

Industrial Metals Monitor

May 2013

Group Economics

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Metals in macro context...

The global whole-economy PMI edged up to 53.1 in March from 52.9 in February, which left it heading in the right direction but still below the long-term average of the series. World trade was up by 2.5% annualised in the three months to January, putting it well below the long-term average of 6%. However, the PMI's manufacturing export orders index improved in February and March, suggesting that trade flows are gradually firming. The eurozone should eventually get a lift from the pick-up in world trade growth and reduced uncertainty. The improvement of some economies (China and the US) is leading to an increase in demand for cyclical commodities (such as base metals). Asian economies have been showing a mixed picture and there are increasing downside risks for the region. Fortunately, China – world biggest metal consuming country – is showing somewhat stronger dynamics. Trends in investor sentiment and money flows between asset classes have become more important. In general, slower economic growth prospects gives investors cold feet. Therefore, the investment appetite for cyclical industrial metals has decreased somewhat, especially due to slower Chinese growth in Q1 and worries about its future development.

Aluminium - Demand in good shape, but oversupply remains

Aluminium prices decreased by 11% since the start of 2013. In the same time period, stocks at London Metal Exchange (LME) warehouses increased only slightly, by 0.4%, thus maintaining their relatively high level. Oversupply will remain a heavy burden for the industry and this limits any strong rebound in market conditions ... [More on page 2](#)

Copper - Fundamentally relatively sound

Mainly due to disappointing economic data from major economies, the copper price decreased by 9% since the start of 2013. Prices reacted swiftly to worsening manufacturing and other economic data from the US and China. Stocks at London Metal Exchange (LME) warehouses increased by 95% since the start of 2013, but continue to be relatively low ... [More on page 3](#)

Steel - Battle against overcapacity persists

The global average steel price (HRC) decreased by 2% since the start of 2013. The road ahead remains challenging and overcapacity is the key issue to address. Demand in Europe is weak and steel giants with operations in the region took large losses in Q1. In other regions, the economic outlook is more buoyant, but still fragile ... [More on page 5](#)

Steel raw materials - Abundant supply to meet demand

Both iron ore and coking coal prices decreased since the start of 2013 by 6% and 9%, respectively. Demand is relatively weak and supply is abundant, especially for iron ore. Downbeat market sentiment and sluggish end-user steel demand continues to hamper raw materials markets. In addition, steel oversupply will remain a protracted burden ... [More on page 6](#)

Views on the **Chinese economy** and perspectives on **Metal End Users** - [Turn to page 7-9](#)

	Base metals				Ferrous metals		
	Aluminium	Copper	Nickel	Zinc	Steel (HRC)	Iron ore	Coking coal
Spot price	\$1,850	\$7,445	\$15,106	\$1,848	\$562	\$125	\$142
Avg month price	\$1,862	\$7,234	\$15,673	\$1,856	\$591	\$139	\$150
Avg year price (ytd)	\$1,943	\$7,669	\$16,624	\$1,959	\$598	\$144	\$158
ABN AMRO price forecast Q2 (exit)	\$1,950	\$7,650	\$16,000	\$1,950	\$545	\$118	\$135
ABN AMRO 2013 forecast (avg.)	\$2,000	\$7,950	\$17,000	\$2,050	\$550	\$125	\$140

All prices in USD per tonne

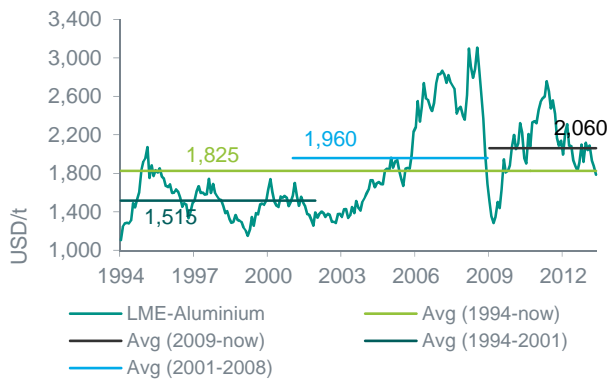
Aluminium - Oversupply is key issue

Market and fundamental developments

Aluminium producer Alcoa announced in early May that it will cut its total smelting capacity by 11% over the coming 15 months. Continuing price weakness and maintaining competitiveness are the key drivers for the cut in capacity, according to statements. However, this is not a one-off event; we have already seen this trend throughout the global aluminium sector. Other producers – such as UC Rusal, BHP Billiton and Rio Tinto - also have taken measures and have been cutting output, especially in the high-cost and inefficient operations. Besides the abundant supply and high stocks of aluminium, price weakness and downbeat demand are also key reasons for such initiatives. Energy and transportation costs form a large portion of total production costs for aluminium smelters. And therefore, areas with lower energy prices and easy access to raw materials (such as the Middle East) are popular for starting new plants, despite the trend of global production cuts. In areas with high energy costs, some smelters are government subsidised in order to keep aluminium production going and remain competitive.

China's share in the aluminium sector is very high (45% share in production and 44% share in consumption) and many stakeholders think China will expand its share even more in the coming years. The Chinese government is planning to consolidate and restructure its aluminium sector and is aiming for the top-ten smelters to account for 90% of the country's total production capacity by 2015. However, this timeframe is overambitious. According to Metal Bulletin, 63% of the smelter capacity in China is in the hands of non-government entities and this makes the government's restructuring plans very difficult to realise. In the medium term, we do not expect any significant improvements in market conditions, given the current negative state of the aluminium market fundamentals. Oversupply will remain a heavy burden for the industry and this limits any strong rebound in market conditions. In addition, LME inventories are high and represent 11-12 weeks of consumption. Meanwhile, strong demand is keeping the market from further deterioration.

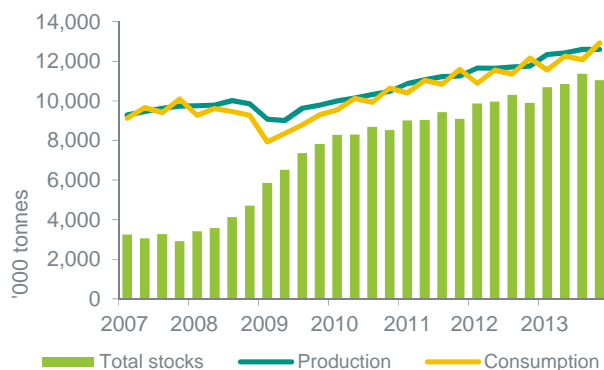
Historic price development



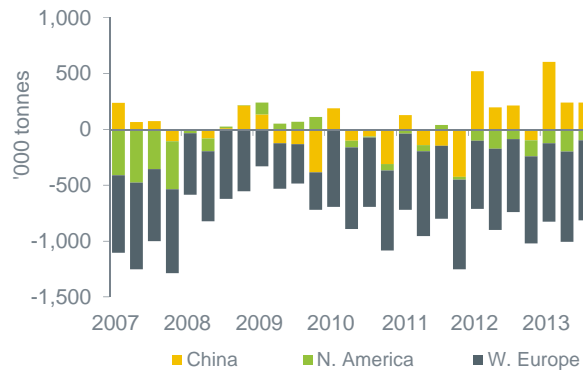
Weekly price movement



Global - Supply, demand and stocks



Regional - S/D-balance



	Spot rate	Avg month	Avg year	ABN AMRO outlook 3-m	% change against spot rate	ABN AMRO outlook 2013	% change against avg year
Aluminium price	\$1,850	\$1,862	\$1,943	\$1,950	5%	\$2,000	3%

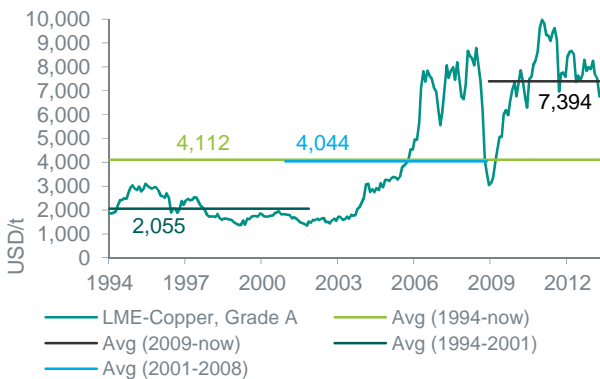
Copper - Economic data dictates price direction

Market and fundamental developments

On 1 May, copper prices reached their lowest level this year, down over 14% from 1 January. There were a number of reasons for the decline. Disappointing economic data from major economies was primary cause as well as, to a much lesser extent, fundamental changes. In addition, weaker Chinese PMI data, slowing Chinese manufacturing and disappointing economic growth figures also contributed to the decline as did the downbeat eurozone manufacturing PMI and the unexpected dip in US existing home sales in March. Copper prices started to increase again from 1 May on the back of the ECB's decision to cut interest rates as well as upbeat US jobs data. This uptick lasted until mid-May, when eurozone economic growth data was released. The eurozone remained in recession and copper prices immediately drifted downwards. Germany's economy grew slower than expected in Q1, while conditions in France deteriorated further. Meanwhile, data from the US were not encouraging; industrial production there fell by 0.5% in April

Despite the strong influence of macro-economic data on copper price developments, there were also changes in market fundamentals that gave direction to copper prices. LME stocks, which is what most worries stakeholders, have increased further. LME copper inventories have risen to a new high since July 2003. Further increases in LME copper stocks will raise concerns amongst stakeholders about oversupply and insufficient demand. But despite the increase in volume at LME warehouses in recent months, stocks are still relatively low (compared to the other base metals) and represent only 1.5 weeks of consumption. This volume of copper can easily be absorbed by the international market. Going forward, copper production will increase further during 2013 (especially in China), while consumption is expected to rise at a somewhat slower pace. This will result in a small surplus of 0.3% of consumption over 2013. Fundamentally, we believe the copper market is still sound, which justifies current price levels. On balance, we expect prices to strengthen further.

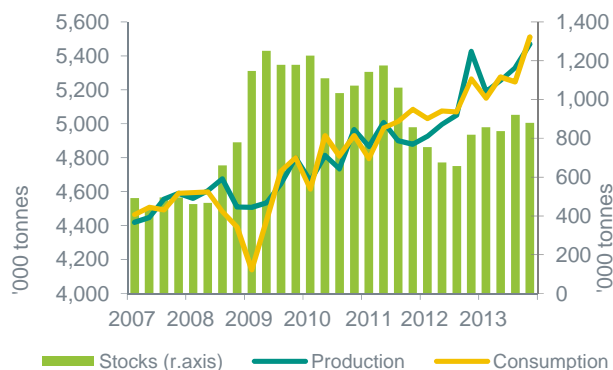
Historic price development



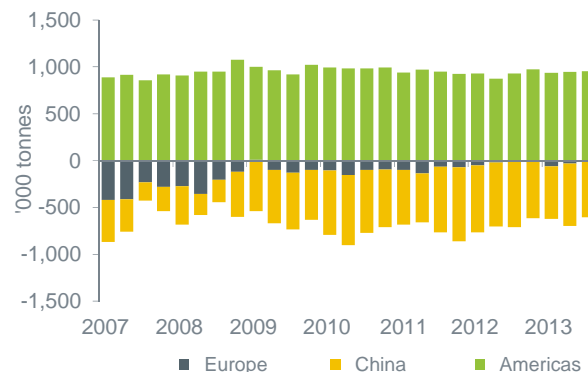
Weekly price movement



Global - Supply, demand and stocks



Regional - S/D-balance



	Spot rate	Avg month	Avg year	ABN AMRO outlook 3-m	% change against spot rate	ABN AMRO outlook 2013	% change against avg year
Copper price	\$7,445	\$7,234	\$7,669	\$7,650	3%	\$7,950	4%

Other base metals - Weak market conditions continue

Nickel - EU demand slow

Market and fundamental developments

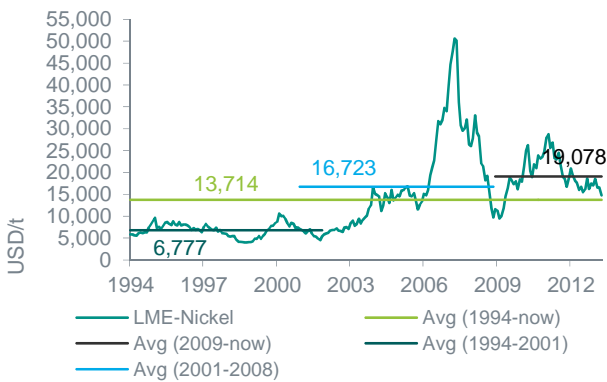
Demand for nickel is slowing – mainly due to lacklustre stainless demand – while at the same time output is increasing further, partly due to new production entering the market for realised brown- and greenfield projects. In the meantime, existing nickel producers in the sector are reducing output in response to low nickel prices. The net result is that the nickel market will remain in surplus in 2013. Demand from the stainless steel industry accounts for 65% of total nickel consumption. The economic problems weigh heavily on the European stainless sector and demand in this region has been particularly weak. In the US, stainless conditions are relatively better and a moderate growth in demand can be expected. This is also the case in China. China continues to be the driving force behind global nickel market developments. The long-term nickel outlook (until 2015) remains positive, with consumption growth outpacing production growth. Increasingly, nickel products will be used in end-markets, such as aerospace, oil & gas and the medical sector.

Zinc - Pressure from high stocks

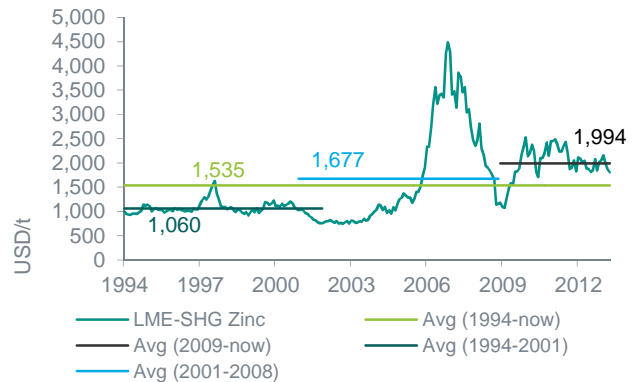
Market and fundamental developments

Fundamentally, the zinc market is not so sound. Global production volume is forecasted to outpace consumption volume, with the surplus reaching 2.3% of consumption in 2013. Stocks will remain elevated (until at least 2015) and are forecasted to reach historic highs of more than 10 weeks of consumption. This is not a positive picture. However, the market will be continuously supported by strengthening demand, especially from China. China is the world's biggest zinc consumer, with a 43% share of total zinc consumption. Currently, demand volume in China outpaces its domestic zinc output and this trend is expected to continue in the long term. Zinc prices are seen recovering from their current low level, helped by improving conditions in key markets. The construction sector is by far the most important end-using sector. Although Chinese investments in the construction sector increased by 15% y-o-y in March, the pace of growth was relatively slower. On the other hand, European construction markets will continue to be weak in 2013 due to economic uncertainty, while the US construction sector will show modest growth.

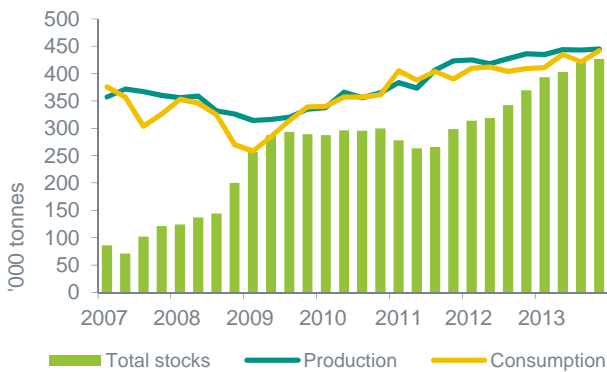
Nickel - Historic price development



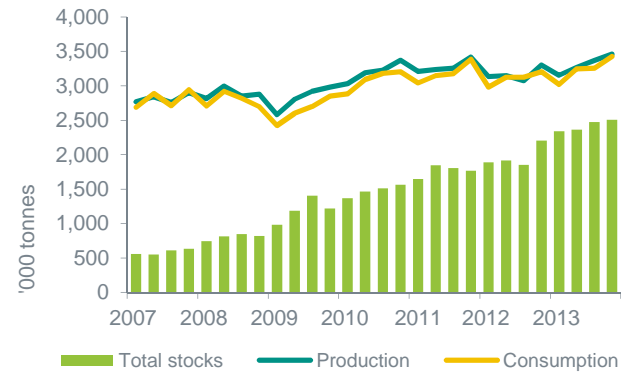
Zinc - Historic price development



Global - Nickel supply, demand and stocks



Global - Zinc supply, demand and stocks



	Spot rate	Avg month	Avg year		Spot rate	Avg month	Avg year
Nickel price	\$15,106	\$15,673	\$16,624	Zinc price	\$1,848	\$1,856	\$1,959

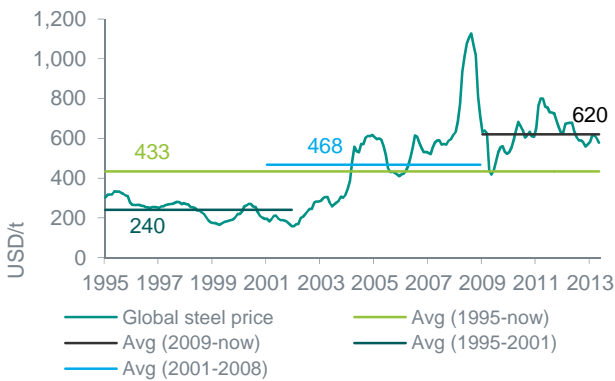
Steel - Restructuring in Europe and China

Market and fundamental developments

Headwinds will persist, market growth will soften and consolidation will get a boost as a result (especially the small mills). However, the key challenge for the global steel industry will be overcapacity. As long as this dominates the sector, companies must be prepared for pressures on price and margins. Steel mills that are vertically integrated – with iron ore, coking coal – are much more resilient than their non-vertically integrated peers. The reduction of input costs – by introducing new gas-based production processes (especially in the US) – could help the steel industry in the long term. A number of US steelmakers are already exploring opportunities to use low-cost energy (shale gas) in their production processes. Global utilisation rates are still relatively low and a high share of total capacity (20%) is still unused. And it doesn't look like the situation will change any time soon. In China, the first tentative steps have been taken to tackle overcapacity. Small inefficient mills are set to be closed, and the top-ten producers must have a market share of 60% by 2015. Concerns over steel market developments in

Europe are high. Steel giants with operations in Europe – such as ArcelorMittal, ThyssenKrupp and Tata Steel – have taken large losses in Q1. Because of weak conditions in Europe, many steel mills have taken drastic measures to curb further deterioration. In mid-May, Tata Steel announced a write-down on assets due to the economic circumstances in Europe and weak steel demand. We expect that growth in Europe will remain subdued for some years. Although market conditions are relatively better in the US, that country's steel market is also hampered by sluggishness. Soft demand, downbeat margins and overcapacity have the US steel market in their grip. However, the US car sector will continue to be one of the best-performing end-markets for the steel industry. The costs of car ownership are currently low, mainly due to lower fuel prices and low interest rates. As a result, the number of passenger car registrations increased by 3% y-o-y in the first four months of 2013. In addition, the US housing market started 2013 on a promising note, with a strong increase in sales of single-family homes.

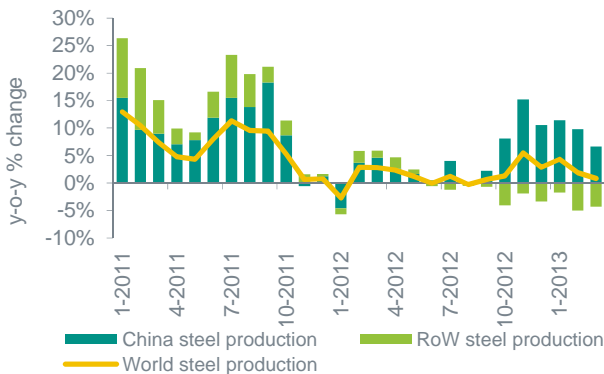
Historic price development



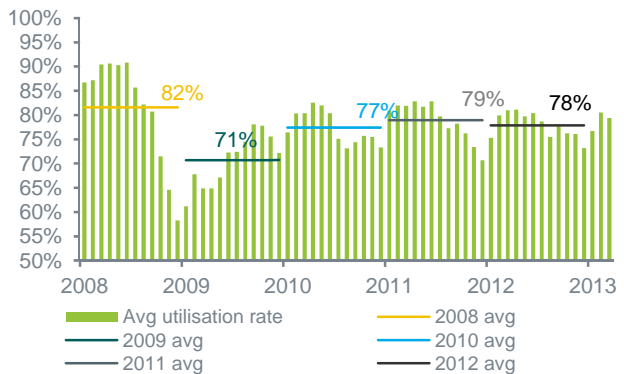
2012-2013 steel price movement



Global steel production (% change)



Global steel utilisation ratio



	Spot rate	Avg month	Avg year	ABN AMRO outlook 3-m	% change against spot rate	ABN AMRO outlook 2013	% change against avg year
Steel price	\$562	\$591	\$598	\$545	-3%	\$550	-8%

Steel raw materials - Sluggish conditions

Iron ore - Oversupply is looming

Market and fundamental developments

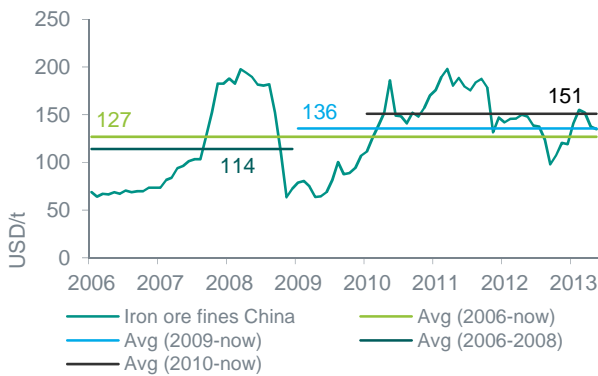
Iron ore prices decreased by more than 14% since the start of 2013 and we expect prices to soften even further. Weak steel demand and abundant availability of iron ore are the main causes of the price fall. In the first three months of 2013, global steel production increased by more than 2%, while China managed to boost its crude steel output by almost 10%. As a result, Chinese iron ore imports increased strongly on an annual basis, rising 17% in April, and were up 4% compared to March. This was also the result of stimulus plans announced by the Chinese government, which triggered some level of restocking by steel mills. Nevertheless, downbeat sentiment and sluggish end-user steel demand continues to hamper iron ore market developments. At the same time, the steel oversupply will remain a long-lasting burden that will affect market conditions for iron ore. Some initiatives to tackle this problem have already been taken by the steel sector, but it will clearly take some time before they have an effect. Until then, we do not expect any significant improvements in the global iron ore market. ABN AMRO expects iron ore prices to soften further.

Coking coal - Weak sentiment

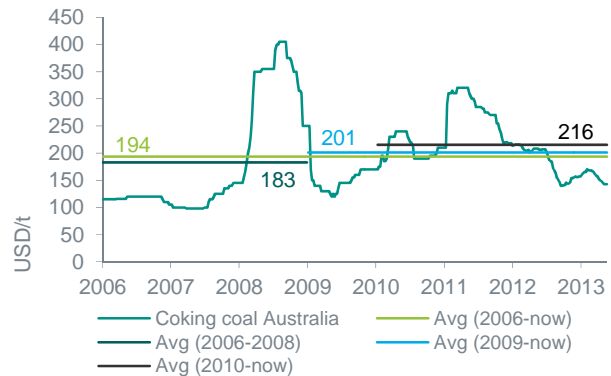
Market and fundamental developments

The coking coal price is in a downtrend. Prices have decreased non-stop since the start of February and have lost 16%. The price fall is mainly due to the uncertain economic environment and weak market conditions in the global steel industry. In addition, competition from other energy resources (such as natural gas) is pulling coal prices down further. Demand among steel mills for coking coal has decreased due to the lacklustre demand for steel (especially in Europe and China). China's imported coking coal market continued to decline in the beginning of May; sentiment was weak and buying activity from China was limited due to increased market risks and de-stocking activity by steel mills. Stakeholders are still cautious about buying too much material when prices are weakening. In addition, existing stockpiles at steel mills are sufficient to meet the current level of steel production. Going forward, prices are expected to soften further. Demand from China (the biggest coal consumer) is expected to remain weak and the coking coal supply is currently abundant. Fortunately, however, there are no imminent problems of overcapacity, as is the case in the iron ore and steel sectors.

Historic price development



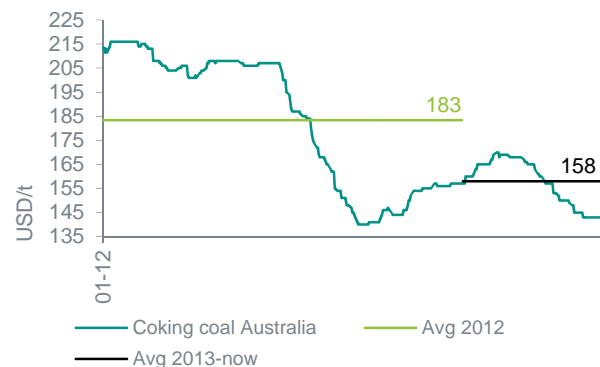
Historic price development



2012-2013 iron ore price development



2012-2013 coking coal price development



	Spot rate	Avg month	Avg year		Spot rate	Avg month	Avg year
Iron ore price	\$125	\$139	\$144	Coking coal price	\$142	\$150	\$158

Sources: Thomson Reuters Datastream, Metal Bulletin, Mining Journal, ABN AMRO

China - key factor for global metal markets

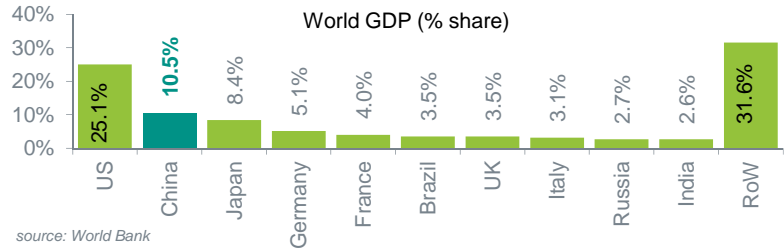
China metal balance - share of China in world metals production and consumption 2012

	Aluminium	Copper	Nickel	Zinc	Crude steel	Iron ore	Coking coal
- Production share	45%	29%	29%	38%	46%	15% **	51%
- Consumption share	44%	42%	45%	43%	51% *	65% ***	57%

* = finished steel demand; ** = converted to world high quality average; *** = of total world imports

ABN AMRO economic forecasts:

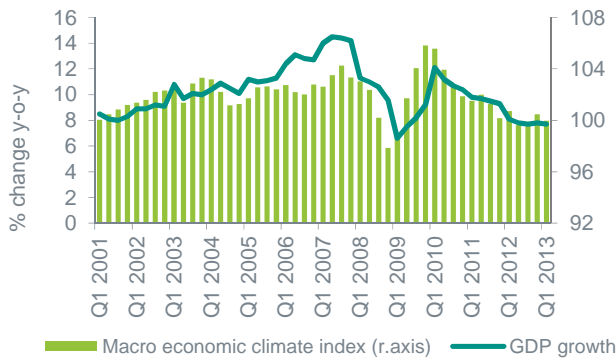
	2013	2014
- GDP	8.0%	8.0%
- Inflation	3.0%	4.1%
- Unemployment (urban)	4.3%	5.3%



Economic Update by Maritza Cabezas - Senior economist (+31203435618/maritza.cabezas@nl.abnamro.com)

During the leadership transition and after the top officials were installed, we noted a heightened zeal for reform. The reforms that are making headlines include policies to tackle corruption, regulations on shadow banking, a new vision for urbanisation, a plan to reduce inequality as well as ministerial restructurings. Many of the details have yet to be announced, but there has been some pressure to accelerate the process, both from the public and rating agencies. Meanwhile, the economy seems to be moving swiftly towards the 2013 targets announced during the National People's Congress, including GDP growth of 7.5% and inflation of 3.5% y-o-y. Supporting private consumption is a priority in the policy agenda. However, it will take several years to fully implement a suitable environment in which private consumption will lead growth, including an expansion of the coverage of the welfare system and financial reform. We think the government will continue with its stricter policies for the property market, while continuing large investments in social housing. We are cautious about the pace of China's recovery. In the first half of 2013, growth is likely to be softer than initially expected, but GDP growth should pick up in the second half. We also expect a moderate global recovery in the second half of the year, which should keep export growth at modest rates. At the same time, fixed investment in China should show a slower pace of growth than in 2012 on the back of continuous tightening to cool down the property market and increasing controls on shadow banking. We have projected GDP growth of around 8% y-o-y in 2013 and 2014.

GDP growth & macro economic climate index



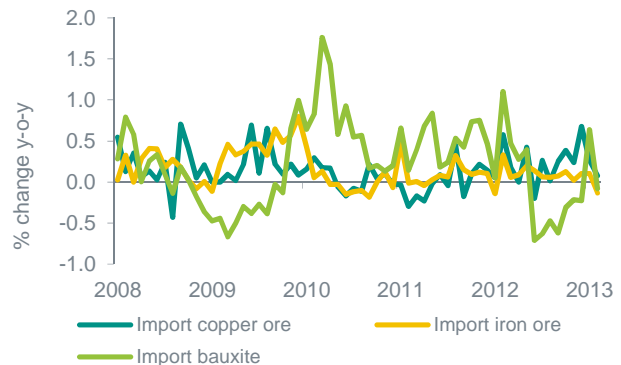
Loans by financial institutions & investments



NBS Manufacturing PMI & New orders

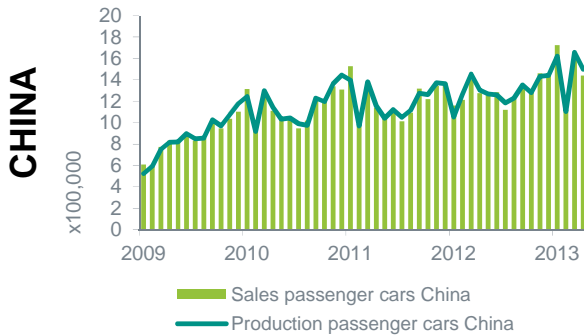


Chinese import of metal ores

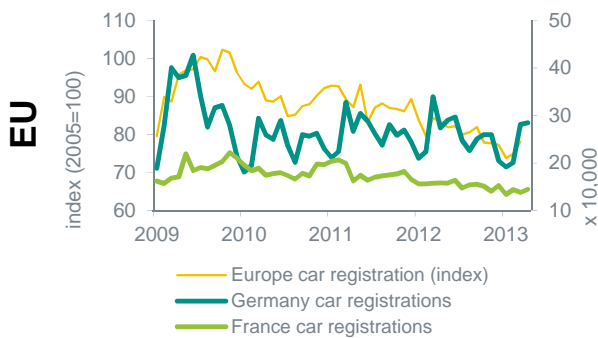


Developments in key metal end user sectors

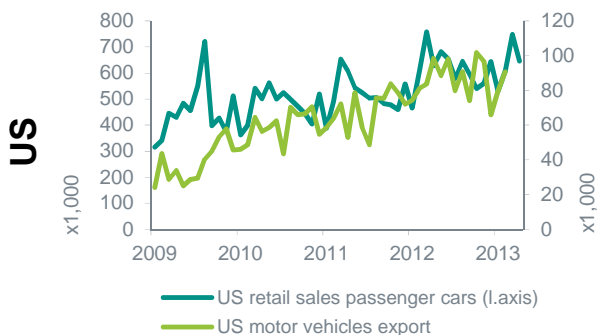
Car Manufacturing



In the first four months of 2013, 5.86 million passenger vehicles were delivered in the Chinese market. This is an increase of 16% compared to the same period in 2012. By 2030, Chinese automotive sales could surpass 30 million units per year.

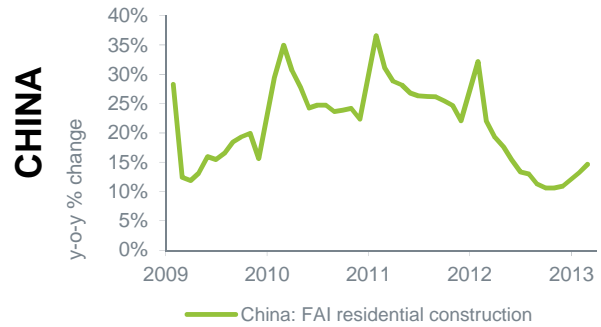


New car registrations in Europe fell by 9% y-o-y in the first quarter of 2013. Due to the bad start of 2013, earlier forecasts by industry experts (decline in sales of 5% y-o-y), will be revised. Economic stagnation and persistent uncertainty continues to depress demand in the region.

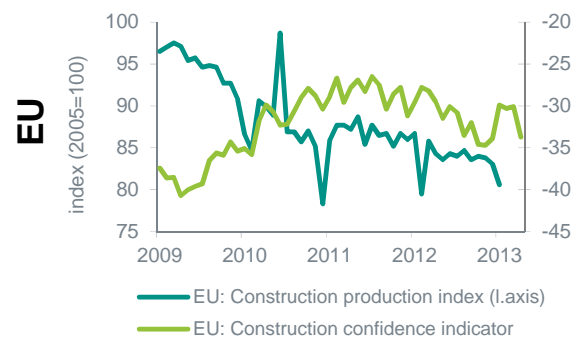


In the US, the number of passenger car registrations increased by 3% y-o-y in the first four months of 2013. The US car sector will remain one of the best-performing end-markets. Costs of ownership will decline further, mainly based on lower fuel prices and relative low interest rates.

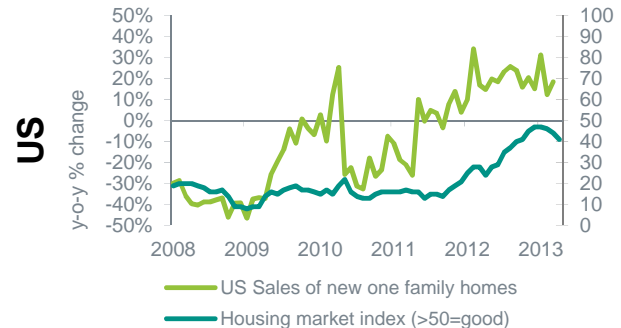
Construction



Sales of residential buildings increased further in the first quarter of 2013. Meanwhile, while investment in the construction sector grew during the quarter, the pace of growth was relatively slower. In March, investments in construction increased by 15% y-o-y.



Construction activity in Europe has decreased further. Sentiment on order books and employment expectations remains low and production has continued to slow. The EU construction markets will show persistent weakness in 2013 due to uncertainty.



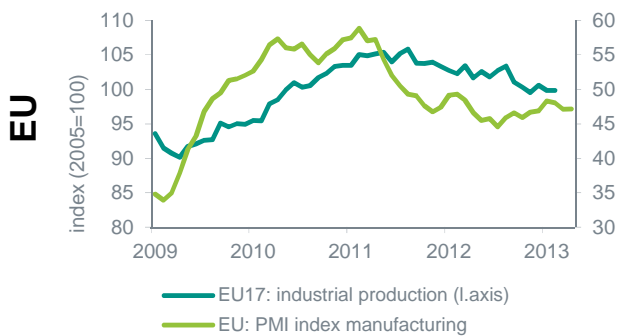
The housing market got off to a promising start in 2013. The number of single-family homes sold increased by more than 20% y-o-y in Q1 of 2013. The housing market index is below 50 points – indicating contraction – but the recent recovery shows potential.

Developments in key metal end user sectors

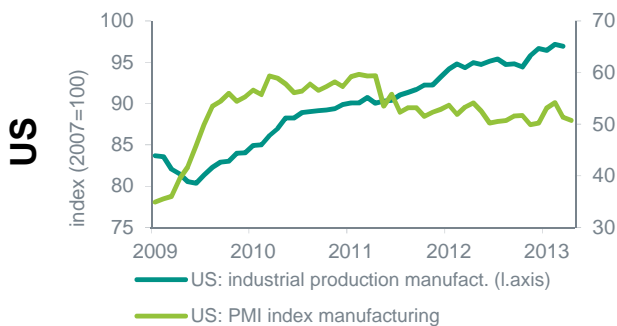
Industrial manufacturing



Industrial output in China increased by 9.3% y-o-y in April, up from 8.9% in March. Still, confidence is depressed as mainly analysts expected more buoyant output figures. For the past 12 months, the Manufacturing PMI has been hovering between 49.2 and 50.9.



With a reading of 47.2 in April, the EU Manufacturing PMI has managed to stay below the neutral 50-mark for 21 consecutive months. Both demand and general sentiment indicators remain at low levels while industrial production is expected to improve moderately in 2013.

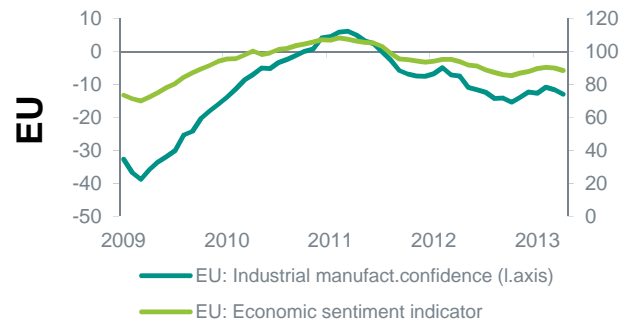


After a good start in January (53.1), the ISM manufacturing index decreased by almost 5% to April. The index currently stands at 50.7. Industrial production in the US increased further during Q1, but the index has so far failed to return to its 2007 level.

Other indicators



Fixed asset investments in urban areas slowed slightly in April to 20.6% (from 20.9% in March), with the growth propelled by infrastructure and property investment. Investment in the manufacturing sector remained relatively weak.



Sentiment in sectors such as manufacturing and construction remains weak. Across the continent, new orders for the manufacturing sector have plummeted along with sentiment and confidence. General economic confidence is not expected to return to 2011 levels any time soon.



Since 2010, growth in new orders in the manufacturing sector has been in a downtrend. The Economic Optimism Index, which tracks American opinions and outlooks on the economy, has remained below the neutral 50-mark for seven consecutive months. This indicates a negative sentiment.

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