ABN·AMRO

Quarterly Commodity Outlook

Commodity Research
commodity.research@nl.abnamro.com

19 July 2011

Energy:

A sluggish and oversupplied US oil market, amply supplied with unconventional oil and domestic oil production sees WTI lagging behind Brent at high prices nonetheless; the latter is buoyed by persistent strong oil demand growth in Asia and light/heavy crude differentials. As for natural gas, under-demand in the short-term is likely to be followed by tighter market fundamentals, against the onset of greater demand for natural gas worldwide. ABN AMRO expects structurally high yearly averages for oil and gas prices in the medium-term compared to past years, but are keeping a neutral to negative outlook compared to currently-evolving 2011 prices.

Precious metals:

Investor positions are crowded in precious metals and pose serious risks to the downside. This changes precious metals' characteristics of becoming less fundamentals-driven and more risk-appetite driven even when it comes to gold prices. Investors have bought gold as a safe haven, but if this "insurance" is needed it may not behave as expected. The first signals of a different reaction were seen during the worries about the possible contagion of the eurozone debt crisis (gold did not move higher). The expectation that the Fed will promote low interest rates for longer will support precious metals in a more risk-seeking environment. Overall, ABN AMRO expects more uncertainty ahead and lower investor appetite.

Base metals:

The general state and uncertainty surrounding the global economy plays a significant role in today's base metal market developments. To name but a few headwinds: negative sentiment in eurozone (Greece, Italy, Portugal), decision over the debt ceiling in the US, slower pace in manufacturing sectors, monetary tightening and power regulations in China. We are keeping a neutral short-term outlook, with a negative bias. Nevertheless, ABN AMRO continues to be positive on demand fundamentals for the long-term (until 2013). Ongoing urbanisation, growing middle classes and further industrialisation in emerging Asia (China and India) will provide a solid foundation for all base metal markets.

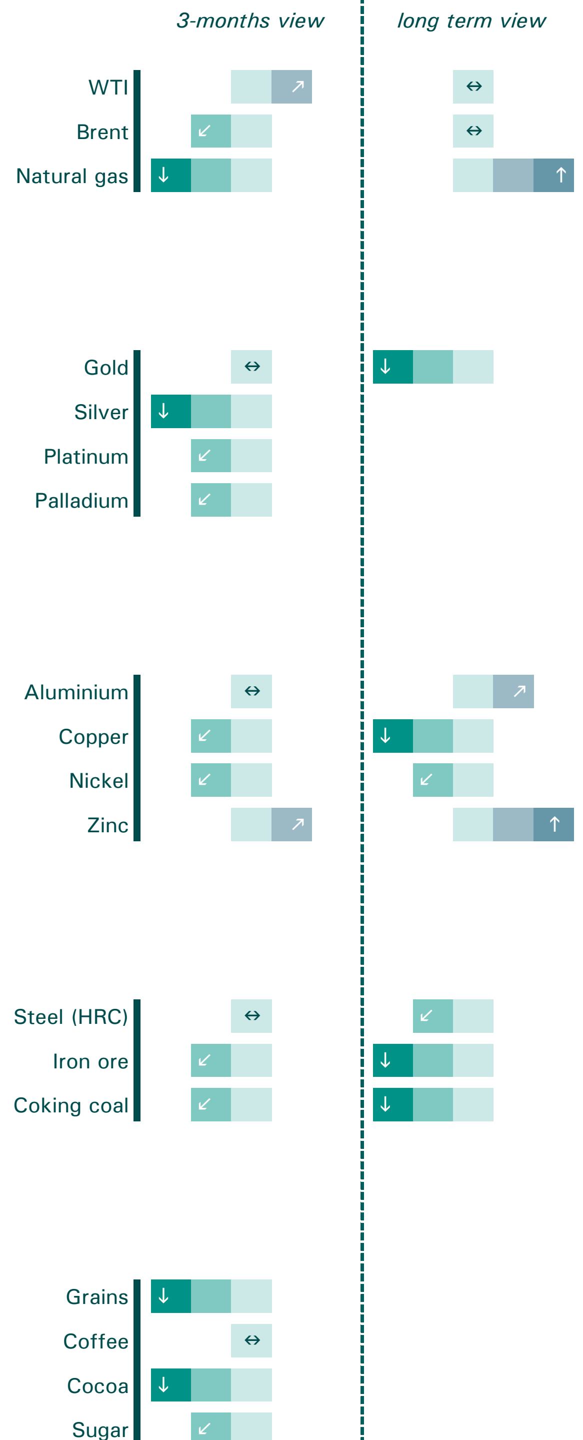
Ferrous metals:

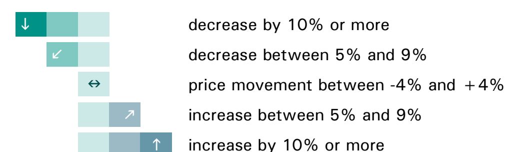
Ferrous industries will face further challenges, uncertainty and more frequent disruptions. Natural factors (with flooding, heavy rainfalls) and man-made shocks (such as strikes, government regulations, and economic factors) will impact the industries and supply chains. For the steel industry, ABN AMRO expects long-term market conditions to remain positive, although regional differences remain. Ongoing urbanisation and industrialisation will continue in China at a relatively high rate which will ensure a solid outlook for manufacturing and construction until 2013 and thus for steel demand which in turn will secure demand for iron ore and coking coal.

Agriculture:

In the current season, agricultural production is increasing due to favourable weather conditions in the main producing countries. Global consumption is growing, fuelled by a growing population, demographic changes and continued economic growth. Global stocks of wheat and coffee are projected to decline while stocks of cocoa and sugar will increase. Due to the tight market situation prices of wheat, sugar and coffee will remain on current high levels while cocoa prices are expected to decrease.

ABN AMRO Price Outlook Q3-2011





- Short term: our three month outlook versus spot rate on July 15th.
- Long term: 2013 average forecast price versus 2011 forecast price.

FORECASTS Q3-2011 [1]

	Spot rate 15 July	Average price Q2-2011	3-months	2011	2012	2013
Energy:						
- WTI (USD/barrel)	96	102	100	100	100	100
- Brent (USD/barrel)	118	118	110	108	100	110
- Natural gas (USD/mmBtu)	4.50	4.37	4.00	4.00	5.00	6.00
Precious metals:						
- Gold (USD/oz)	1,590	1,487	1,525	1,475	1,350	1,300
- Silver (USD/oz)	38	38	34	35	-	-
- Platinum (USD/oz)	1,760	1,781	1,625	1,680	-	-
- Palladium (USD/oz)	777	760	730	740	-	-
Base metals:						
- Aluminium (USD/t)	2,463	2,610	2,400	2,450	2,525	2,600
- Aluminium (USD/lb)	1.12	1.18	1.09	1.11	1.15	1.18
- Copper (USD/t)	9,651	9,168	9,100	9,400	9,250	8,300
- Copper (USD/lb)	4.38	4.16	4.13	4.26	4.20	3.76
- Nickel (USD/t)	24,126	24,324	23,000	24,000	23,800	21,750
- Nickel (USD/lb)	10.94	11.03	10.43	10.89	10.80	9.87
- Zinc (USD/t)	2,349	2,253	2,500	2,500	2,650	2,750
- Zinc (USD/lb)	1.07	1.02	1.13	1.13	1.20	1.25
Ferrous metals:						
- Steel (global, HRC; USD/t)	723	745	705	720	700	665
- Iron ore (fines, USD/t)	176	184	160	165	156	147
- Hard coking coal (USD/t) [2]	285	308	270	280	265	235
Agricultural:						
- Wheat (Cts/bu)	727	869	650	775	-	-
- Coffee (Cts/lb)	214	225	220	220	-	-
- Cocoa (USD/t)	3,221	3,069	2,900	2,900	-	-
- Sugar (Cts/lb)	28	24	26	26	-	-

(1) The 3-months forecasts is a Q3 2011 exit price. Forecasts for 2011, 2012 and 2013 are average year prices.

(2) Prime coking coal Australia,CIF

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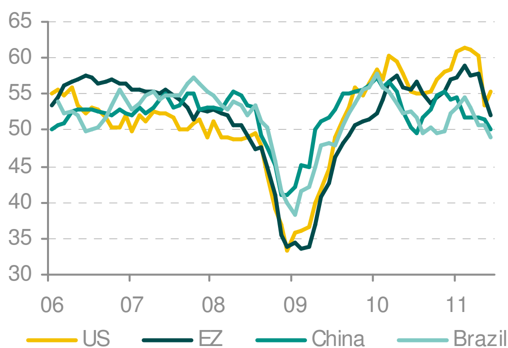
Nick Kounis (Head Macro Research, Group Economics)

Macro

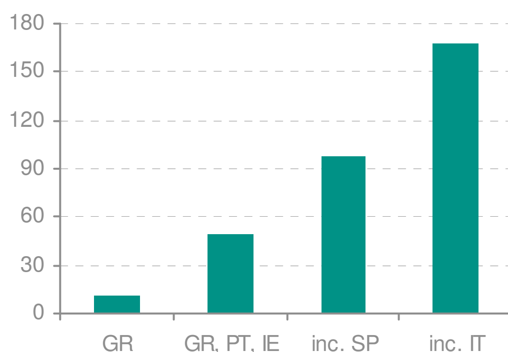
- **Soft patch has materialised, but economy should regain traction**
- **Risks surrounding sovereign debt have grown**
- **Policymakers in advanced economies are low on ammunition**

Manufacturing PMI surveys



Source: Thomson Reuters Datastream

Eurozone bank exposure (% tier 1 capital)



Source: OECD, BIS, Group Economics

Transfers from USD10 rise in oil prices (%GDP)

	Consumers	Producers	Net
World	-0.51	0.51	0.00
OECD	-0.41	0.09	-0.32
Non-OECD	-0.72	1.27	0.55
Ex-OPEC	-0.72	0.64	-0.08
US	-0.48	0.13	-0.35
Europe	-0.40	0.05	-0.35

Sources: ABN AMRO Group Economics, Oil Intelligence Group, IMF

Economy should regain traction later in the year

The soft patch that we incorporated into our scenario earlier this year is materialising in a spectacular way: Business surveys point to a sharp synchronised slowdown in growth. The US economy appears to have grown only modestly in Q2 for the second quarter in a row, while the eurozone is likely to have registered a sharp slowdown in economic growth, following a strong start to the year. Growth in the big Emerging Markets has also been slowing down, but so far looks set for a soft landing. The rise in oil prices over recent months and supply-chain problems caused by the disasters in Japan are proximate factors behind the soft patch. However, the tightening of monetary policy in Emerging Markets and fiscal policy in Europe are more fundamental drivers. The drags on the global economy do not look big enough to spark a fresh downturn. In addition, we expect oil prices to fall back and the supply-chain problems to lift during the course of this year. As such, the global economy should regain traction from about the autumn.

Sovereign debt the key risk

A dangerous new chapter of Europe's sovereign debt crisis has opened, with the sell-off seen in Spanish and in Italian bonds. Italy and Spain's respective fundamentals are better than those of Greece, Ireland and Portugal. However, bond market worries can become a self-fulfilling prophecy, as financing can become impaired, while higher bond yields can lead to deterioration in the debt outlook. Italy and Spain dwarf the countries that are currently receiving Euro-IMF aid, with much greater potential fallout for the banking sector and hence the economy. The EFSF's lending capacity is currently not enough to provide a 3-year financing package to both these big countries. Quick and decisive policy action is badly needed. Our central view is that policymakers will 'do what it takes' to manage the crisis, although the risks have certainly increased. Another proximate risk is that politicians in the US will fail to raise the debt ceiling in time, which would risk a budget crisis or a default. Indeed, this has been described as 'the mother of all tail risks'.

Running out of ammo

In addition to sovereign debt, the potential for commodity prices to stay elevated is also a major downside risk. Policymakers – certainly in the advanced economies – do not have much ammunition left if these risks start materialising. The Fed has hinted at QE3 if the economy does not regain traction. However, the bar is higher than it was for QE2, because inflation is now elevated. In addition, QE can have negative side-effects: In particular, it stimulates the economy by boosting risk appetite and risky asset prices, which leads to easier financial conditions. However, rising risk appetite also drives commodity prices higher, and the past rise in these has been a key factor behind the current soft patch. As such, we do not expect further Fed policy easing.

Upside to the forecast:	Downside to the forecast:
- Companies are cash-rich	- Sovereign debt crisis spirals out of control
- Monetary policy is ultra-accommodative	- Elevated commodity prices
- Temporary factors more important in soft patch than assumed	- Policymakers' lack of ammunition in advanced economies

Georgette Boele (ABN AMRO Private Banking)

Commodity Top-Down

- **Attitude of glass being 'half full'**
- **Regulatory overhang dampening overall outlook, increasing downside risks**
- **Commodity as an asset class is expensive compared to equities; Neutral at best in portfolios**

Historical price CRB Index

Source: Thomson Reuters Datastream

Dow Jones/WTI ratio

Source: Thomson Reuters Datastream

Dow Jones/CRB ratio

Source: Thomson Reuters Datastream

General overview

Commodity markets have taken a 'glass is half full' attitude towards recent economic data; the CRB index broke below former support layered at 333 but recently popped up above it again. The market has been reluctant to adjust its forecasts downwards, instead recycling the supportive commodity drivers - albeit with limited impact. On the macro side, this year's soft patch carries more downside risks than last year's. The commodity market is not taking these downside risks into account for now. An adjustment of market expectations about economic growth could result in fears of lower demand for commodities and a drop in overall risk appetite, both of which would hurt commodity markets. Our overall bias remains negative.

Dodd-Frank Act impact

The Dodd-Frank Act provides, among other things, the SEC and CFTC with authority to regulate over-the-counter derivatives with the aim of curtailing irresponsible practices and excessive risk-taking through regulatory oversight. Section 742 of the Act deals with retail commodity transactions and expands the CFTC's power to any commodity transaction unless the commodity is actually delivered within 28 days. Most commodity trading fails to meet this requirement and as a result some brokers have informed their clients that they will not trade commodities with US persons over the counter once the relevant provisions of the Act come into effect. Furthermore the Dodd-Frank Act also set rules for transparency for the extraction industry. Public disclosure to the SEC of payments made to the US and foreign governments relating to the commercial development of oil, natural gas and minerals. Manufacturers disclosure: requires thoses who file with the SEC and use minerals originating in the Democratic Republic of Congo in manufacturing to disclose measures taken to exercise due diligence on the source and chain of custody of materials and the product manufactured.

Relative unattractive

We have compared commodities as an asset class to equities: Both asset classes are in demand in an environment of positive investor sentiment and optimism on global growth. Both are also vulnerable to a more bearish outlook. In extreme negative market environments, both markets move sharply lower in a correlated manner as seen during the financial crisis but their resilience is different. Since early 1999, the Dow Jones Industrial has underperformed commodities (CRB) with the ratio moving from almost 106 to just below 36 today (the low was 24.73 June 2008). Taking the historical perspective into account, commodities are very expensive compared to the Dow Jones. Although there has been some recovery since June 2008, the prospect of more commodity underperformance compared to equities is only increasing. Therefore, from a portfolio perspective, we remain 'Neutral' at best with a negative bias

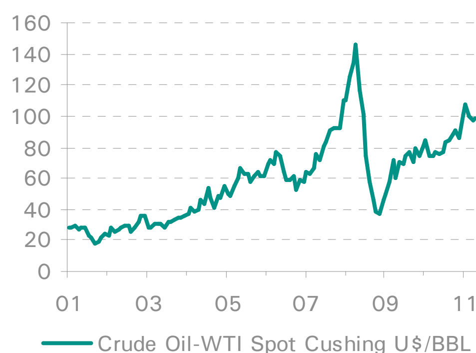
Upside to the forecast:	Downside to the forecast:
- Large supply disruptions	- More ample commodity supply
- More resilient global growth	- Global double dip
- Another wave of USD weakness and/or QE3	- Regulatory overhang

Tim Boon von Ochssée (ABN AMRO Sector Research)
Hans van Cleef (ABN AMRO Private Banking)

Energy | WTI (West Texas Intermediate)

- **Brent/WTI spread is expected to stay elevated**
- **Volatility could be high, but no clear price trend**
- **WTI will stay under pressure from regional oversupplies**

Historical price WTI



Source: Thomson Reuters Datastream

North American observed oil inventories *(million barrels month end)*

Source: Oil Market Intelligence

Commodity Research price forecast
(USD/barrel)

	3-month	2011	2012	2013
WTI	100	100	100	100

Source: ABN AMRO

Brent / WTI spread to remain elevated

In Q2, WTI prices declined on the back of risk aversion waves triggered by 'non-oil'-related events such as Greek default worries, softer economic data, financial regulation of commodity investments and the end of QE2. Furthermore, WTI prices continued to trade significantly lower than the other often-traded crude: Brent oil. In fact, the spread between Brent and WTI reached a new record high of almost USD 25 in Q2 2011. Dynamics are clearly different and new information (see below) suggests that this situation could continue for the next few months. It seems likely that Brent will continue to trade at a higher price than WTI for at least another year. Nonetheless, the spread could decline significantly if the risk premium on Brent oil starts to decrease.

Balancing drivers could result in range-trading

Although the direction of other energy prices is also important for WTI, the main specific drivers for this quarter will be the supply/demand ratio and trading dynamics. As described in our previous quarterly, WTI prices are capped due to the record stocks in Cushing (Oklahoma, US). The market had expected stocks to decline after the start of the US driving season but with gasoline prices trading only slightly below USD 4 per gallon, demand did not rise as much as expected; as a result, stocks did not decline. Meanwhile, unconventional oil, mainly from Canada, has added its own weight to a dampening of WTI prices and will continue to do so. The US driving season ends on Labour Day (September 1st); this may shift investor focus from demand to supply since the storm season has already started. Production disruptions in the Gulf of Mexico due to tropical storms may well add to the upside potential. For Q3, we expect WTI prices to trade within a sideways range although times of higher volatility could occur in the same way that they did in Q2. From a technical point of view, the resistance level at USD 103.39 is crucial, where a break would open the way towards USD 115. First support is found around USD 90. Our forecast for the average Q3 price is of USD 100.

Back to trend-growth

For the medium-term, there are no clear signals that oil demand growth is going to pick up anytime soon in the US. The unconventional gas revolution in the US is also channelling know-how towards unconventional oil production (see above), on top of short-term excess crude oversupply at Cushing; this pattern may last into the medium-term, leaving the WTI price marker adrift, disconnected from a global oil market where non-OECD oil demand growth is the main support for high prices (see Brent). With oil production in the US and Canada set to rise substantially over the next two years, there is ample evidence that WTI could remain stifled. Our forecast remains sluggish for the medium-term: USD100/bbl for 2012 and 2013.

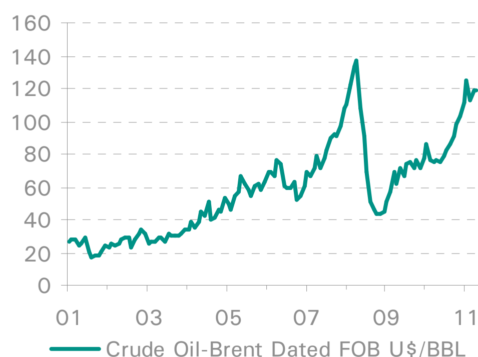
Upside to the forecast:	Downside to the forecast:
- US Economic growth continues to steam ahead	- Market sentiment eases, resulting in profit-taking waves
- New USD sell-off	- USD starts to recover
- Heavy storm season hinders production in Gulf of Mexico	- Unconventional oil supplies are larger than expected

Tim Boon von Ochssée (ABN AMRO Sector Research)
Hans van Cleef (ABN AMRO Private Banking)

Energy | Brent

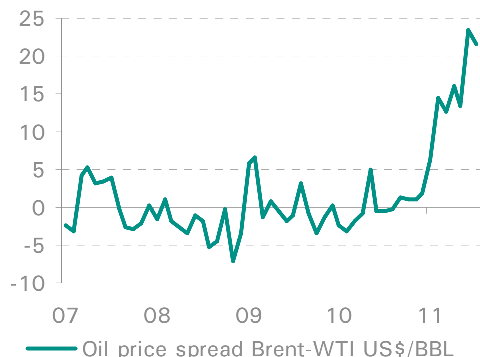
- **Risk aversion weighted but risk premium remains high**
- **Global economic soft patch could hurt demand despite supportive drivers**
- **Structurally high, USD80/bbl plus oil prices are here to stay for the medium-term**

Historical price Brent



Source: Thomson Reuters Datastream

Oil price spread Brent-WTI



Source: Thomson Reuters Datastream

Commodity Research price forecast
(USD/barrel)

	3-month	2011	2012	2013
Brent	110	108	100	110

Source: ABN AMRO

IEA surprises markets emergency stock release

Brent prices dropped in the second quarter on the back of risk aversion. Nevertheless, the risk premium remains high as tensions in the Middle East and supply constraints in Libya persist. After the Organization of the Petroleum Exporting Countries (OPEC) failed to reach consensus on a rise in production, Saudi Arabia tried to increase production unilaterally but failed to find buyers. The International Energy Agency (IEA) then announced a 60 million barrel release of its emergency oil stocks to replace the lost Libyan exports. While this initially dampened prices, this effect dissipated and prices bounced back in the subsequent two weeks.

Economic soft patch caps Brent's upside potential

Brent oil prices' direction for Q3 will strongly depend on the USD's direction and economic concerns – i.e., whether or not there will be an economic soft patch. These drivers will result in risk aversion moves. The impact thereof could be limited since other drivers - such as post-Fukushima Japan reconstruction efforts, persistent Chinese oil demand, and car sector improvement in the US and Japan - could balance each other out. Technical analysis shows a completely neutral trend between support at USD 105.15 and resistance at USD 121.47. The forward curve is also neutral for the first year and even in backwardation later on, suggesting some possible pressure in the coming months. The IEA could release some more emergency stocks, but this will most likely be limited to one or two releases and nothing in Q4 since the IEA expects demand to ease towards year-end. ABN AMRO forecasts an average of USD 110 for Q3 since the impact of the global economic soft patch should outweigh the supporting drivers.

Towards a structurally higher price level

For the remainder of 2011, there is a strong downside potential on oil prices across the board. On the demand side, OECD oil demand growth is likely to remain sluggish, though an economic recovery over the medium-term will see stronger support for higher oil prices. Non-OECD oil demand, especially in China, will be the main driver for structurally higher oil prices in the run-up to 2013. On the supply side, there appears to be no sign of timely restoration of Libyan oil production for the foreseeable future. In addition, various sources suggest that OECD inventories and OPEC spare capacity may come under pressure, effectively leading to higher prices. High oil prices are currently acting like a brake on economic recovery against a background of high macro-economic uncertainty. All in all, continued economic recovery and persistent ecnomic growth in BRIC countries in 2012 and 2013 lead us to conclude that, over the medium-term, we expect a structurally higher oil prices, especially for Brent.

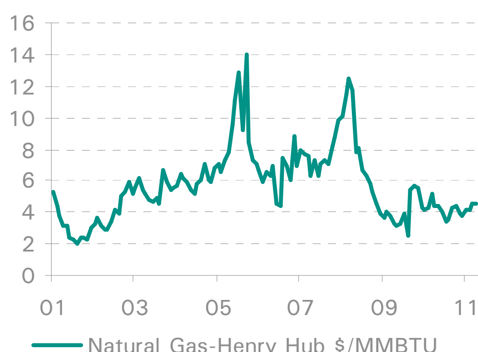
Upside to the forecast:	Downside to the forecast:
- Increased tensions in the Middle East	- Global economic soft patch trigger fears of recession
- New USD sell-off	- Profit taking on recent rallies if economic conditions pick up
	- Lower risk premium if Libya starts to export and tensions ebb away

Tim Boon von Ochssée (ABN AMRO Sector Research)
Hans van Cleef (ABN AMRO Private Banking)

Energy | Natural gas

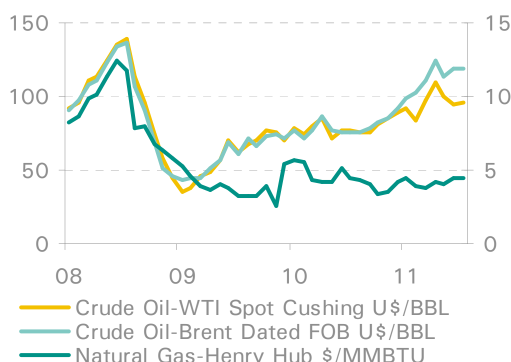
- **Prices moved higher due to increased demand in the spring**
- **Record inventories and global economic soft-patch keep NatGas prices within a neutral range**
- **In the medium-term though, NatGas prices trend significant higher**

Historical price Natural Gas



Source: Thomson Reuters Datastream

Natural Gas and oil prices



Source: Thomson Reuters Datastream

Commodity Research price forecast

(USD/mmbtu)

	3-month	2011	2012	2013
Natural gas	4.00	4.00	5.00	6.00

Source: ABN AMRO

Prices rally, but stay within the neutral range

In recent months, Henry Hub Natural Gas (NatGas) prices nudged higher within the wide neutral trading range. Warm weather conditions in Europe and the US triggered a rise in demand which proved to be somewhat supportive for NatGas prices. Furthermore, worries about nuclear energy also increased demand. The fact that NatGas did not rally much higher, though, had to do with high stocks.

More sideways trading very likely

Where inventories were already at record-high levels in Q2, there was more stock- building in recent months despite greater demand due to warm weather in April. At the end of June especially, stocks increased significantly again due to the fact that the temperatures fell short of last year's extremes. Furthermore, after tensions over the disaster in Fukushima (Japan) eased, more and more nuclear units started returning to service, resulting in lower NatGas demand. From a technical analysis point of view, the neutral range between support at USD 3.73/mmbtu and resistance at USD5/mmbtu is still intact. More sideways trading is expected this quarter as demand is not expected to increase given the economic soft-patch. The two main risks that could push NatGas prices significantly higher are: 1) A period of broad-based warm weather; 2) a heavy storm season in the Gulf of Mexico that would hurt production processes.

The natural gas wave at high tide

As is widely known, unconventional gas production and mismatch between demand and supply have caused a wave of low Henry Hub prices (NatGas) in the US. Combined with ongoing LNG flows (from various gas-exporting countries) that seek their way to market, low gas prices in the US create the impression that low gas prices are here to stay in other markets. However, there are important signs that the natural gas wave may be at high tide, and that we may see a gradual gas market tightening up until 2013. First, there is increased gas demand in Asia and the Middle East. Second, the long-term policy implications of the Fukushima disaster may well translate into higher gas demand in Germany, Europe's largest economy, mainly because of nuclear power plant closures. Last but certainly not least, gas is widely seen as an important transition fuel from fossil fuel-based power generation to renewable energy. In addition, the New York Department of Environmental Conservation (DEC) announced a number of regulatory recommendations on hydraulic fracturing which may result in a restriction of unconventional gas production over the medium-term up until 2013. In our view, NatGas holds significant upside potential: USD4/mmbtu in 2011, USD5/mmbtu in 2012 and USD6/mmbtu in 2013.

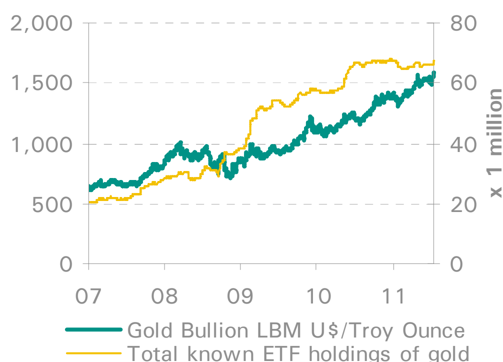
Upside to the forecast:	Downside to the forecast:
- Extreme weather conditions (long period of heat)	- Supplies continue to build
- Production disruptions in Gulf of Mexico due to heavy storm season	- Heavy pressure on the USD

Georgette Boele (ABN AMRO Private Banking)

Precious metals | Gold

- **Gold becoming an increasingly risky asset**
- **Central banks increase risk appetite**
- **Gold long is a crowded position**

Historical price gold and ETF position



Source: Thomson Reuters Datastream

Historical gold price in Swiss Franc

Source: Thomson Reuters Datastream

Commodity Research price forecast

(USD/oz)

	3-month	2011	2012	2013
Gold	1525	1475	1350	1300

Source: ABN AMRO

An increasingly risky asset

There was a period of consolidation driven by the balancing out of opposing forces. Eurozone sovereign debt worries and fears of a global economic slowdown failed to be gold-supportive, mainly because gold is becoming an increasingly riskier asset, rather than a safe-haven due to large investor positioning; this is important to bear in mind because the result could differ from the reason to buy gold as a safe haven. This is reflected all the more so in the way gold reacted when investor sentiment recently improved. Gold prices moved higher, further bolstered by expectations of QE3 and the political stalemate in the US on debt ceiling discussions.

Central banks' activity

The prospects of higher interest rates in the US have faded given the weakening economic climate in the US and worldwide. We have consequently pushed out the expected rate-hike until Q3 2012. The prospects of low interest rates for a long time in the US usually supports gold prices because the low interest rates earned on gold are above those earned on USD (and low global real yields); on top of that, there is the element of it being considered a safe haven. In an environment of increased risk appetite, these gold holdings can be lent out to the private sector to earn some income (increasing counterparty risk). An FT report recently showed that central banks pulled 635 tonnes of gold from the BIS in 2010, mainly on the back of the motivation to lend out. Gold is also seen as a more attractive asset in central bank reserves than the USD tends to be.

Crowded position

The New York Times reported on 7 July 2011 that Russia has eased gold trading rules to let more gold be mined and exported more quickly. The monsoon in India is well underway and could result in more demand from the physical demand side as good crops provide income to buy gold. Although it is very important what India – as the main consumer - does, the investment community is far more important going forward. The ETF community holds around 67 mln ounces, while positioning on the COMEX is at almost 24 mln ounces. Together, this is around last year's mine production and above the 2010 jewellery demand. While optimists might say that it could increase further, what if gold loses its special touch or if the regulatory overhang spooks these large investment positions? Then, any position cutback will have a huge impact on the price, even if India's demand for gold demand increases sharply. The main reason for buying gold because of its uncorrelated and safe have status will then not fly: It is a crowded investment and will most likely not serve its purpose when needed the most. So, although low US interest rates, sovereign risks and a good Indian Monsoon all support gold, we are neutral on it because downside risks outweigh upside potential in this overall crowded position.

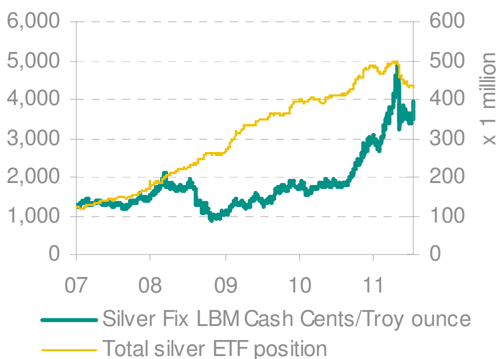
Upside to the forecast:	Downside to the forecast:
- Fed QE3 programme	- Fed starts quicker interest rate normalisation
- Spreading of sovereign risks	- Liquidity crisis would also squeeze gold longs
- USD panic	- Regulatory overhang

Georgette Boele (ABN AMRO Private Banking)

Precious metals | Silver

- **First precious metal that has come back to earth**
- **Global slowdown and risk aversion could further wash out silver longs**
- **Silver prices could recover if sentiment improves; Fed's 'low interest rates for long' is in the picture again**

Silver price and total ETF demand



Source: Thomson Reuters Datastream, Bloomberg

Historical gold / silver ratio

Source: Thomson Reuters Datastream

Commodity Research price forecast

(USD/oz)

	3-month	2011	2012	2013
Silver	34	35	-	-

Source: ABN AMRO

Gravity felt

Silver's stunning performance came to an abrupt end in early May, when the CME announced several increases in margin requirements to squeeze out the speculative part of the market. Silver prices crashed from 49.79 on 29 April, to a low of 33.09 on 6 May or -33%. The pain inflicted by the CME will not easily be forgotten. Despite this, the market is giving it another shot anyway to push silver prices higher since the technical picture improved. If the market hits a brick wall again, silver will be moved to the 'do-no-touch' list for the foreseeable future. This crash in silver prices has brought gold-to-silver ratios to more reasonable levels, albeit still relatively low. ETF and COMEX positions have been cut back drastically, which comes as no surprise. Silver's story can serve as a reminder of what could also happen to the other precious metals if and when prices are pushed too far - even though the arguments against this appear to be well established.

More downside risks

The scale-back in total ETF positions in silver has been volatile but rather modest, taking into account the build-up in the last years. The scale-back probably only affected investors that entered their positions at relatively expensive levels. Total ETF positions are currently at 436 million ounces, or 33% of the total supply for 2010, which is still very large. A large scale-back will likely result if sentiment on the global economy and in financial markets deteriorates sharply. Fear of contagion in the eurozone is one of the drivers that could result in a depressed sentiment in financial markets. As was mentioned about our overall macro outlook, ABN AMRO expects a slowdown in economic momentum which will not only affect overall investor appetite but also demand for commodities such as silver. Silver is more exposed to the global growth cycle than for example gold is. Industrial demand for silver is mainly because of its use in solar panels, energy-efficient windows and its power to prevent bacterial growth. So, a slowdown in global economic activity should be felt more in silver than in gold. We expect the gold-to-silver ratio to move further up; a move back towards 45 is on the cards. Another variable to watch is the Dodd-Frank Act's impact: Some expect that the Act will result in no OTC positions in commodities and FX by US retail investors. In that case, investors will likely find other ways of investing in precious metals than through the OTC market. If towards the end of 2011, sentiment on the economic front improves and the sovereign eurozone thunder-clouds have passed, silver prices could have some room to recover again - especially if the market starts to use the Fed's 'low interest rates for long' as an argument to sell the USD again.

Upside to the forecast:	Downside to the forecast:
- Fed QE3 programme	- Fed starts quicker interest rate normalisation
- Global economic recovery	- Liquidity crisis could also squeeze silver longs
- USD panic	- A larger deceleration of global growth and fears of double dip

Georgette Boele (ABN AMRO Private Banking)

Precious metals | Platinum

- **Japanese disturbance being felt, but recovery also likely**
- **ETF and non-commercial positions remain at risk**
- **Platinum/gold ratio close to 1 would be an opportunity to buy platinum instead of gold**

Historical price Platinum

Source: Thomson Reuters Datastream

Platinum / palladium ratio

Source: Thomson Reuters Datastream

Commodity Research price forecast
(USD/oz)

	3-month	2011	2012	2013
Platinum	1,625	1,680	-	-

Source: ABN AMRO

Rally is losing pace

Since April 2011, the rally in platinum prices has come to a halt and a correction has been made. The impact of the tsunami and nuclear disaster in Japan was felt in platinum because economic activity - including car production - in Japan had come to a halt, a fact that is also reflected in Swiss trade data. These data show global demand and supply dynamics for both platinum and palladium. The most recent data continue to show platinum imports, which in fact reflects a lack of demand from Japan. The overall precious metal activity has also changed from being outright bullish to being more cautious, resulting in non-commercial positions (in the futures market and in ETFs) being scaled back, as reflected by a lower platinum price.

Downside risks are increasing

Although recent data on the global car industry remains depressed, a pickup is expected this year. That said, though, global car production may only reach 2010 levels just before year-end. After the sharp drop in industrial production in Japan, it has also started to recover at a high pace recently. US industrial production has flattened and since we expect a weakening of the global economic landscape, the pickup in activity in Japan could be off-set by weakness in the US and the eurozone (highest platinum growth area in 2010). Any recovery in platinum demand from Japan should be seen in the trade data. In terms of the balance between supply and demand, Johnson Matthey indicated that platinum will be close to balance in 2011. South Africa continues to be the main producer (76% of total global mine production). The mining industry is nervously watching political developments in South Africa. There is currently a political debate on the nationalisation of South African mines. Any move in such direction could hamper investments in South Africa and hurt overall production.

Even though these above-mentioned developments are crucial, the largest price actions in recent years are more the result of investor interest in platinum ETFs than in the non-investment supply and demand statistics. Since ETFs took off, especially in the US in 2010, prices have increased by 500 USD per ounce. The ETF community is currently long 1.34 million ounces or 17% of total demand and 22% of the global supply (ex recycling) in 2010. Although there is room to grow compared to gold, it is more vulnerable than gold is to the global industrial sector and lacks the safe haven status. The platinum/gold ratio has moved further into extreme territory, compared to our last quarterly report, dropping from around 1.20 to 1.11. We believe that platinum will be cheap compared to gold if parity were seen. Overall, we believe that the risk of investor positions being scaled back is increasing in 2011.

Upside to the forecast:	**Downside to the forecast:**
- USD sell-off	- Greater economic slowdown, with fears of double dip
- Disruption of South African supply	- Regulatory overhang that makes investors nervous
- Japan rebuilding faster than expected	- The Fed exiting earlier than expected (July 2012)

Georgette Boele (ABN AMRO Private Banking)

Precious metals | Palladium

- **ETF demand main driver behind palladium prices**
- **Palladium market in deficit in 2010; will likely also be in 2011**
- **Investors will become more selective, which could hurt palladium**

Historical price Palladium

Source: Thomson Reuters Datastream

Chinese car sales

Source: Thomson Reuters Datastream

Commodity Research price forecast
(USD/oz)

	3-month	2011	2012	2013
Palladium	730	740	-	-

Source: ABN AMRO

ETF demand major driver for Palladium prices

Since the end of 2008, palladium gone from being the black sheep to the golden egg in terms of performance; the introduction of ETFs has been a major driver behind this performance. Palladium prices are around 350 to 400 USD higher than before the introduction of US ETFs. Although not all of the movement can explained by it, a big part can which also highlights the risk if the investment community starts to turn against this precious metal. Since February 2011, the market has become less positive on the prospects of palladium - probably due to a lack of new drivers. Since then, ETF palladium positions have decreased to just less than 2.1 mln ounces, down from the high close to 2.35 mln ounces – a retracement that has been rather modest. Palladium prices have moved in the same direction as these ETF holdings, although in a more volatile manner. The picture for palladium resembles that of platinum. The industrial production's standstill in Japan was also felt in palladium prices, albeit to a lesser extent than it was in platinum, mainly because:

1. The exposure to the US and Emerging Markets such as China, Brazil and Russia. Russia raised its new car sales to 2.7 million units, 23% higher than Russia's previous outlook.
2. Already in deficit in 2010, the palladium market is also expected to be in 2011.

More selective and therefore downside risks

Going forward, we expect a global slowdown which will also likely affect palladium demand in 2011. Autocatalysts are the main demand category for palladium. Palladium catalysts are used in gasoline cars in the US and in all the major growth centres. Due to high oil prices, demand for cars is expected to slow - especially in the US. The palladium supply comes mainly from South Africa and Russia. In South Africa, there is debate on nationalising the mining industry, a debate that the mining industry is closely following. Fears of lower South African supply are probably already reflected in the current price, since the market has the habit of discounting the news/fears as they arise - especially if it defends the dominant market sentiment. We also expect financial markets to be more selective on risky assets going forward. For palladium, the EM growth story has already been widely recycled; it is going to be a recurrent theme for years to come. What makes the picture for 2011 more cloudy and risky is what exactly the investment community is going to do with their palladium longs (via ETFs or COMEX). If other alternatives become more attractive and also have Emerging Market exposure, these longs could be scaled back dramatically. We do feel, though, that platinum is probably more vulnerable than palladium is because of a more diversified palladium mine supply and better positioning towards growth markets in palladium's case We therefore still prefer palladium over platinum, but for both, the risks are on the downside in 2011.

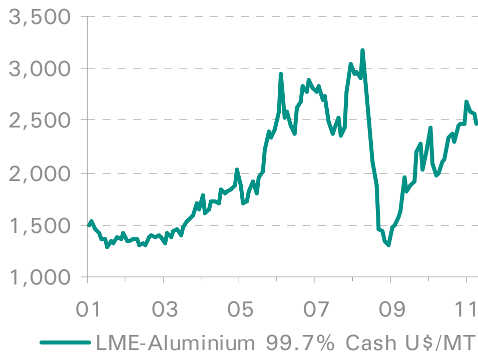
Upside to the forecast:	Downside to the forecast:
- USD sell-off	- Deeper global slowdown and fears of double dip
- Disruption to South African or Russian supply	- Need for liquidity resulting in closing palladium positions
- Strong rebound in car manufacturing and global economy	- Fed starts exiting faster than anticipated

Hans van Cleef (ABN AMRO Private Banking)
Casper Burgering (ABN AMRO Sector Research)

Base metals | Aluminium

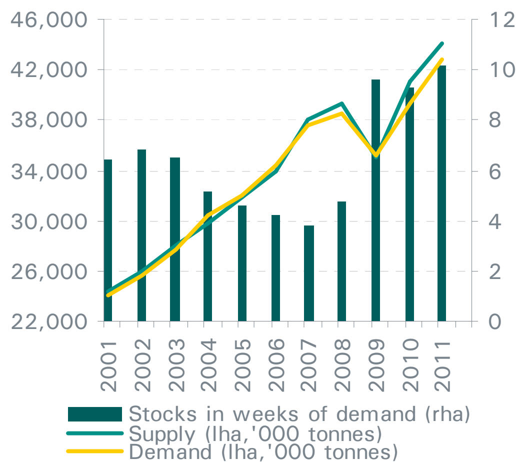
- **Higher average prices in Q2 than forecasted**
- **Rising inventories and economic soft patch balances positive signals from automotive sector**
- **In the long-term, prices expected to stay relatively high**

Historical price Aluminium



Source: Thomson Reuters Datastream

Supply, demand & stocks



Source: Metal Bulletin

Commodity Research price forecast

	3-month	2011	2012	2013
Aluminium (USD/t)	2,400	2,450	2,525	2,600
Aluminium (USD/lb)	1.09	1.11	1.15	1.18

Source: ABN AMRO

Aluminium traded higher than others in Q2

Aluminium is the only base metal for which the Q2 average price (USD 2,616) is higher than the Q1 average (USD 2,530). This rise is remarkable, especially when the record levels of the LME inventories are taken into account. These record-high stocks have prevailed since mid-2009. In our Q1 report, we had forecast a price of USD 2,500 at the end of Q2 which is now close to the current spot prices. The recent development of an oversupply in the Shanghai aluminium market has been adding more pressure on aluminium prices in recent weeks, resulting in a drop of close to 10% in aluminium prices since April.

Mixed signals keep outlook neutral to negative

Looking at the forward curve, there is a backwardation between spot prices and the first contracts, suggesting that the market is anticipating lower prices in the very near-term. The rest of the forward curve is in a 'normal' contango of slightly higher prices. From a technical point of view, the long-term uptrend is still intact, but investors will be closely monitoring the support level at USD 2,452. A break lower would open the way towards USD 2,300. The copper/aluminium ratio has rallied strongly in recent years. Where the ratio was still at 1.6 in 2005, it is almost 2.5 times higher now, at 3.8. We believe that this ratio has gone too far but that it should run out of steam any time soon. The economic soft patch would hurt demand, mainly in the automotive sector, and balances out any positive signals of a rebuilding of the Japanese car sector and a pick-up in US car production. Finally, power shortages in China may lead to somewhat lower production, but the impact thereof on aluminium prices will be limited. We expect aluminium to trade at around USD 2,400 by quarter-end.

Energy costs will keep aluminium price on a high level

In aluminium, the long term prospects on market developments did not change very much. Fundamentally, the market environment for aluminium will stay in oversupply in 2011-2013. Although demand prospects from sectors such as transport equipment, packaging and construction look promising in the forecast period, the supply/demand balance will stay positive. Stocks are also set to increase further. The Asian region (especially China) will lead the way in the global aluminium sector. Although the fundamentals are not that supportive of aluminium prices, macro-economic fundamentals will have a significant influence. Oil price developments are in particular translated into aluminium price. Aluminium is highly energy-intensive, making it sensitive to volatility in energy and oil prices. With the relative high oil prices and the uncertainty in nuclear power supply, energy costs are expected to stay comparatively high in the forecast period.

Upside to the forecast:	Downside to the forecast:
- Recovery in aluminium consuming sectors (e.g. construction)	- Funds scale back their interest in aluminium as an asset class
- Significant Chinese smelter cutbacks in output	- Surge in production: High and rising stocks
- Increase substitution demand (copper and steel)	- New projects entering the market

Hans van Cleef (ABN AMRO Private Banking)
Casper Burgering (ABN AMRO Sector Research)

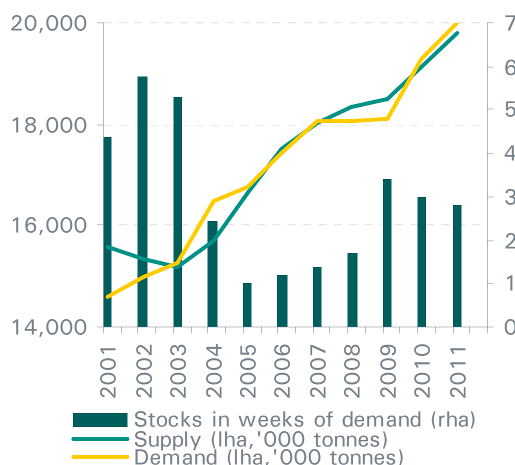
Base metals | Copper

- **Chinese economic slowdown being watched; impact limited for now**
- **Short-term uncertainties will outweigh the longer-term (Chinese) demand expectations/speculations**
- **Prospects on the long-term look sound; prices will stay high**

Historical price Copper

Source: Thomson Reuters Datastream

Supply, demand & stocks



Source: Metal Bulletin

Commodity Research price forecast

	3-month	2011	2012	2013
Copper (USD/t)	9,100	9,400	9,250	8,300
Copper (USD/lb)	4.13	4.26	4.20	3.76

Source: ABN AMRO

Risk aversion moves watched for direction

Copper prices reacted strongly to the risk appetite moves. The larger correction in base metals was also reflected in copper. In the second quarter, the drop in copper prices as forecasted did indeed materialise, but the recovery came sooner and more aggressively than expected. The average price was USD 9,166/tonne. The main driver, Chinese data, came in mixed, signalling that the Chinese economy is slowing down. Market speculations about the Chinese economy cool-down had only limited effect since GDP will remain at relatively strong levels from a global perspective. This kept copper prices at elevated levels.

Pressure could build if risk aversion accelerates

The main drivers behind copper prices in Q3 will be risk sentiment and developments in – and speculation on - the Chinese economy. If the worries about a global economic slowdown, ongoing sovereign debt worries in the eurozone and the US debt ceiling continue to feed risk appetite, copper prices could fall under heavy pressure. The rise of the London Metal Exchange (LME) inventories came to a halt, although no decline was noted. Another supportive aspect in the months to come will be from disruptions to production due to strikes at large mining companies in Chile and South Africa. From a technical analysis point of view, the longer-term uptrend is still intact, although copper prices are currently in a neutral phase (with a positive bias) between USD 8,504 – 10,190/tonne. Overall, ABN AMRO expects the impact of a global soft patch, together with risk aversion and the need for liquidity to hurt copper prices in the short-term. Therefore, we expect copper prices to ease towards USD 9,100/tonne in Q3 before the metal could start to recover in Q4.

Until 2013 copper price will soften

Copper prices softened somewhat due to the continued uncertainty around the European debt crisis, the US debt ceiling decision and the effects of China's monetary policy. The ongoing negative news on the global economy also affects confidence in key copper-consuming sectors. Construction activity in the US and in the EU remains at relatively low levels, mainly due to (macro-economic) uncertainty and disappointing data. However, construction output in China is set to grow further, because of the ongoing urbanisation process and high level of investments in the construction sector, which will continue for the next few years. Also, the growth of the Chinese economy will stay on comparable high level and therefore not severely impact the copper market. Nevertheless, the copper market continues to be volatile in the forecast period. In short, copper fundamentals for the long-term seem to be positive: Demand will outpace supply until 2012, while in 2013, a surplus is expected. Copper prices will stay high until 2012, and ease towards 2013. We forecast a long-term copper price of USD 8,300/tonne.

Upside to the forecast:	Downside to the forecast:
- A quick solution for EU debt issues and US debt ceiling	- Risk aversion / need for liquidity increases
- Chinese economy performs more strongly than forecasted	- More disappointing Chinese industrial production data
- Recovery in construction sectors (US, EU)	- Funds scaling back their interest in copper as an asset class

Hans van Cleef (ABN AMRO Private Banking)
Casper Burgering (ABN AMRO Sector Research)

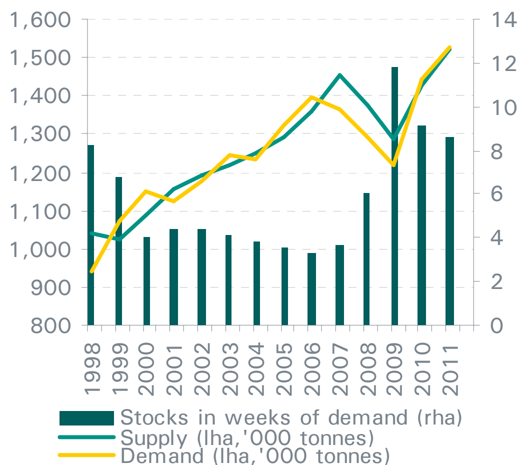
Base metals | Nickel

- **Lower nickel prices due to deteriorating sentiment**
- **In the short-term, supply and demand more balanced resulting in Neutral to Negative outlook**
- **An oversupplied refined nickel market will lead to downward pressure on long-term prices**

Historical price Nickel

Source: Thomson Reuters Datastream

Supply, demand & stocks



Source: Metal Bulletin

Commodity Research price forecast

	3-month	2011	2012	2013
Nickel (USD/t)	23,000	24,000	23,800	21,750
Nickel (USD/lb)	10.43	10.89	10.80	9.87

Source: ABN AMRO

Nickel prices declined as expected

Nickel prices have declined significantly over the last few months, as forecasted in our previous Quarterly Outlook (expected price USD 23,000) due to deteriorating sentiment; they have dropped 20% since February's peak and 15% since early May due to weak demand for stainless steel over the last couple of months and funds scaling back their interest. It is only in the past two weeks that prices have recovered from about USD 21,500 to USD 24,000 based on hopes for stronger Chinese demand and the linked rally in copper prices, which improved the sentiment for base metals somewhat. The average price for Q2 was USD 24,158.

Balanced drivers may lead to neutral phase

For the coming quarter, we expect supply and demand to be in balance. The London Metal Exchange inventories continued to ease but are still 60% higher than the highs seen in 2009. According to Technical Analysis, the uptrend is broken on the downside and, as a result, we have entered a neutral phase with a negative bias. The crucial support level to watch is USD 20,450. If this level breaks, downside is open towards the next target at USD 17,375. What is remarkable is that the copper/nickel ratio is relatively neutral, suggesting that copper's out-performance against the other base metals is limited against nickel. Chinese trade data for May showed a jump in imports of nickel ore, not because of larger nickel demand, but mainly because steel mills use nickel ore as a cheap form of crude iron ore. We expect nickel prices to trade sideways to slightly lower towards USD 23,000 at the end of this quarter.

Downward pressure on long-term nickel prices

ABN AMRO expects demand to increase by an average of 6% per year until 2013. The stainless steel industry is an important driver for our outlook on the nickel market. This industry is responsible for 65% of total nickel demand which will continue to improve in the long-term. Although regional differences will remain, improving prospects on consumer spending and increasing confidence demand for consumer durables (domestic appliances and white goods) will increase. Next to that, stainless output is forecasted to grow strongly, due to further re-stocking activity worldwide and the vast stainless expansion in China. Therefore, growth in refined nickel output will also continue. In 2012 and 2013, new projects are expected to enter the market; supply growth during this time will outpace demand growth, resulting in an oversupplied market. However, non-economic factors, such as strikes at production facilities and ports, (unexpected) disruptions in operations, unscheduled shut-downs and political issues could create unexpected short-term nickel shortages which will keep refined nickel prices volatile. Higher Nickel Pig Iron (NPI) production in China will create pressure on the demand for pure nickel.

Upside to the forecast:	Downside to the forecast:
- Stainless steel expansions exceeding current expectations	- Funds scaling back their interest in nickel as an asset class
- Supply disruptions and delays in pipeline projects	- Stainless steel demand staying low at global levels
- Decrease in Chinese NPI production	- Substitution by stainless steel with lower nickel content

Hans van Cleef (ABN AMRO Private Banking)
Casper Burgering (ABN AMRO Sector Research)

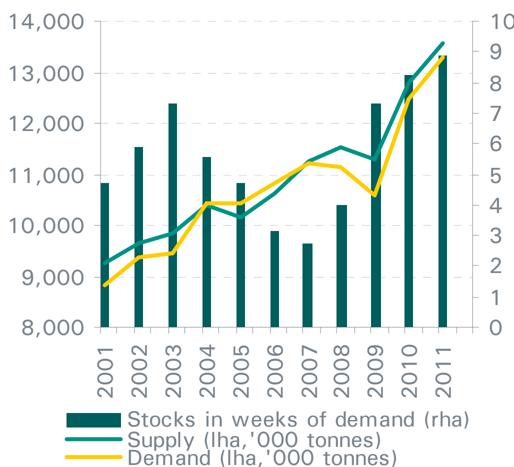
Base metals | Zinc

- **Despite easing zinc prices, it is still best-performing base metal**
- **The neutral range will likely hold; outlook for Q3 USD 2,500**
- **Fundamentally, zinc market points to stronger prices until 2013**

Historical price Zinc

Source: Thomson Reuters Datastream

Supply, demand & stocks



Source: Metal Bulletin

Commodity Research price forecast

	3-month	2011	2012	2013
Zinc (USD/t)	2,500	2,500	2,650	2,750
Zinc (USD/lb)	1.13	1.13	1.20	1.25

Source: ABN AMRO

Zinc prices rallied, but upside was capped

Funds dominate today's zinc market and investor flows play a significant role in zinc price volatility. Despite a rally in global industrial production, zinc prices traded sideways within a neutral range. The supportive effects thereof, though, were countered by a strong rise of the Shanghai zinc stocks. Due to deteriorating sentiment in other base metals, zinc prices also eased by 7.5% within this range since April's high. Zinc was, however, the best-performing base metal, with an average Q2 price of USD 2,271/tonne.

Zinc may be less hurt than other metals in Q2

London Metal Exchange (LME) inventories are at 16-year high levels. Zinc will likely continue to outperform the other base metals as downside risks for the latter are greater from an investment and price point of view. For technical analysis, zinc is trading within a relatively large sideways range of USD 2,019 – 2,639/tonne, levels that should hold despite the fact that zinc could rally towards a price of USD 2,500/tonne at the end of the quarter.

Long term zinc fundamentals look promising

Macro-economic headwinds and other disasters such as the EU debt crisis, the US debt ceiling decision and the effects of China's monetary policy, will dominate zinc consumption in 2011. The regional macro-economic uncertainties result in different outlooks for zinc demand. In China, zinc mine output is not able to meet domestic concentrated demand to the fullest, meaning that China will continue to be a big importer of zinc for the coming years. Total refined zinc demand is driven by Emerging Markets, of which China alone has a share of 41%. The country needs the material to feed its vast growing sectors like construction and car manufacturing. On a global scale, the construction sector accounts for 65% in total zinc demand. Construction output in China is set to grow further, due to the ongoing urbanisation process, which will continue for the coming years. However, in the US and the EU (together representing 25% of world zinc demand), construction activity is at relatively low levels and uncertainty still dominates. In car manufacturing, the production levels in the US and in the Eurozone are not expected to reach their trend levels until 2012. The automotive sector in China is expected to grow significantly, despite the cancellation of the tax incentive to encourage car purchases. China became the world's largest auto market in volume in 2009; its domestic auto market is expected to grow strongly in 2012 and 2013 due a strong growing middle class. Fundamentally, the zinc market points to stronger prices until 2013. Refined zinc supply will increase on average by 5% per year between 2011 and 2013; refined zinc demand, however, will outpace this growth by 2 percentage points, leading to a deficit in 2013.

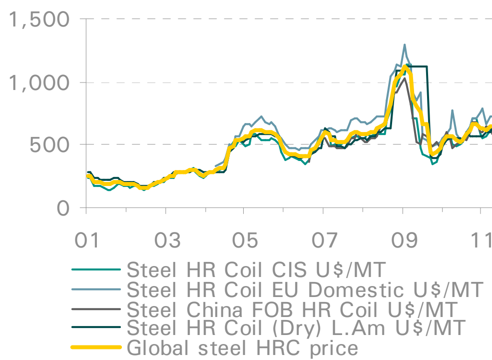
Upside to the forecast:	Downside to the forecast:
- Demand recovery in major zinc-consuming countries	- Substitution of zinc with aluminium in e.g. automotive die-casting
- Rising galvanised sheet use in China	- Mine closures, which will draw inventories down
- Increasing raw materials prices and labour costs	- Funds scaling back their interest in zinc as an asset class

Casper Burgering (ABN AMRO Sector Research)

Ferrous metals | Steel (global HRC)

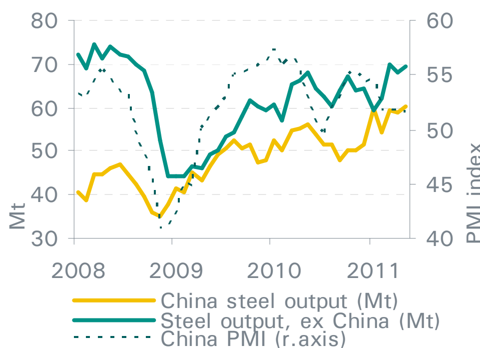
- **China increased output by 36% until May, and output in the rest of the world decreased by 9% (yoy)**
- **Short-term market conditions will worsen due to seasonal slump and government interference**
- **ABN AMRO keeps its solid long-term steel price outlook unchanged**

Historical prices Steel



Source: Thomson Reuters Datastream

Crude steel production and China PMI *(per month)*



Source: IISI, Thomson Reuters Datastream

Commodity Research price forecast *(USD/t)*

	3-month	2011	2012	2013
Steel (HRC, global)	705	720	700	665

Source: ABN AMRO

Chinese steel output on record highs

In the first five months of 2011, world crude steel output was up 6% year-on-year. In the same period, China was able to increase its steel production by 9% and reached a record high monthly production in May of 60.2Mt. In comparison to pre-crisis levels (the first five months of 2008), China managed to increase output by an impressive 36%, while output in the rest of the world decreased by 9% in that same period. Although the utilisation ratio averaged at a high of 81.9% (until May), this was still below its pre-crisis 2008 (until May) average of 89%. Since January 2011, the average global HRC price has risen non-stop, adding almost 14%.

Short term steel demand will soften

Market conditions for producers worldwide have worsened and mills must prepare themselves for some headwinds. First of all, steel demand growth is expected to soften as the market is approaching the seasonal slowdown. As a result, many mills worldwide will schedule more maintenance, which will cut steel production in July and August. In September, conditions should normalise again, when steel demand and output increase again. In China, market conditions for the coming months will be negatively affected by government interference (such as monetary tightening leading to tighter credit availability, energy efficiency schemes for mills and cancellations of subsidy programme). In the Chinese automotive sector, production will drop due to the termination of some preferential policies (tax incentives to encourage purchases) which is also softening demand further. The decision expresses the government's concern about an overheating automobile consumption.

Long-term steel fundamentals provide solid base

ABN AMRO expects the long-term market conditions to remain positive for the steel industry, although regional differences remain. Developments in the construction sector worldwide are especially important to monitor. The outlook for steel demand from key end-user sectors in China will strengthen further. Despite some short-term hurdles, ongoing urbanisation and industrialisation will continue in China at a relatively high rate which will ensure a solid outlook for manufacturing and construction (ongoing housing and infrastructure projects) until 2013 and thus for steel demand. However, due to the ending of the incentives for car purchases in China, the automotive industry will be faced with a lower pace of growth of sales, which could affect steel demand. Outside China, steel demand conditions are less favourable. In the US, we expect the steel and economic fundamentals to remain stable, while steel demand prospects for the EU remain sluggish. Slow economic recovery and uncertainty in the EU is dominating steel end-using sectors, as are fears over EU stability. On a global scale, however, prevailing steel oversupply is a structural problem, which will keep stocks at relatively high levels. ABN AMRO has cut the 2011 global steel price forecast by 2% to USD 720/t and left the 2012-2013 price forecast unchanged.

Upside to the forecast:	Downside to the forecast:
- Strong steel demand from key sectors in EU, US	- Continued oversupply of steel and limited producer discipline
- Permanent shut-down of Chinese capacity (small mills)	- Unfavourable global macro-economic developments
	- Overcapacity in steel end-using sectors

Casper Burgering (ABN AMRO Sector Research)

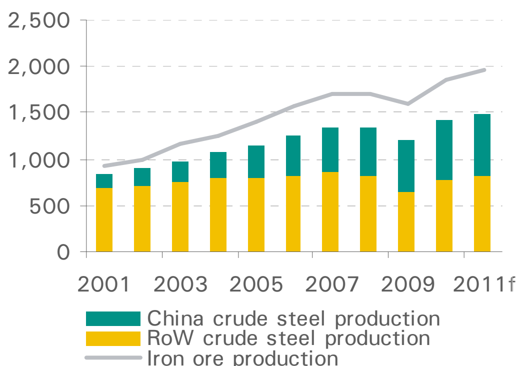
Ferrous metals | Iron ore (fines)

- **New record high of iron ore spot price in February 2011**
- **Short term prices will soften further due to (seasonal) weak demand**
- **Although prices will remain at elevated levels until 2013, supply surplus will give pressure**

Historical price Iron ore (fines)

Source: Thomson Reuters Datastream

World iron ore & steel production
('000 tonnes)



Source: IISI, UNCTAD, ABN AMRO

Commodity Research price forecast
(USD/t)

	3-month	2011	2012	2013
Iron ore (fines)	160	165	156	147

Source: ABN AMRO

High iron ore spot rates due to growth in China

In the last decade, China was the source of the iron ore industry's boom . China increased its share in seaborne iron ore trade from 14% in 2000 to 61% in 2010; it is not expected that this share will decline in the near term. Chinese iron ore imports increased in May by 2.7% year-on-year to 53.3Mt. For the first five months of 2011, China has imported thus far 283.4 Mt of iron ore (of which 95% is seaborne). Compared to the first five months of 2010, Chinese iron ore import volumes are up by 8.1%. The buoyant iron ore demand by China is reflected in the increasing iron ore spot rates since its trough of April 2009.

Seasonal slump will soften short-term prices

In January 2011, Chinese iron ore import reached a record high (69 Mt), and as a response iron ore spot prices reached a record high of USD 196/t in February 2011. However, the market was unable to maintain this high level. Iron ore prices have softened further since this peak, mainly due to abundant supply and weaker demand. As the market is now entering the summer period, global steel demand is usually slow. In the meantime, iron ore output will remain steady, which should affect prices. With relatively less iron ore demand over the next couple of months, iron ore prices will soften further.

Long term prices will ease, but stay at elevated levels

Beyond 2011, we expect iron ore demand in developed countries (such as Japan, US and EU) to grow moderately, while solid growth prospects will be accomplished in the developing world. Given its ongoing urbanisation and industrialisation, and thus greater hunger for iron ore, we believe that China will remain a dominant stakeholder in the iron ore market for years to come. The current level of steel use per capita in China indicates that there is still room for further improvement; we also expect strong growth in steel use for infrastructural development. Strong demand for steel, and thus for iron ore, will remain buoyant. To feed its domestic steel mills with good quality raw materials, high volumes of imported iron ore are needed. Given the lower grade domestic iron ore supply, large Chinese steelmakers have already indicated that they will continue to use higher quality imported iron ore for years to come which will keep iron ore prices at relatively high levels. However, like many ferrous and non-ferrous industries, the iron ore industry will be faced with further challenges, uncertainty and more frequent shocks. Not only natural factors (with flooding, heavy rainfalls), but also man-made disruptions (such as strikes, government regulations, economic factors) will impact the iron ore industry. Additional supply from new mining projects until 2013 will push the iron ore market into a small surplus, which will put some pressure on spot prices. But under the circumstances that steel demand will stay solid, we expect iron ore prices to gradually ease between 2011-2013.

Upside to the forecast:	Downside to the forecast:
- Infrastructural problems, unfavourable weather conditions	- Addition of new mining projects leading to surplus
- Strong increase in (real) iron ore demand	- Unfavourable macro-economic developments
- Re-stocking of iron ore	- Shut-down of steel capacity (small mills in China)

Casper Burgering (ABN AMRO Sector Research)

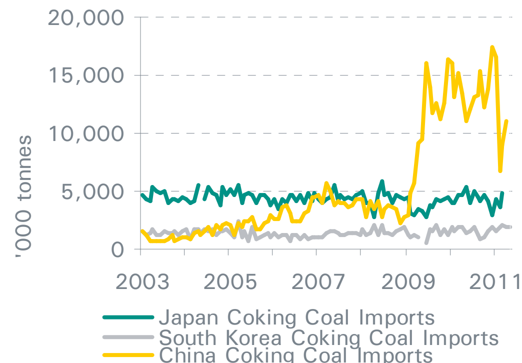
Ferrous metals | Hard coking coal

- **Supply difficulties increased market tightness, pushing coking coal prices up**
- **Short-term, we expect that this market tightness will stay on elevated levels**
- **Supply constraints will dominate the market for the foreseeable future**

Historical price Hard coking coal

Source: Metal Bulletin, Thomson Reuters Datastream

Regional hard coking coal import
('000 tonnes)



Source: Clarksons SIN

Commodity Research price forecast
(USD/t)

	3-month	2011	2012	2013
Hard coking coal	270	280	265	235

Source: ABN AMRO

Natural disasters dominates market

Coal availability in early 2011 was a problem when Australia declared *force majeure* on deliveries from Australia's Queensland coal mines, due to the severe flooding. As a result, Chinese coking coal import volume plummeted by almost 60% month-on-month in February 2011. Other major coal-exporting countries were not able to fill the supply gap, resulting in coking coal shortages. Hard coking coal prices from Australia reacted immediately, with a strong price increase. Although coking coal export volumes from Australia recovered quickly in March and April, they still have not reached their pre-flooding level and price are still relatively high.

High short-term prices levels

China is the biggest consumer of coking coal. For over 60% of its imported coking coal, China depends on deliveries from Australia and Mongolia. However, major bottle-necks in these two countries impacted coking coal supplies and have tightened market conditions. Due to flooding in Australia's Queensland, supply decreased (23% less in the first 4 months), while in Mongolia, poor infrastructure and transportation conditions have delayed many deliveries; this in turn causes supply shortages, which then increases market tightness significantly. We do not expect conditions to improve much in the short-term, which will keep prices high for the next three months. When Australia manages to increase output again and recover export volumes to pre-flooding levels, the price of coking coal will soften.

Supply constraints will keep long term prices high

The Australian coking coal price averaged USD 306/t until the end of June 2011. For the second half of 2011, we expect prices to ease further, bringing the year average coking coal price back to USD 285/t. For the coming years, the market for good-quality coking coal remains tight. Although new coal supply is expected to enter the market between 2011-2013, infrastructural problems are a key challenge for these projects. Steel mills from China will continue to be big coking coal consumers. Mongolia has become the dominant coking coal supplier to China, to the detriment of Australia share of coking coal into China. Because of its domestically lower-quality coal supplies and relatively costly mining operations, China will remain a dominant factor and a net importer on the international coking coal market, with a consistent volume of imported good-quality coking coal. Other emerging regions will also enter the coking coal market. India, for example, will witness a surge in steel demand, due to stronger growth in urban areas. Through this, coking coal imports into India will witness a considerable rise in the coming years. The tight market fundamentals will support high prices. The high coking coal prices could, however, push steel mills to switch to cheaper (low-quality) alternatives, such as PCI (Pulverised Coal Injections) and semi-soft materials.

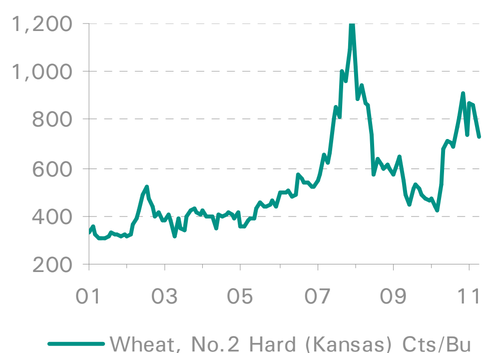
Upside to the forecast:	Downside to the forecast:
- Supply problems prevailing in major coal supplying countries	- Additional coking coal capacity leading to a surplus
- Other coal supply difficulties (strikes, export limits, etc.)	- Steel mills switching to (cheaper) alternatives
- Coal stockpiling strategies by governments	- Unexpected decrease of Chinese coking coal import

Thijs Pons (ABN AMRO Sector Research)

Agriculturals | Wheat

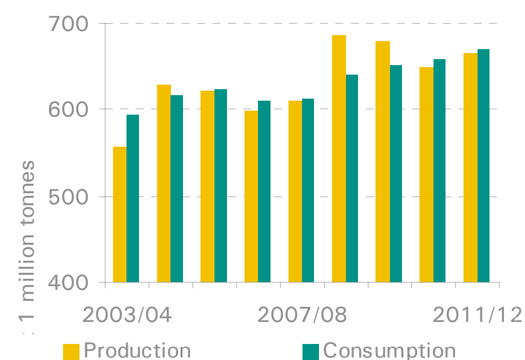
- **In 2011/2012, corn will support wheat**
- **Russia is back on the market again**
- **Near-term weather conditions remain critical**

Historical price Wheat



Source: Thomson Reuters Datastream

Wheat production and consumption



Source: IGC

Commodity Research price forecast
(Cts/bu)

	3-month	2011	2012	2013
Wheat	650	775	-	-

Source: ABN AMRO

Russian export ban in 2010/2011

In 2010/2011, global wheat production decreased by 4.2% to 650.2 million tonnes; that said, this crop is still considered to be the third-largest in history. The fall in production in the main producing countries is attributable to the weather conditions like the drought in Russia and the Black Sea region and heavy rainfall in Canada. Russian wheat production fell by 32.7%. Due to concerns about wheat availability, Russia set an export ban in August 2010, which was subsequently lifted on July 1st 2011. EU production has decreased by 2.5%, while US production remains virtually unchanged. Production in Australia and Argentina has been boosted. In 2010/2011, global wheat consumption increased by 1.2%, to 659.6 million tonnes. Carryover stocks declined by 9.3 million tonnes to 189.3 million tonnes, equal to 104 days' consumption. Almost one-third of global stocks is located in China and will not be available on the world market. The production deficit, declining and low global stocks and the Russian export ban supported high wheat prices in 2010/2011.

Closing stocks for 2011/2012 are projected to decrease

In 2011/2012, wheat production is forecast to rise to 666.2 million tonnes, an increase of 2.5%. In the EU, production will decline by 1.4% due to extremely dry weather in the spring. Despite an increasing wheat area, production in the US will decrease by 7.7% due to poor weather. Russian wheat production will rebound to 54.0 million tonnes (+30%), but below 2009/2010 levels. Winter wheat plantings have declined due to the drought, but the spring planting area has increased. Long-term, production in Russia will increase due to the availability of arable land, more inputs and better seed. In China, rains ended the drought in the northern growing areas, meaning that production will be virtually unchanged. As regards wheat for human consumption demand will grow modestly, fuelled by a growing population, demographic changes and continued economic growth. Wheat's use for animal feed will grow due to corn's tight market supply, the increasing demand for livestock feed and the use of a greater proportion of wheat in feed (due to high corn prices). Industrial use of wheat is increasing due to the expansion of the renewable energy sector. Despite high wheat prices, global consumption is forecast to grow by 1.6%, to 670.4 million tonnes. Reviewing the supply/demand ratio, global wheat stocks will decrease slightly. Wheat stocks are still low. Russia has returned to the export market after lifting its export ban on wheat. In Q3 2011, wheat prices will move sideways and stay at historically high levels due to the upward trend in demand and low stock levels.

Upside to the forecast:	Downside to the forecast:
- Production risks due to adverse weather in production areas - Strong wheat feed demand in the wheat to corn substitution	- Impact of political uncertainty in Middle East and North Africa region - Pending Russian export availability

Thijs Pons (ABN AMRO Sector Research)

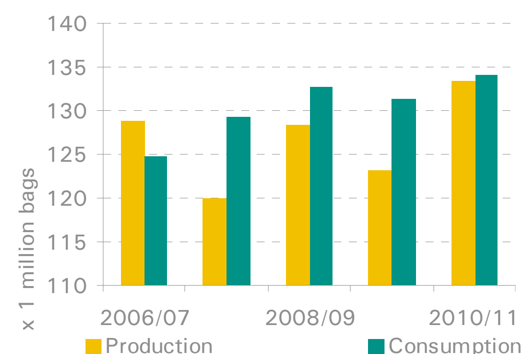
Agriculturals | Coffee

- **Production deficit since 2007/2008**
- **No reconstitution of stocks which are at historically low levels**
- **Coffee prices are high due to market fundamentals**

Historical price Coffee

Source: Thomson Reuters Datastream

Coffee: production and consumption



Commodity Research price forecast

(Cts/lb)

	3-month	2011	2012	2013
Coffee	220	220	-	-

Source: ABN AMRO

Declining stocks due to production deficit

In 2009/2010, global coffee production declined by 4.1% due to adverse weather conditions in the main coffee-growing countries and increasing production costs. The decrease in global production is attributable to the decline of Arabicas. Robusta production remains unchanged. In 2009/2010, global coffee consumption decreased due to the global economic crisis. Long-term, coffee consumption's annual growth rate is 2.4%. The growing global consumption is mainly attributable to increasing consumption in producing countries particularly Brazil, Vietnam and Ethiopia and in other Emerging Markets. Coffee consumption in traditional importing countries is growing more slowly. Global stocks declined due to the 7.8 million bag production deficit. In both exporting and importing countries, stocks fell to a historically low level. The production deficit and low world stocks support the high price levels.

Market fundamentals favour firm prices

In 2010/2011, forecasts for global production are for 133.3 million bags, an increase of 8.2%. Of the leading coffee countries, only Indonesian coffee production is falling (-22.2%) due to severe weather conditions. In the current coffee year, global production is benefitting from good weather conditions, improving farm husbandry and a greater use of fertilizers. The greatest production increase will be in Arabicas (+13.9%), while Robusta production will be virtually unchanged. Global consumption remains buoyant, with an increasing consumption in exporting countries and Emerging Markets and a modest growth in the more mature markets. In 2010/2011, global coffee consumption is estimated to grow by 2.1%, i.e. almost equal to the annual long-term growth rate. Despite the large world production, there is still a production deficit due to growing consumption rates. Rebuilding stocks is not yet possible. In 2011, the tight market situation with diminished global stocks is supporting high coffee prices. Production prospects are mixed for 2011/2012: Brazilian production will decline by 9.5% because this crop year is an off year in the biennial Arabica production cycle. In Vietnam and Colombia, production will increase thanks to favourable weather. Attractive prices for growers will also stimulate production growth. As a result, forecasts for 2011/2012 global production are for 130 million bags, a decline of 2.5%. Consumption is growing at a stable rate despite the firmness in coffee prices. In 2011/2012, global stocks will decline again. Due to the tight market situation, coffee prices will stay high. Long-term, many countries are planning to expand production, either by rejuvenating plantations or by opening new areas. The market will return to oversupply, with a downward pressure on coffee prices.

Upside to the forecast:	**Downside to the forecast:**
- Coffee production is sensitive to weather conditions - Frost damage in the Brazilian winter - Long-term, bad farm maintenance	- Long-term, increasing global oversupply and rising stocks

Thijs Pons (ABN AMRO Sector Research)

Agriculturals | Cocoa

- **Global production at all-time high in 2010/2011**
- **Global grindings are growing by 3.1%**
- **Prices will decline due to market fundamentals**

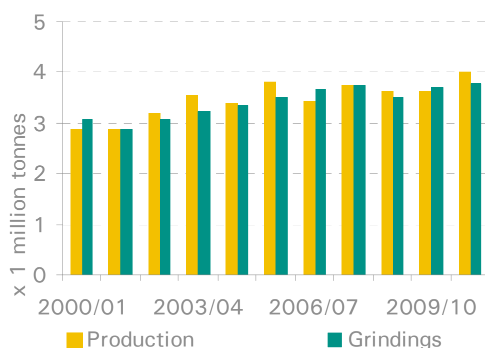
Historical price Cocoa

Source: Thomson Reuters Datastream

Production deficit in 2009/2010

In 2009/2010, global production increased by 0.4% to 3.63 million tonnes. Production growth is small due to relatively unfavourable weather conditions in the main cocoa-growing countries. In several of the main producing countries, new farms with high-yield trees came into production. Production fell in Ghana, Nigeria and Cameroon, while production increased in the Ivory Coast, Indonesia and Ecuador. In 2009/2010, global grindings increased by 5.3% to 3.68 million tonnes thanks to re-stocking and rising demand. The producing countries' market share in global grindings is also rising. About 41.1% of world grindings are processed at origin. The production deficit of 89,000 tonnes will bring the end-of-season stocks to 1,629,000 tonnes, equivalent to 44.2% of world grindings. In 2009/2010, the major factors influencing cocoa prices were concerns about supplies in the Ivory Coast and production deficits.

Cocoa beans production and consumption



Source: ICCO

Cocoa exports from Ivory Coast restarted

Prospects for production in 2010/2011 remain good. Global production will increase as a result of excellent weather conditions across the West African cocoa belt, improving farm husbandry, a greater use of fertilizers and more effective measures to combat disease. Farm maintenance has improved as farmers have had higher cocoa prices. Production will increase mainly in Ghana, the Ivory Coast and Brazil, while production in Indonesia is expected to decline. Ghana, the world's second largest cocoa producer, is the main contributor (+51.9%) to the increasing production; its increasing output is also being aided by smuggling from the Ivory Coast. Forecasts for 2010/2011 global production are for 4.025 million tonnes, an increase of 10.9%. Global grindings are growing moderately by 3.1%, to 3.798 million tonnes. Long-term, grindings at origin are increasing due to the installation of grinding facilities in cocoa bean-producing countries. In the current cocoa year, grindings in the Ivory Coast will decline due to the political crisis. Grindings in Europe rose to compensate for the lost volume in the Ivory Coast. In the EU, re-stocking is complete. In the coming months, grindings in the EU will slow down. The Ivory Coast's export ban has been lifted after a halt of three months and EU sanctions on the country have also been abolished. Cocoa exports from Ivory Coast started up again in May. Forecasts for the 2010/2011 crop and grindings will give a supply surplus of 187,000 tonnes. The end-of-season stocks will rise to 1.816 million tonnes, equal to 47.8% of world grindings. Given market fundamentals, cocoa prices are expected to decrease.

Commodity Research price forecast
(USD/t)

	3-month	2011	2012	2013
Cocoa	2,900	2,900	-	-

Source: ABN AMRO

Upside to the forecast:	**Downside to the forecast:**
- Cocoa production is highly sensitive to weather conditions - Uncertainty about quality of cocoa stored in the Ivory Coast - Long-term, bad farm maintenance	- Global all-time record crops - Increasing global oversupply

Sien Tennekes (ABN AMRO Sector Research)

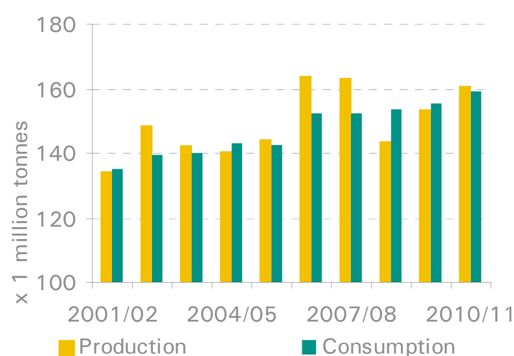
Agriculturals | Sugar

- **Favourable weather conditions induce higher production in 2010/2011**
- **Global sugar consumption is growing**
- **Sugar price is very volatile due to tight global inventories**

Historical price Sugar

Source: Thomson Reuters Datastream

Sugar production and consumption



Source: USDA

Commodity Research price forecast

(Cts/lb)

	3-month	2011	2012	2013
Sugar	26	26	-	-

Source: ABN AMRO

Concerns on Brazil

After a disappointing crop in 2008/2009, production in 2009/2010 rebounded. However, the increase in production has not been enough to meet consumption and for the second year in a row now, consumption exceeded production. As result, world stocks declined and prices were subjected to upward pressure. The high sugar prices and weak global economy dampened global sugar consumption growth to 1% in 2009/2010, well below the long-term average. The global economic slowdown has hampered indirect use, sugar's largest outlet. Sugar consumption growth in emerging countries, like India and China, is higher than in developed countries like the EU and the US. Although limited world crop recovery is expected in 2010/2011, prices remained high in the early months of 2011. A weak dollar, low interest rates and increased interest from hedge funds and other speculators spurred sugar prices in early 2011. In March, prices started declining due to India's decision to start exporting, larger-than-expected crops in Thailand as well as the impending new marketing year in Brazil. In the last month, concerns about output from the world's top producer Brazil falling short of production expectations due to lower yields pushed prices upwards again.

Tight market situation

Higher yields, thanks to favourable weather conditions, induced higher production in 2010/2011. The forecasts for world sugar production in 2010/2011 are for 160.9 million tonnes (raw value), an increase of 4.7%. One of the main sugar-producing countries, India, has an important share in this crop recovery: Production in India recovered faster than expected after two consecutive years of weak monsoon rains. In Brazil, the world's biggest sugar producer, growth in sugar production is partly driven by output increases due to the switch from sugar cane used for ethanol to sugar, encouraged by higher sugar prices. Production in the 2011/2012 harvesting season in Brazil has been lagging behind because of a slow start to the harvest and hindered crop development due to dry weather in late 2010. This weaker-than-expected harvest provided upward pressure on both ethanol and sugar prices. Last week UNICA, the Brazilian cane industry association, revised its 2011/2012 forecasts downwards. On the demand side, global sugar consumption continues to grow at a rate below long-term averages due to high sugar prices. On the long-term, global consumption growth is fuelled by a growing population, economic growth, continuing urbanisation and the growing processed food and beverage sectors. However, the market is still very volatile. With the current tight global inventories, a disappointing production could lead to materially higher prices, given inadequate buffers provided by nearly used-up inventories. Long-term, global production is expected to overtake demand and stocks will rise. In Q3 2011, average sugar prices are expected to stay at current levels.

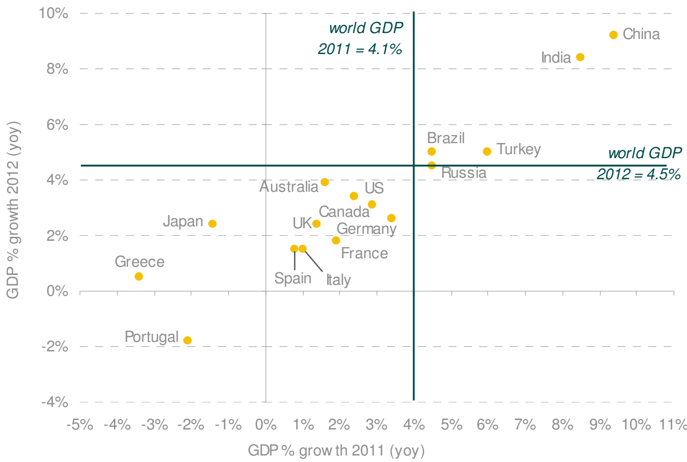
Upside to the forecast:	Downside to the forecast:
- Weather-related production risks in big production areas - Increasing demand for ethanol in Brazil - Lowering of export quota in India	- Lower demand for biofuels

Macro-economic data | Leading indicators supporting commodity price forecasts

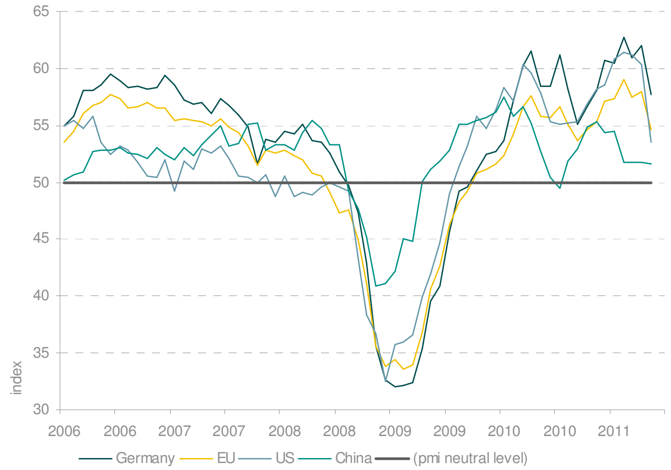
Macro-economic forecasts ABN AMRO Group Economics | Macro and Emerging Markets Research:

	GDP growth (% y.o.y.)				Inflation (CPI, % y.o.y. avg)				GDP per cap USD
	2009	2010	2011	2012	2009	2010	2011	2012	2010
US	-2.6%	2.9%	2.4%	3.4%	-0.3%	1.7%	3.1%	2.1%	47,284
China	9.2%	10.3%	9.4%	9.2%	-0.7%	3.2%	4.5%	3.5%	7,519
Japan	-6.2%	4.0%	-1.4%	2.4%	-1.3%	-0.7%	0.4%	0.7%	33,805
EU	-4.1%	1.7%	1.8%	1.7%	0.3%	1.6%	2.8%	1.8%	32,900
UK	-4.9%	1.3%	1.4%	2.4%	2.2%	3.3%	4.4%	2.6%	34,920
Germany	-4.9%	3.5%	3.4%	2.5%	0.4%	1.1%	2.5%	1.8%	36,033
World	**-0.4%**	**5.0%**	**4.1%**	**4.5%**	**2.3%**	**3.6%**	**4.4%**	**3.5%**	**10,886**

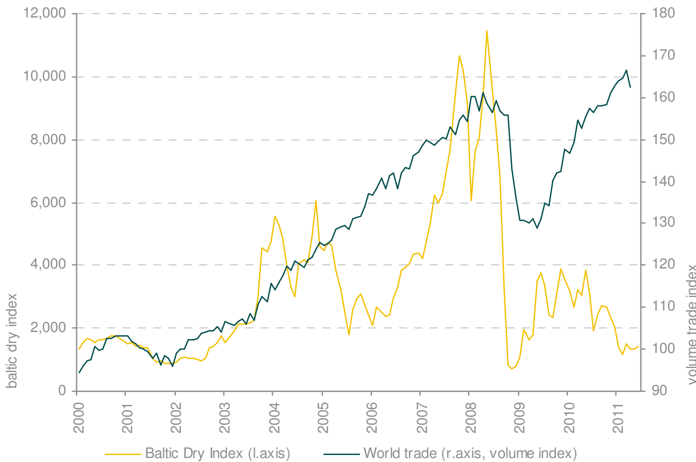
GDP forecast developed and developing countries



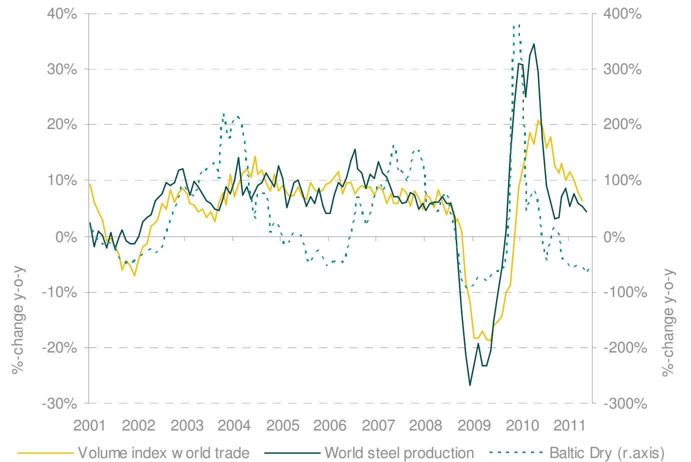
Regional manufacturing PMI



Baltic Dry and World trade volume

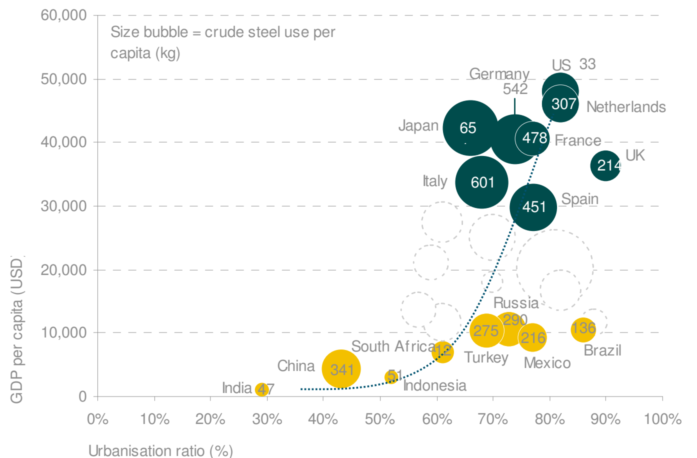


World steel production, trade and freight rates



China fixed asset investments and construction projects

Urbanisation ratio and GDP per capita per country 2010



Consulted sources for this publication: Economic forecasts, insights and publications from ABN AMRO | Group Economics, Brookhunt, Metal Bulletin, CRU, Commodities Now, Mining Journal, Coaltrans, Bloomberg, IISI, ISSB, NBS, IGC, IEA, Energy Intelligence, ICCO, ICO, USDA, China Mining, Clarkson Research Services, ABARE, AME, Thomson Reuters Datastream, Worldbank.

Contributors

Commodity Research is a joint venture between ABN AMRO Group Economics | Sector & Commodity Research and ABN AMRO Strategy & Research Private Banking. Analysts are part of a larger ABN AMRO Research Group, with 60 experts worldwide who are based in Amsterdam, Geneva, Zurich, Frankfurt, Paris, Singapore and Hong Kong.

Research & Strategy Private Banking:

Contact information ABN AMRO | Research & Strategy Private Banking:			
	Primary area of expertise:	Phone:	E-mail:
Group mail box			commodity.research@nl.abnamro.com
Research:			
- Georgette Boele	Head FX & Commodity research	+41 228 197 631	georgette.boele@ch.abnamro.com
- Hans van Cleef	Analyst FX & Commodity research	+31 20 343 88 43	hans.van.cleef@nl.abnamro.com
Technical analysis:			
- Michael Nabarro	Head Technical analysis	+31 20 628 20 61	michael.nabarro@nl.abnamro.com
- Aad Hoogervorst	Senior Technical Analyst	+31 20 628 32 28	aad.hoogervorst@nl.abnamro.com
- Demis Bril	Senior Technical Analyst	+31 20 629 20 22	demis.bril@nl.abnamro.com

Group Economics:

Contact information ABN AMRO | Group Economics:			
	Primary area of expertise:	Phone:	E-mail:
Sector & Commodity Research:			
- Jacques van de Wal	Head Sector & Commodity Research	+31 20 628 04 99	jacques.van.de.wal@nl.abnamro.com
- Casper Burgering	Metals	+31 20 383 26 93	casper.burgering@nl.abnamro.com
- Thijs Pons	Soft commodities & food	+31 20 628 64 37	thijs.pons@nl.abnamro.com
- Tim Boon von Ochssée	Energy (oil, gas)	+31 20 343 46 79	tim.ochssee@nl.abnamro.com
- Sien Tennekes	Soft commodities & food	+31 20 628 04 97	sien.tennekes@nl.abnamro.com
- Theo de Kort	Information analyst	+31 20 628 04 89	theo.de.kort@nl.abnamro.com
Macro Research:			
- Nick Kounis (Head)	Global economy	+31 20 343 56 16	nick.kounis@nl.abnamro.com

More information:

Websites Group Economics	
- Internet Private Banking	www.abnamroprivatebanking.com
- Internet Group Economics (Macro Research):	www.abnamro.nl/nl/zakelijk/service/publicaties/economisch_bureau.html
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