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Commodity market correction - back to earth with a bump?

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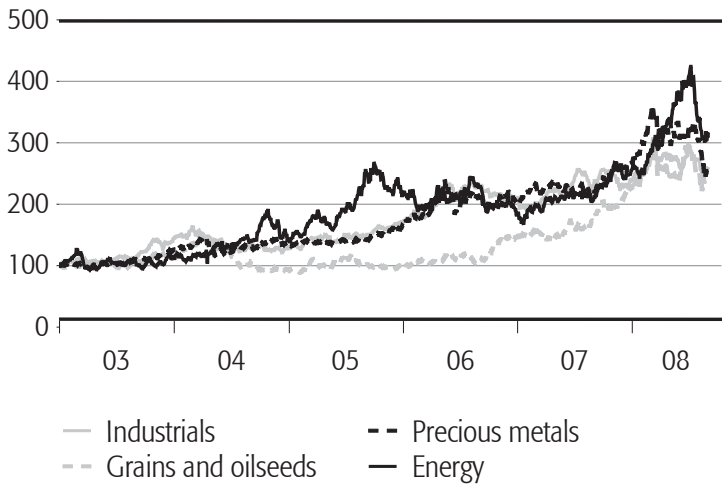
The long-running boom on the commodity markets came to an abrupt end. Prices had been marking new record highs in ever shorter intervals and at the end appeared to be defying fundamental factors. In July, commodity prices suddenly slid downwards within a twinkle of an eye. Has speculation had the wind taken out of its sails? How far will the correction go?

1. BRIEF REVIEW

Commodity price correction

Commodity prices are correcting downwards across the board. Beforehand, nearly all segments had been reaping the rewards of the long-running commodity market boom. The general commodity euphoria had spilt over to crude oil as well as to precious and industrial metals and finally also to the agricultural sector. In the end, the only way for commodity prices was up. This was most pronounced in the case of crude oil, the heavyweight among the commodities. In our opinion, the development culminated in speculation bubbles particularly as price increases were no longer in keeping with fundamentals. And now, as we had expected, the speculative fizz has gone out of the market.

Figure 1: Commodity market price correction
Reuters/CRB Commodity Index, USD, 2003 = 100



Source: Ecowin

2. CRUDE OIL

Demand growth showing signs of slowing down

Oil price causing despair

The most important commodity, crude oil, is also referred to as the lubricant that keeps the global economy moving. The surge in the price of oil in recent years was primarily a demand phenomenon that brought consumers close to despair. In actual fact, the additional demand had recently been feeding itself solely from the energy-intensive race between the emerging markets to recover lost economic ground.

Oil consumption in industrial countries declining

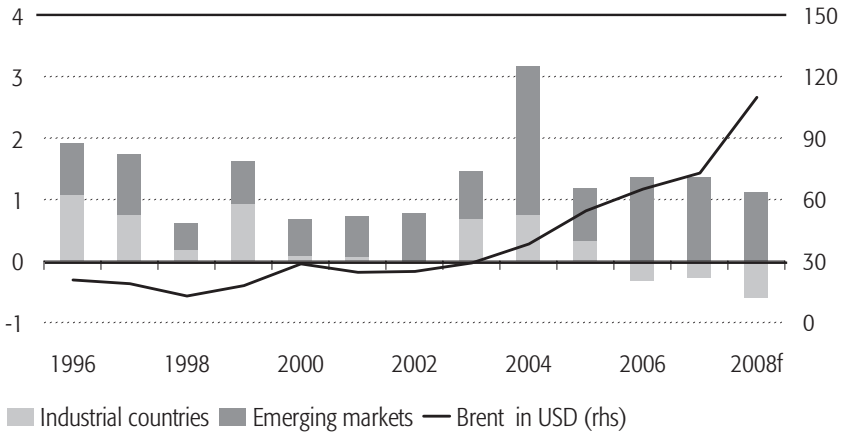
In the industrial countries oil consumption has been declining for the third year running. On the one hand, the high oil price has prompted industry and consumers to deal more sparingly with the commodity. On the other hand, though, the record prices recently developed into a negative factor for the economy, throttling consumption in

the process. This combination can be seen most vividly in the fact that American motorists have driven fewer miles during this year's holiday season than in the previous year. Another point to note is that **demand also responds after a time lag,** for example in the form of new cars offering lower energy consumption or more energy-efficient machinery.

Emerging market fuel subsidies reined in

For a long time, the world market price for crude oil had left little impression on oil consumption in many **emerging markets** due to **fuel subsidies** which shielded the domestic market from developments on the world market. However, with prices reaching record levels these subsidies became too expensive even for Asian countries. Subsidies were reined in in the early summer of 2008 in China, India, Indonesia, Malaysia and other Asian countries. **Energy price adjustments** will not fail to have repercussions for oil demand from the Far East, particularly as **economic activity** is losing momentum there, too. At the final count, global oil demand is likely to rise less strongly in the next five years, at rates of approx. 1.0 –1.2 % p.a., than in the past (1998 – 2008: average 1.6 % p.a.).

Figure 2: Global demand for oil slowing
Annual increase/decline in million barrels a day



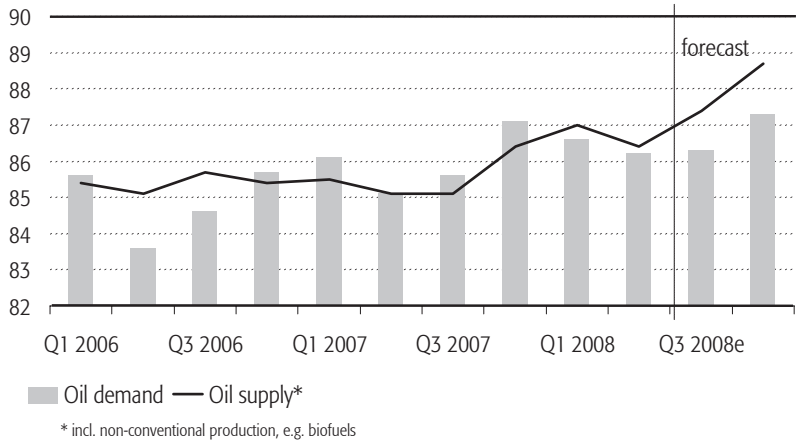
Source: IEA, own calculations

Enhanced supply

Supply set to expand

Oil supply still has to keep pace even if demand growth is decelerating. Last year the **balance between supply and demand** for oil had indeed been exceptionally tight, culminating in inventory liquidation. In the first half of 2008 a number of important oil producing countries, such as Mexico and Russia, also surprisingly announced a drop in output. But now there are signs of **improvement on the production front.** Saudi Arabia has already implemented the production increase it had announced of 0.3 million barrels/day. What is more, the high oil price has unleashed investment incentives. In the second half of 2008, global production capacities could increase by as much as 1.7 million barrel/day (e.g. Kazakhstan, Saudi Arabia) assuming no time delays. The expected supply expansion is likely to bring the price even further under pressure in coming months. At the same time, though, too steep a fall in prices could prompt OPEC to make cut-backs.

Figure 3: Supply side set to improve million barrels a day



Source: IEA, own calculations

But supply jitters flare up time and again

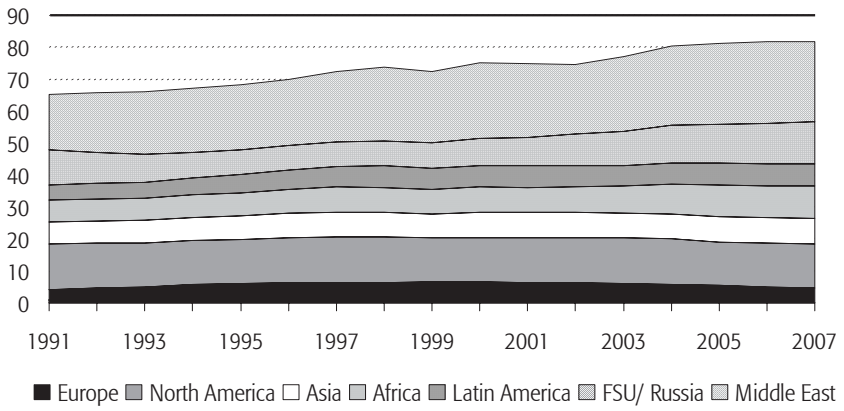
Supply worries cause volatility

However, risks exist which should not be entirely disregarded in the wake of the price decline. With most oil fields located in **turbulent regions**, the oil market is spooked time and again by **supply jitters**. Iran with its nuclear weapons program poses a latent risk, coupled with uncertainty over the political future of Iraq. In Nigeria, rebel attacks on local oil installations regularly lead to supply interruptions. In the summer attention moved to the hurricane season in the Gulf of Mexico.

Sufficient oil resources, but misguided energy policy

And then there is the **question of supply security in the medium term**. Yields from the oil fields in the **North Sea** and the **USA** are no longer so generous. And **oil production is also declining** in some **emerging markets**, too. In the countries affected, however, this is not a case of oil resources generally drying up but of a **misguided energy policy**. Due to the **nationalization waves** in recent years, some 85 % of oil production worldwide has come under state influence. In Venezuela, Mexico or Russia it was simply a case of not investing enough.

Figure 4: Trend in global oil supply
million barrels a day



Source: BP

But numerous oil projects in the pipeline

In spite of this, **numerous oil projects are still in the pipeline**, primarily in the **Middle East.** Capacities in this region have been projected to expand by 2012 by some 4 million barrels/day net. But in Brazil, Kazakhstan and western Africa new projects are also being tackled. The length of the projects, which as a rule run for between three and five years, must be borne in mind. Overall, growth in global production capacities looks set to pan out at 1.5 % p.a. in the next five years and is thus keep pace with demand growth. Nonetheless the days of cheap oil are over due not least to **rising exploration costs** (higher material costs, more complex tapping).

Influence of the financial market and oil price speculation

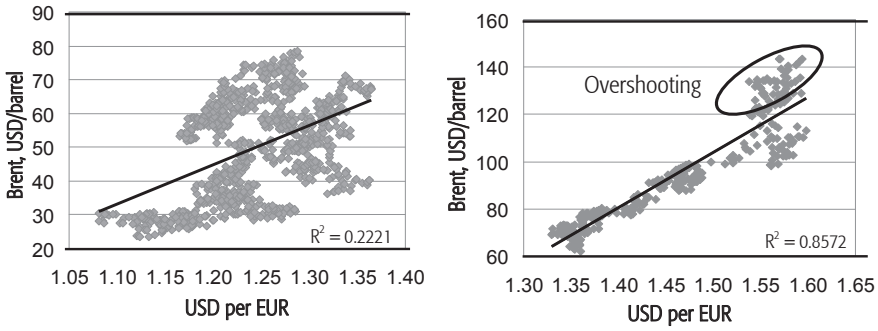
US dollar influences oil price

However, on their own the supply and demand factors are not enough to explain the development satisfactorily. The **financial market** has **grown in significance for the oil market,** with the **development of the US dollar** playing a key role. This can be explained first by fundamental reasons such as the fact that crude oil is invoiced in US dollars. Faced with the **dollar's bout of weakness, revenues of oil exporting countries lost purchasing power against the euro,** but the bulk of imports stems from Europe. By capping output, it was possible to offset the drop in the value of US dollar revenues via a high oil price.

Since the outbreak of the subprime crisis a year ago, the **correlation between oil price and US dollar** has become extremely tight. In the uncertain capital market environment, a number of market segments became less attractive. At the same time, though, commodities - in particular crude oil - became attractive as an investment category. A trading pattern started to emerge with short positions in US dollar (i.e. positions created via short sales) being offset by long positions in oil (i.e. purchasing oil futures in the hope of rising prices). However the price uptrend took on a life of its own. Not even the pattern described above could explain an oil price above USD 120 which in our view was indicative of **overshooting.** Some of this was corrected by the fall in the oil price seen in July. At the same time, the rebound in the dollar could knock the oil price down.

Figure 5: Scant correlation prior to subprime, (5/2003 - 4/2007)

... but since subprime (5/2007 - 7/2008)



Source: Ecowin

Speculation factors and herd instinct

Several studies have attempted to quantify the **influence that speculation has been having.** The U.S. Commodity Futures Trading Commission (CFTC) estimated the speculative trading share of the crude oil type WTI at some 70 % this year compared to 37 % in 2000. The statistics of the Bank for International Settlements reveal that commodity derivatives have risen sixfold within three years, with the lion‘s share relating to oil. However, bond and equity derivatives have only doubled. According to estimates, financial investors more than trebled their investments in commodity markets from the beginning of 2006 to mid-2008, to some USD 300bn. In the wake of the general market trend, a **herd instinct** can quickly arise. Not all investors have the necessary information or are able to correctly interpret market events and the underlying influences. Although the economic outlook was clouding over, the oil price climbed further. Market sentiment only turned sour in July when focus shifted to the worsening economic figures.

Growing significance of commodity derivatives

With greater amounts of capital flowing into the oil market, the significance of **commodity derivatives** (futures and options) also increased compared to earlier commodity cycles. As explained, the oil price increase was also fueled by the buildup of long positions. The recent drop in the oil price has now coincided with the reduction in speculative net positions in oil contracts (difference between long and short positions) as evidenced in the weekly report of the CFTC. The „specula-tive“ market players (non-commercials) have wound down their long positions and, instead, have partially raised their short positions. After all, with short positions it is possible to profit from falling prices. The rapid decline in the oil price from its record high of USD 143 per barrel (Brent) by more than 20 % within the space of a month also suggests **speculative components.** The effect is now pushing in the other direction, with numerous funds withdrawing capital from the commodity markets and switching (back) to investment classes that have become more attractive, including the equity market. However, due to the lack of data it is difficult to quantify the extent to which individual hedge funds with very strong exposures to the commodity market have got into difficulty.

Price outlook for crude oil

Correction is not yet over,

The oil boom was based on price-propelling news items until the economic risks could no longer be overlooked. And now the focus has shifted. As we had been expecting for some time, the oil price is coming under pressure as a result of **weaker demand** and **rising supply**. This is joined by a recovery in the US dollar due to the overcast economy in the euro area. We expect a further decline up to the end of 2008, to **USD 90** per barrel Brent. The correction, which can be viewed as a welcome refreshment, will enable the economic situation to improve again, a factor which should ultimately bolster oil prices. The oil price should then shift over again to the underlying **structural long-term uptrend**, with political events influencing volatility.

but structural long-term upward trend intac

Figure 6: Oil price outlook
Brent, USD per barrel

Source: Ecowin

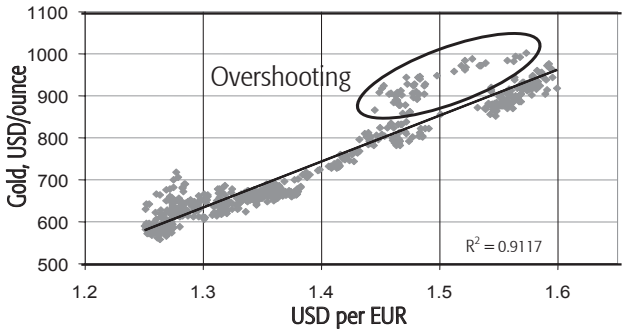
3. PRECIOUS METALS

Gold

Dollar rebound implies setback potential for gold

The gold price had trebled in the last five years but finally failed on two occasions to lastingly clear the USD 1,000 hurdle. While the long-term uptrend was **initially corroborated by fundamentals, overshooting** also set in here in the flurry of the general commodity euphoria. This is illustrated by looking at what is **traditionally a relatively close link between gold and the US dollar.** Gold behaves in the same way as a currency against the greenback and is therefore also used for hedging. As a consequence, the weak US dollar played a decisive role in sending the gold price spiraling up. However, the gold market took on a life of its own as a result of the subprime crisis and the search for safe investment openings. Thus, the failure to breach the USD 1,000 mark is a correction of the previous overshooting. In the light of this, the short-term risks for the gold price lie mainly in the recovery of the US dollar.

Figure 7: Traditionally close correlation between gold and US Dollar



Source: Ecowin

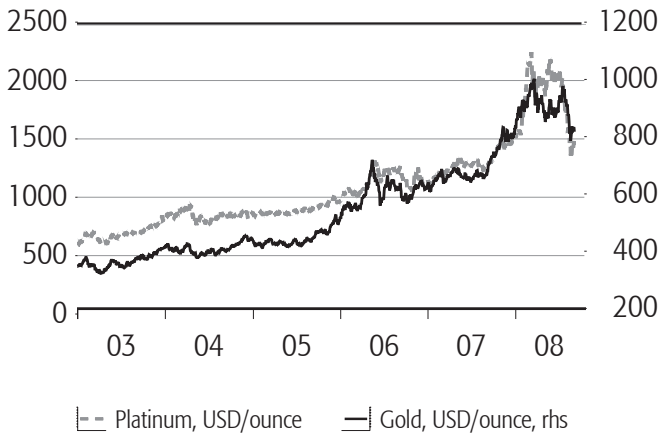
Inflation has peaked

The correction was already initiated in spring of 2008 when **interest rates** started to climb. When interest rates rise, the opportunity costs of an investment in gold also increase due to the fact that precious metals do not yield interest or dividends. Account must now also be taken of the inflation aspect. To begin with, gold had benefited from inflation fears. However, once **inflation expectations** ease up due not least to declining oil and agricultural prices, the gold price will also have the wind taken out of its sails. Furthermore, **jewelry demand** which after all absorbs more than a good half of annual production, also responded to high prices. Worldwide, gold demand for jewelry will most likely have fallen in the first half of 2008 price-adjusted by approximately one fifth compared to the previous year. In India, the most important buyer, gold sales actually collapsed by approximately half in the first six months according to information from the World Gold Council. In the **short term,** this means **setback potential** for the gold price to USD 750 per ounce.

Stagnating mining output will bolster gold in medium term

In the medium to long term the precious metal should stabilize again, with gold serving time and again as a **safe haven** and will also be used in the future as an investment vehicle. The investment instruments known as **Exchange Traded Funds** (ETFs) which had been created in 2004, support capital investment. Second, the **growing prosperity in the emerging markets** should bolster gold demand again over the medium term. Lastly, gold demand is encountering **stagnating supply.** In **South Africa,** the traditional gold producing country, mining has been on a decline for years. South African gold mines are comparatively old and they are yielding less. In addition, local gold extraction will also be dragged down in the years ahead by the country's chronic energy crisis. As a result of this decline in output, South Africa will for the first time have to surrender to China its position as the most important gold producer, a status it had held for a long time.

Figure 8: Gold and platinum losing speculative fizz



Source: Ecowin

Platinum

Economic woes weighing on platinum price

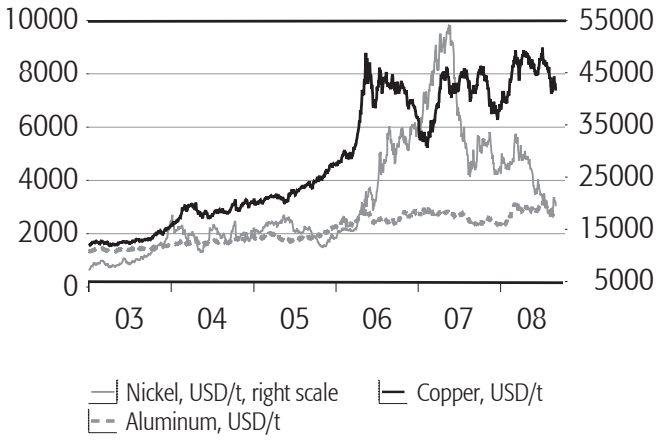
Among the various precious metals, gold has a decisive influence on general price developments, but specific market conditions also play a role. Platinum has long been profiting from developments on the gold market. Most recently, though, the metal was hit by weaker demand from the automobile industry, its most important sales market (where it is used for the production of **catalytic converters**). **Platinum demand** would also pick up once the economy starts moving again. South Africa, where **platinum extraction** is suffering as a result of chronic electricity shortages, accounts for some 80 % of supplies. Thus, in the medium term the platinum price could well perform better than gold.

4. NON-FERROUS METALS

Price level still out of tune with fundamentals

Industrial metals have also been profiting from strong demand, in particular from the commodity-intensive construction and infrastructure investments being made by the emerging markets. Here, **China is by far the most important buyer** ahead of the USA. Approximately one fifth of global copper demand stems from the Middle Kingdom. The situation is similar for aluminum and nickel, and the market share will rise even further in the future. **Supply was unable to keep pace with the surge in demand,** and prices were sent rocketing. The **price increases culminated in speculative bubbles.** Within the space of a few years, the copper price soared by 400 %. Nickel even climbed by a meteoric 600 % before plummeting just as drastically. Fundamentals are no longer able to explain the in some cases still high prices. There were even accusations that nickel and copper prices were being manipulated.

Figure 9: Copper and aluminum correction still pending
Speculative bubble for nickel burst a while back



Source: Ecowin

Economic downswing and investment in mining sector

And now **metal markets** are coming under pressure **from two angles**. As we had expected, prices are experiencing headwind from the **global economic downswing** which is dampening demand. China's economic boom is also easing up somewhat. The Chinese government had adopted restrictive measures to dampen the overheating economy. For example, large-scale state projects have been postponed in the infrastructure area. America's economic slowdown is also weakening demand for metal, with the collapse on the US housing market having a decisive influence here. A further point is that the record prices for non-ferrous metals have spurred a **search for cheaper substitutes** and prompted more frugal consumption, even if prices have dropped recently from their record highs. On the supply side, the high prices have stimulated **investment in the mining sector**. In previous years production shortfalls were frequently noted among non-ferrous metals, but now production is expected to record surpluses again. Nonetheless, project delays or strikes - particularly in the case of copper - can lead time and again to temporary shortages and send prices up again. Overall, however, the prospects remain on the downside.

Setback potential for copper

Copper that is used mainly in the **construction industry** offers a fine example of this. To begin with, **Chinese demand** concealed the collapse on the US housing market. However, inventories which had shriveled up in the course of this are now beginning to pick up again. However there are **discrepancies** between the individual statistics and the accusations of manipulation cannot be dismissed out of hand. In the long term, prices will be unable to escape the fundamental factors. Even if the spot price is still caught in a sideways movement, forward prices for copper are clearly pointing down.

Energy-intensive aluminum production

Aluminum price increases had not been all that extreme in the past. This is probably attributable to the fact that China is a net exporter of aluminum and the supply picture was not so difficult. Nonetheless temporary supply disruptions caused prices to spike. Compared to other non-ferrous metals, the aluminum industry is extremely **energy-intensive.** In countries unable to offer cheaply produced electricity, production expansion has become unattractive. On the other hand, the Gulf states have expanded their aluminum smelting capacities so as to exploit their site ad-vantages in the energy area. Thus, **fierce competition** has also started up here.

Speculation bubble for nickel burst long ago

Nickel offers a good example of how strongly individual markets can react. In a market that is relatively tight and tense and where a sizeable share of supply stems from Russia, a veritable squeeze came about a year ago which caused prices to explode. When trading regulations were tightened and buyers turned to more favorable alternatives, the speculation bubble burst. The market is still in the process of recovering from this shock.

5. AGRICULTURAL COMMODITIES

Long-term rise in agricultural demand in emerging markets

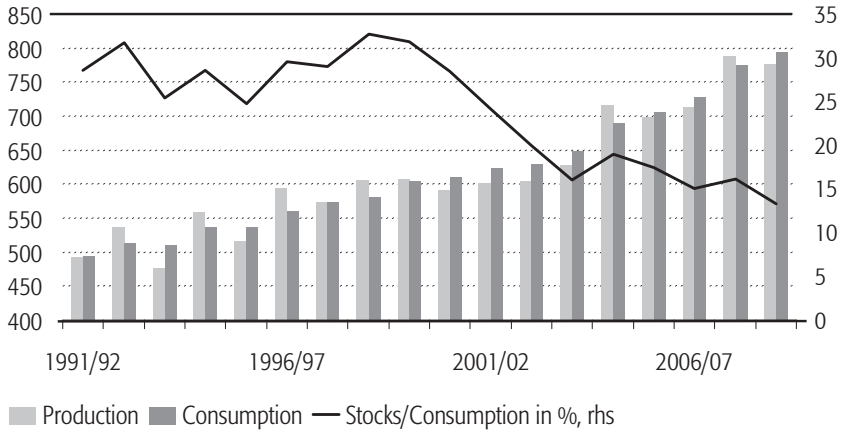
Even if agricultural prices have fallen in recent weeks, structural factors suggest that demand will pick up in the long term. The development on agricultural markets is being influenced by several mega-trends. First the global population is continuously rising. In the next three to four decades, the population is predicted to have grown by 2.5 billion, equivalent to an increase of 40 %. Second, prosperity is on the rise in the emerging markets, first and foremost in Asia. In the last five years alone, annual per capita income in the developing and emerging countries gained on average 50 % to some USD 5,000 (Purchasing Power Parity). The trend is set to continue. Third, calorie consumption and eating habits have altered in the more prosperous emerging markets. For example, consumption of milk and meat products has risen and has in turn boosted grain consumption.

Repercussions of biofuel demand disproportionately high

Fourth, all this is joined by demand from the biofuel industry. The classic preliminary products include maize (USA), sugar (Brazil), soya beans and palm oil (Asia) as well as rape seed (EU). Faced with rising oil prices and concern over climate change, a large number of countries have started gearing their energy policy to renewable commodities. Although the share of biofuels in global oil consumption stands at only 1.6 % (EU: 2 %), the repercussions for the agricultural sector were felt to a disproportionately high degree.

This development is clearly illustrated in the case of maize. This grain type serves as both food-stuff as well as animal feed, and is processed in the USA into ethanol. The fact that maize inventories had already been contracting before the real biofuel wave had started rolling should not be overlooked, with demand for ethanol merely intensifying the situation even further. In the United States, the ethanol share in gasoline consumption has risen from 1.4 % (2001) to currently some 4.3 %, with one fifth of US maize production now being processed for this. And the energy policy goals have not even been fully implemented yet either.

Figure 10: Global shortage of maize
million tonnes



Source: US Ministry of Agriculture

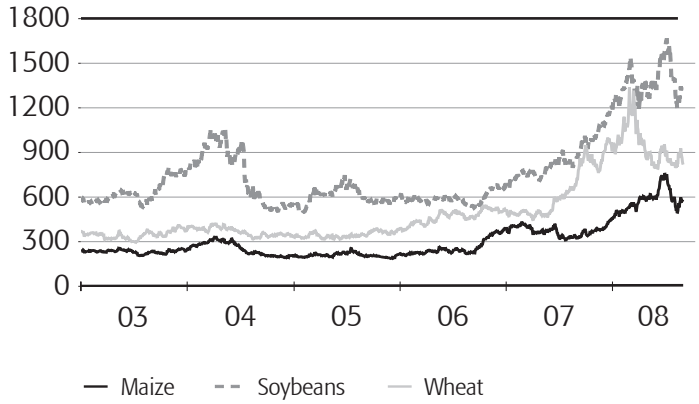
Interdependencies with oil market

How biofuel demand actually develops depends not least on the structuring of the energy policy goals. Amid growing criticism over the energetic efficiency of biofuels to date and the rising agricultural prices, much could still change - for example, there could be a greater transition to exploiting waste products or wood. Furthermore, **a mutual dependence also exists between the biofuel market and the oil market.** A decline in fuel demand in the industrialized countries will ultimately also have repercussions for biofuel.

Harvest concerns and low stocks

The **supply side** naturally also plays a key role in price developments. In the course of economic development in the emerging markets, agricultural land had to make way for **industrialization**, especially in China. Besides, **EU agricultural policy** had long been geared to reducing agricultural surpluses. The consequence of this was that inventory levels shrank substantially. In this tight situation, **short-term factors** had a double impact: In the last two years, this was joined by **harvest failures** as a result of extreme weather conditions (drought, flooding) triggering price spikes. On top of this came export restrictions in key producing countries which were aimed at securing supplies for the domestic population.

Figure 11: Slight let-up in agriculturals
US cent/bushel



Source: Ecowin

Speculation works both ways

Competition for agricultural land

The price spikes on agricultural markets were not sparked off but were compounded by **speculative factors**, particularly given the relative tightness of the markets. Now the scale of the overreaction has become evident. Within the shortest space of time, agricultural prices tumbled by 30 %. Speculation is **not a one-way street**. If the market shifts direction, prices can spiral down sharply. Supply does indeed react to high prices. Faced with rising prices, (fallow) **agricultural areas were expanded**, e.g. by lifting the EU's set-aside quota.

Furthermore, the various agricultural products are competing against each other for **agricultural land**. This can lead to what is known as the **"pig cycle"**, as highlighted in the following example. Last year wheat prices rose sharply, with the already tight supply situation being exacerbated by unfavorable harvest conditions. Wheat production was expanded in response, with the result that this year actually saw a record harvest and wheat prices had to surrender a sizeable portion of their gains. Conversely, maize cultivation was curtailed, sending maize prices rocketing.

In addition to the abovementioned influence on cultivation decisions, improved harvest conditions for certain grain types (such as wheat) also play a role. This contrasts with maize and soya (inputs for biofuels) which have come under pressure as a result of the drop in the oil price and the mutual dependence on the oil market. Nonetheless no lasting turnaround has been seen in inventories. Poor harvests can send prices back up again.

Medium-term respite, but no return to low prices

In the medium term, the **greatest reservoir** for a more intensive use and expansion of agricultural land can be found in **eastern Europe and Latin America.** However, in other major emerging markets such as China or India, prosperity is growing at a quicker pace than small-scale agricultural production. At the final count, prices will ease up further in the medium term but we will have to bid farewell to the low prices of the years prior to 2003. With extreme weather conditions on the increase, price fluctuations will remain on the cards.

6. SUMMARY AND PRICE OUTLOOK

Correction not yet over,

Although the **weaker economic outlook** has been on the radar for some time now, investors have been speculating on a growing shortage of commodities in the maelstrom of the financial crisis. We now believe that **reality** has caught up with the commodity market. In many segments, **supply** has responded to the higher prices. While the commodity boom had benefited from the weakness of the dollar, in turn a **strengthening dollar** is now putting prices under pressure. The combination of these factors points to a further fall in commodity prices. The bottom has not yet been reached. Just as **speculation** played its part in record prices, speculative repositioning by hedge funds and outflows of capital from commodity funds are serving to push prices down.

but moderate long-term uptrend intact

Over a longer-term horizon, however, the greater significance of commodities has not come to an end. For their part, falling commodity prices will help fuel the economic recovery. The underlying structural trends remain valid and will bring about consolidation in the medium term. Commodity prices are then likely to resume their more moderate **long-term uptrend.**