – 2010: Analysis of market behaviour and possible policy responses,” Oxford Institute for Energy Studies, April 2011.

¹³⁷ Better Markets, Comment Letter on Position Limits for Derivatives to the CFTC, Washington, D.C., 28 March 2011.

¹³⁸ “Cargill faces jump in trading costs,” Financial Times, 1 March 2011.

¹³⁹ “Commodity traders hit back at planned US futures curbs,” Financial Times, 13 June 2011.

ARE POSITION LIMITS ENOUGH TO CURB SPECULATION?

The same mixture of financial speculation and physical trading is common in the oil business. Shell and BP are not only the second and third largest crude oil refiners and distributors in the world, but are also among the biggest traders in oil derivatives. The trade journal *Energy Risk* ranks the largest financial investors in the energy sector, putting Shell and BP in sixth and seventh place. At the top are investment banks Morgan Stanley and Barclays,¹⁴⁰ who in turn maintain their own oil shipping companies and pipeline businesses, and could, just like Shell and BP, claim for themselves end-user status for commodity derivatives.¹⁴¹ To apply position limits only to the speculative portion of the derivatives business, regulatory agencies would need to have very accurate information on transactions from each of these major players. However, they would not be able to exercise this kind of control without extensive financial audits, involving time and effort which no oversight authority could invest. In practice, they would have no choice but to deal generously with possible transgressions.

But this doesn't mean that introducing the position limits called for in the United States and Europe would be meaningless, although it is doubtful whether this alone would effectively curb excessive speculation. Another option for regulating derivatives trading is to combat commodity speculation at the source, in other words, to exclude pension funds, insurance companies, foundation trustees and asset managers from access to the market for commodity derivatives. These institutional investors supply a very large share of the capital used to bet on rising commodity prices. But why should the savings of millions of employees, the premiums from insurance clients, or the assets of non-profit and tax-exempt foundations be invested to speculate on rising commodity prices? Providers of funds are always good at explaining to their investors that these transactions in commodity markets help to safeguard their portfolios and are therefore a "hedge against inflation and a tool

for diversification" for the pensions of savings depositors or the proceeds of foundations, as PIMCO promises, the world's largest asset manager in the Allianz Group.¹⁴² But this sales pitch has no longer been true for about five years. It is precisely the diversion of large amounts of investment capital to the commodity markets that has led to yields being in no way safer or better there than in markets for stocks and bonds. "This search for 'uncorrelated assets' became a victim of its own success," said Gillian Tett, the Financial Time's specialist on the errors of the investment community.¹⁴³ Anyone who invested in funds based on the S&P Goldman Sachs Community Index from 2005 to 2010 averaged a 6.5 percent loss per year because the great slump following the financial crisis occurred during this period. Investors in funds based on the second most important commodity index, the Dow Jones-UBSCI, had barely 1 percent in returns per year, less than the inflation rate. In contrast, investments in American stocks in the S&P 500 index, comprising the 500 largest American corporations, brought in yields of at least 2.4 percent.¹⁴⁴

RESPONSIBLE INVESTORS ARE IN THE MINORITY

Doubt is therefore beginning to grow among the managers of pension funds and foundations. For example, CalSTRS, the pension fund for teachers and state employees in California, and the second largest of its kind in the United States, had originally planned to invest 2.5 billion dollars in commodity funds in 2010. When several campaign groups criticized this plan, fund administrators consulted with independent experts and examined the arguments of their critics. After eight months of extensive consultation, fund managers came to the conclusion that the meager income was not worth the risk of potentially harming poor countries and American consumers, and decided to put their plan on hold.¹⁴⁵ Similarly, the trustees of the British Royal Mail Pension Plan for employees of the national postal service also decided not to invest in commodities any longer. At the same

time, a growing number of pension fund managers now look for socially and ecologically sustainable investment opportunities.

But these responsible investors are still in the minority. Sarasin, a private Swiss bank, is attempting to specialize in the marketing of sustainable investments. At the peak of the food crisis in June 2008, the commodity funds offered by the bank withdrew from transactions in corn and wheat futures. Unfortunately, things didn't stay that way. Because its customers were asking for standard commodity index funds reflecting the entire range of raw materials, the bank returned to transactions in the agricultural sector for its roughly 2-billion-euro commodity funds.¹⁴⁶

vatives. There is no recognizable economic benefit even for these funds, only potentially adverse effects. Consequently, legislators could simply place a ban on such financial products.

LEGISLATION IS MORE EFFECTIVE THAN PUBLIC PRESSURE

This episode shows that it is not enough to exert public pressure, which is why legislative regulation is so important. Pension funds, insurance companies and charitable foundations are already subject to strict rulings to protect their customers and their foundation assets. It would be easy to add another stipulation forbidding money from depositors and donors from being invested in commodities. Regulators could enforce this kind of ruling without much effort, and it would not be connected to any economic adversity. Quite on the contrary, more capital would be available for investing in productive endeavors.

The same holds true for mutual funds traded on stock exchanges, and certificates for commodities that are bought mainly by individual investors. These already make up about a third of the investment volume on the markets for commodity deri-

¹⁴⁰ John Parsons, Massachusetts Institute of Technology, "When is an end-user not an end-user?," in blog: "Betting the Business, Financial Risk Management for Non-financial Corporations," <http://bettingthebusiness.com/2011/02/17/when-is-an-end-user-not-an-end-user/>, 7 February 2011.

¹⁴¹ "Beim Rohstoff-Roulette gewinnt immer die Bank" [The bank always wins at commodity roulette], *Handelsblatt*, 9 August 2010.

¹⁴² PIMCO, "Commodities-Based Strategies," <http://www.pimco.com/EN/Solutions/Pages/Commodities.aspx?origin=Strategies>


¹⁴³ Gillian Tett, "Index trackers offer clues to herd behaviour," *Financial Times*, 26 May 2011.

¹⁴⁴ "Commodity investment performance," Barclays, 3 February 2011.

¹⁴⁵ "Calstrs Reins In Plans for a Big Bet," *Wall Street Journal*, 20 November 2010.

¹⁴⁶ Press release, Bank Sarasin, 9 June 2008; and information from a bank representative, May 2011.

EMIR, MIFID AND ESMA – A TUG OF WAR AROUND COMMODITY MARKETS WITHIN THE MAZE OF EU INSTITUTIONS



“Speculation in basic foodstuffs is a scandal when there are a billion starving people in the world. I am fighting for a fairer world and I want Europe to take the lead on that.”

.....
Michel Barnier, EU-Commissioner

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 are connected to the International Swaps and Derivatives Association, the central lobby association for the derivatives business.

If it were up to Michel Barnier, an EU commissioner responsible for regulating the single European market, tough restrictions for capital investors on commodity markets would have been introduced long ago in Europe. “Speculation in basic foodstuffs is a scandal when there are a billion starving people in the world,” he said to the European Parliament as early as January 2010. “I am fighting for a fairer world and I want Europe to take the lead on that,” he admitted.¹⁴⁷ But Barnier is only one of 27 commissioners who must find common agreement in order to adopt legislative proposals. Additionally, the EU Commission is not the government of Europe but only an executive body that develops proposals for Europe’s legislators, the Council of Ministers of 27 member governments and the European Parliament. At the same time, the Commission’s resources are extremely limited. It has fewer employees than the city administration of Cologne, and therefore relies on preparatory work from numerous consultancies and advisory bodies – opening a door to well-organized interest groups and their lobbyists. Thus commissioners and their civil servants are always bound in a mesh with many hundreds of players. That is why it is no coincidence that a year and a half after Barnier’s seemingly radical statement of commitment it is still unclear whether and how the EU will regulate the trading of commodity derivatives. Like in Washington, the financial industry has placed an entire army of lobbyists in position in Brussels to thwart efforts to reform financial markets. They dominate all of the advisory bodies appointed by the Commission for financial reforms. In the expert group appointed in the fall of 2009 to prepare reforms for regulating financial and commodity derivatives, 34 out of 44 members came from businesses in the financial sector and related associations. Twenty-five are connected to the International Swaps and Derivatives Association, the central lobby association for the derivative business.¹⁴⁸ The remaining 10 were representatives of national regulatory authorities. Critical and independent experts were not invited or consulted. Thierry Philipponnat, secretary-general of Finance Watch, an independent think tank in Brussels, and former manager of the NYSE Euronext corporation, estimates that the financial industry is spending more than 1 million euros a day on lobbying in Brussels.

The intensity of the struggle over commodity speculation was revealed when in January 2011 the Commission wanted to publish its position paper on the issue and put forward the reforms it was aiming for. In a draft agreed upon by all departments, Barnier’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

.....
¹⁴⁷ Michel Barnier, testimony at a hearing on the regulation of the industry for financial services, Brussels, 13 January 2010.

¹⁴⁸ According to the EU Commission, in the register of expert groups, accessible at that time at: <http://ec.europa.eu/transparency/regexpert/detail.cfm?ref=2299>. After the group was dissolved, data was deleted from the register. See also: Corporate Europe Observatory, “Financial Warmongers Set EU Agenda,” Brussels, April 2010.

derivatives and the price of raw materials on physical markets.¹⁴⁹ After some media channels reported on the draft in advance, French President Nicolas Sarkozy personally intervened, remarking sarcastically that “the first of April would be a better publication date.”¹⁵⁰ Barnier’s staff then changed the wording somewhat. The official document published later said it was “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.”¹⁵¹

But not much time remains. Three European laws are supposed to undergo reform to make the market for financial and commodity derivatives in Europe transparent and controllable. The Commission foresees their adoption in 2011. The first is EMIR, the European Market Infrastructure Regulation, which has been waiting for adoption by Council and Parliament since September 2010. It is designed to remove all kinds of derivatives trading from the dark zone of over-the-counter business and place it in clearing centers where all participants have to deposit collateral and oversight authorities can monitor risks. For that matter, this regulation could have included the handling of commodity derivatives and futures exchanges too, as many critics have noted. 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 submittal 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’s 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.¹⁵² Christine Lagarde, finance minister in France until June 2011 and now head of the International Monetary Fund, said that setting such limits was “indispensable” for her government, as she wrote in a letter to Commissioner Barnier.¹⁵³ But even if the Commission would follow the American example, as announced by Barnier, and call for mandatory position limits in

EMIR

This acronym stands for the European Market Infrastructure Regulation, an EU law adopted early in the summer of 2011. It specifies that trading with financial instruments of any kind can be done only on exchanges or exchange-like facilities that communicate trade data to regulatory agencies. The regulation is meant to ensure that individual financial institutions can no longer take excessive risks that go unnoticed by regulators.

MiFID

This is the EU Markets in Financial Instruments Directive. It prescribes the rules and obligations which operators of stock exchanges and other organized markets must comply with regarding securities and financial instruments, and describes the tasks of regulators in this area. A reform of the directive planned for the fall of 2011 is expected to include provisions on how the market for commodity derivatives should be organized in the future, an area of activity which is now largely unregulated in the EU.

¹⁴⁹ “EU-Kommission gegen Agrarminister” [EU Commission against agriculture ministers], *Frankfurter Allgemeine Zeitung*, 24 January 2011; “Commodities daily: Spectres of speculation,” *Financial Times*, 28 January 2011.

¹⁵⁰ “EU-Kommission knickt vor Paris ein” [EU Commission bowing to pressure from Paris], *Frankfurter Allgemeine Zeitung*, 27 January 2011.

¹⁵¹ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, “Tackling the challenges in commodity markets and on raw materials,” Brussels, 2 February 2011.

¹⁵² HM Treasury, Financial Services Authority, UK response to the Commission Services’ consultation on the Review of the Markets in Financial Instruments Directive (MiFID), March 2011.

¹⁵³ Christine Lagarde, Bruno Le Maire, Jean Louis Borloo, letter to Commissioner Michel Barnier, 27 August 2010.

ESMA

This acronym is for the European Securities and Markets Authority, a new regulatory agency created in the spring of 2011 for securities trading in the EU. Located in Paris, the agency's powers are limited however to coordinating oversight in member countries. ESMA officials have no direct executive powers.

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.

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 would be logical to transfer this task to the new EU regulatory authority for securities, the European Securities and Markets Authority (ESMA), based in Paris. But 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. For instance, the equally new EU agency created to regulate banks was granted merely the function of coordinator for national agencies. This probably won't be any different for the ESMA and regulation of the derivatives market. It can be expected therefore that the Commission will incorporate the introduction of position limits into its legislative proposal, but leave their calculation and enforcement to national authorities, explained an official in Bernier's department.¹⁵⁴ A draft of the proposed directive, which was leaked to the press in September 2011, is formulated in this way. Accordingly, the 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.¹⁵⁵ If it stays that way, the British regulatory authority could leave everything as it is and London would finally become the center of the global commodity casino, especially since participating financial institutions in the United States have already announced that they will relocate their operations to Europe if the American regulatory agency keeps to its plans.

This could happen, but it doesn't have to. The Commission and the Council cannot adopt market legislation without the EU Parliament. But the vast majority of MPs have already spoken out several times in favor of limiting commodity speculation. Across all party lines, parliamentary groups in February 2011 jointly called on the Commission to "take the necessary steps to fight against the excesses of speculation on commodity markets."¹⁵⁶ At the first reading of the EMIR regulation in early June 2011, MPs even decided that the "exclusion of financial institutions" from "admission to commodity exchanges" should be examined to achieve an "effective limit on the unnaturally high volume of trade on commodity markets."¹⁵⁷

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 essentially depend on the extent to which citizens and civil society organizations interfere and take a stand. Make Finance Work, a network of organizations from all over Europe, launched a 'Stop Banks Betting on Food' campaign in June 2011 on the occasion of the vote over the EMIR regulation, and provided support to all MPs who had made the point expressed in the demand to the EU Commission quoted above.¹⁵⁸ In Britain, actions by

¹⁵⁴ Interview with the author.

¹⁵⁵ EU Commission, Proposal for a Directive of the European Parliament and of the Council on markets in financial instruments, Draft, Brussels, August 2011.

¹⁵⁶ European Parliament, Joint Motion for a Resolution, Document-No. RC\857433EN.doc, Strasbourg, 14 February 2011.

¹⁵⁷ European Parliament, Report on the proposal for a regulation of the European Parliament and of the Council on OTC derivatives, central counterparties and trade repositories, first reading, Document No. RR\869797EN.doc, Strasbourg, 7 June 2011.

¹⁵⁸ Make Finance Work, "Food Speculation," <http://www.makefinancework.org/home-english/food-speculation/?lang=en>.

the World Development Movement at the shareholders' meeting of Barclays Bank, the leading commodity trader, met with great support from the media and citizens; the government struggled to justify its position. The organization is planning more actions. It is also certain that Nicolas Sarkozy will not let up, not least because his campaign against speculation with commodities should gain him points in the upcoming presidential election. Headwinds from other G20 states and the arguments of academic skeptics have so far not taken him off course. "Let's not wait for the experts to agree before we act," he demanded in June 2011 in Paris at the World Farmers' Forum, the global conference of farmers' associations. One thing "is for certain: the experts won't agree," he said. "If you wait, nothing will be done, and we cannot afford to do nothing."¹⁵⁹

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.

The Treaty of Lisbon prescribes preventive action to protect life and limb, even if there is still no conclusive scientific certainty over the causal relationship between a disgraceful situation to be combated and its potential effect on human health.

¹⁵⁹ Nicolas Sarkozy, welcome speech at the World Farmers' Forum, Paris, 16 June 2011.

>> FURTHER READING

BASIC LITERATURE ON SPECULATION WITH COMMODITY DERIVATIVES

Ann Berg, "The rise of commodity speculation, from villainous to venerable," in: Adam Prakash, FAO (ed.), *Safeguarding Food Security in Volatile Global Markets*, Rome, 2011.

Nicola Colbran, "The Financialisation of Agricultural Commodity Futures Trading and its Impact on the 2006-2008 Global Food Crisis," paper presented at the 3rd Biennial Ingram Colloquium on International Law and Development, held at the University of Southern Wales Law Faculty, 2 December 2010.

Commission of the European Communities, "Agricultural commodity derivative markets: the way ahead," Commission Staff Working Document, Brussels, 28 October 2009.

Better Markets, Comment Letter to the CFTC, Washington, D.C., 28 March 2011, <http://www.bettermarkets.com/sites/default/files/CFTC-%20Comment%20Letter-%20Position%20Limits%203-28-11.pdf>.

Institute for Agriculture and Trade Policy, "Excessive Speculation in Agriculture Commodities: Selected Writings from 2008–2011," Minneapolis, 2011.

Thomas Lines, "Speculation in food commodity markets," a report commissioned by the World Development Movement, London, 2010.

Michael W. Masters, Adam K. White, "The Accidental Hunt Brothers, How Institutional Investors are Driving up Food and Energy Prices," Atlanta, 2008, <http://accidentalthuntbrothers.com/ahbreports.zip>.

Peter Robison, Asjylyn Loder, Alan Bjerga, "Amber Waves of Pain," *Business Week*, 22 July 2010.

Olivier De Schutter, United Nations Special Rapporteur on the Right to Food, "Food Commodities Speculation and Food Price Crises," Briefing Note 2, Brussels, September 2010.

Task Force on Systemic Issues and Economic Cooperation, "The Global Economic Crisis: Systemic Failures and Multilateral Remedies," Chapter III, United Nations Conference on Trade and Development (UNCTAD), Geneva, 2009.

United States Senate Permanent Subcommittee on Investigations, "Excessive Speculation on the Wheat Market," Washington, D.C., 24 June 2009.

STUDIES AND COMPUTATIONS OF THE INFLUENCE OF FINANCIAL INVESTORS ON COMMODITY PRICES

John Baffes, Tassos Haniotis, "Placing the 2006/08 Commodity Price Boom into Perspective," Policy Research Working Paper 5371, World Bank, Washington, D.C., July 2010.

Hans H. Bass, "Finanzmärkte als Hungerverursacher?" [Are Financial Markets Causing Hunger?], study for Welthungerhilfe, Bonn, 2011.

Christopher L. Gilbert, "How to Understand High Food Prices," *Journal of Agricultural Economics*, Vol. 61, No. 2, 2010.

Christopher L. Gilbert, "Speculative Influences on Commodity Prices," UNCTAD Discussion Papers 197, Geneva, March 2010.

Manuel Hernandez, Maximo Torrero, "Examining the Dynamic Relationship between Spot and Future Prices of Agricultural Commodities," IFPRI Discussion Paper 00988, Washington, D.C., June 2010.

Yasunari Inamura, Tomonori Kimata, Takeshi Kimura, Takashi Muto, "Recent Surge in Global Commodity Prices: Impact of financialization of commodities and globally accommodative monetary conditions," *Bank of Japan Review*, Tokyo, March 2011.

Scott H. Irwin, Dwight R. Sanders, "The Impact of Index and Swap Funds on Commodity Futures Markets," OECD Food, Agriculture and Fisheries Working Papers, No. 27, Paris, 2010.

David Frenk et al., "Review of Irwin and Sanders 2010 OECD Reports," Better Markets, Washington, D.C., 30 June 2010.

Stephan Schulmeister, "Trading Practices and Price Dynamics in Commodity Markets and the Stabilising Effects of a Transaction Tax," Austrian Institute of Economic Research, Vienna, January 2009.

Ke Tang, Wei Xiong, "Index Investment and the Financialization of Commodities," NBER Working Paper Series, No. 16385, Washington, D.C., September 2010.

United Nations Conference on Trade and Development (UNCTAD), "Price Formation in Financialized Commodity Markets: The Role of Information," Geneva, June 2011.

M. Lagi, Yavni Bar-Yam, K. Z. Bertrand, Yaneer Bar-Yam, "The Food Crises: A Quantitative Model of Food Prices Including Speculators and Ethanol Conversion," New England Complex Systems Institute, Cambridge, September 2011.

STUDIES ON SPECULATION AND PRICE TRENDS IN THE MARKET FOR CRUDE OIL

European Central Bank, "Do Financial Investors destabilize the Oil Price?," Working Paper Series 1346, Frankfurt, June 2011.

Deutsche Bank Research, "Treiben Spekulanten den Rohölmarkt?" [Do speculators drive the crude oil market?], Research Notes 32, Frankfurt, September 2009.

Bassam Fattouh, "Oil Market Dynamics through the Lens of the 2002–2009 Price Cycle," Oxford Institute for Energy Studies, Oxford, 2010.

Michael Greenberger, "The Relationship of Unregulated Excessive Speculation to Oil Market Price Volatility," University of Maryland School of Law, January 2010.

Robert Pollin and James Heintz, "How Wall Street Speculation is Driving Up Gasoline Prices Today," Political Economy Research Institute, University of Massachusetts, Amherst, June 2011.

Kenneth J. Singleton, "Investor Flows and the 2008 Boom/Bust in Oil Prices," Stanford, 23 March 2011.

Adair Turner et al., "The Oil Trading Markets, 2003–2010: Analysis of market behaviour and possible policy responses," Oxford Institute for Energy Studies, April 2011.

ABOUT THE AUTHOR



HARALD SCHUMANN, 54, is a journalist and writer and works as senior reporter for the Tagespiegel in Berlin. He has closely followed developments on international financial markets for many years and has often reported on their connection to and interaction with politics. His most recent work on this subject, *The Global Countdown*, co-written with Christiane Grefe, was published by Kiepenheuer & Witsch.

ACKNOWLEDGEMENTS

My special thanks go to Marita Wiggerthale and Markus Henn, who with great patience helped me to understand the subject matter and who generously contributed their enormous expertise to the effort.

I am also very grateful to all the professionals who sacrificed their time to explain complex connections in the financial world and who made additional sources of information available, especially Michael Alt, Ann Berg, John Baffes, Dominique Ehrbar, David Frenk, Tassos Haniotis, Detlev Kock, Theodore Margellos, Olivier De Schutter, Steve Strongin and Eugen Weinberg.

And finally, I would like to thank foodwatch for asking me to do this research, giving me the opportunity to look into an important issue much more thoroughly than the everyday life of a journalist would have normally allowed.

Harald Schumann, Berlin, 10 September 2011



