ABN·AMRO

Metals Market Insights – Steel

ABN AMRO
Group Economics

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Low steel prices forge hot issues

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	price	% Δ since 1 January	% Δ in 3 mnths
	3-06-19		
Steel global	523	-5%	-9%
South-Europe	510	-8%	-10%
North-Europe	543	-9%	-7%
China	501	4%	-5%
US	587	-19%	-17%
Iron Ore:			
Fe 65%	115	32%	18%
Fe 63.5%	101	41%	17%
Fe 58%	86	83%	26%
Fe 52%	67	118%	49%
Coking Coal:			
Coal India	205	-4%	-3%
Coal China	197	2%	3%
Coal Russia	197	13%	14%
Scrap:			
China (6-8 mm)	377	1%	-4%
EU (no.1 scrap)	288	-12%	-14%
LME scrap	297	3%	-9%

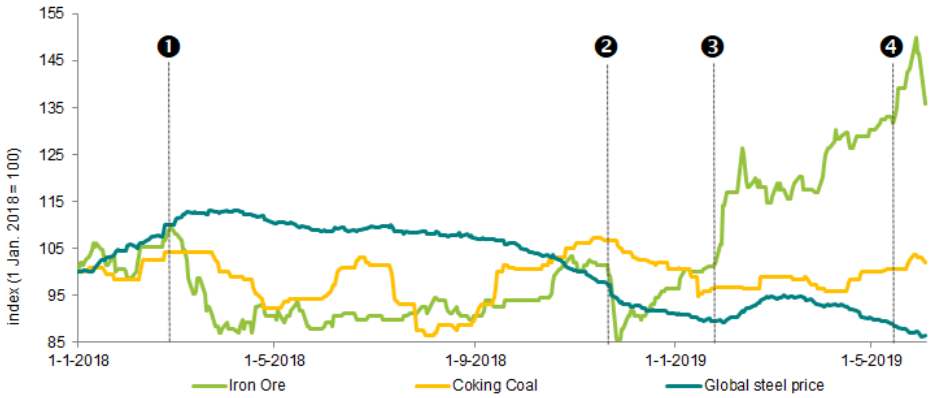
Note: all prices in USD/t

The relatively low steel prices and higher prices for iron ore and coking coal are putting pressure on the margins of many steel mills. These mills are forced to focus more on cost efficiency and one way is to purchase cheaper iron ores. However, these ores are much lower quality and processing them requires far more energy. The use of higher volumes of this type of ore will therefore have a negative impact on making the production process more sustainable.

Turning points in steel market lead to divergent price trends

Steel market dynamics have been unstable over the last year. The trade war, extreme weather conditions and a natural disaster have caused a lot of price volatility as well as quite a few problems. Since March 2018 (❶ in figure) – - when Trump unleashed a trade war with his import tariffs - the global steel price has been in a downward trend. The price

Figure 1: Steel price versus price of iron ore and coking coal



Source: Thomson Reuters Datastream

for iron ore also fell sharply due to weak sentiment in the steel market and remained relatively low until the third quarter.

The problems only increased in the fourth quarter of 2018. As a result of heavy rainfall, many mines in Australia and Brazil were flooded. Supplies fell and prices of iron ore and coking coal rose again. However, steel prices maintained their downward trend owing to overproduction and weak demand. Steel mills used their stocks of iron ore and coking coal to reduce purchasing costs. In November 2018, the price of iron ore took a dive as a result of a sharp decline in demand (❷). The price of coking coal also weakened during this period, in particular due to ample availability.

Nearly three months later, a dam burst in Brazil (❸) which suspended operations at a large iron ore mine in Vale and prompted a price revival. When Vale announced in May 2019 (❹) that the mine would not be fully operational for the next three years, the price

Trend in global steel price (Hot Rolled Coil, HRC):

	Spot price (03/06)	*Price trend in one week (in %)*	*Price trend in one month (in %)*	*Price trend in three months (in %)*	*Price volatility over last months*	*Price volatility since start 2018*	*Price volatility since 2000*
Steel HRC	**USD 523/t**	**-0.9%**	**-3.9%**	**-7.9%**	**3.9%**	**3.0%**	**4.5%**

Volatility is the difference in the highest price and lowest price over the period mentioned (on a monthly basis, moving averages)

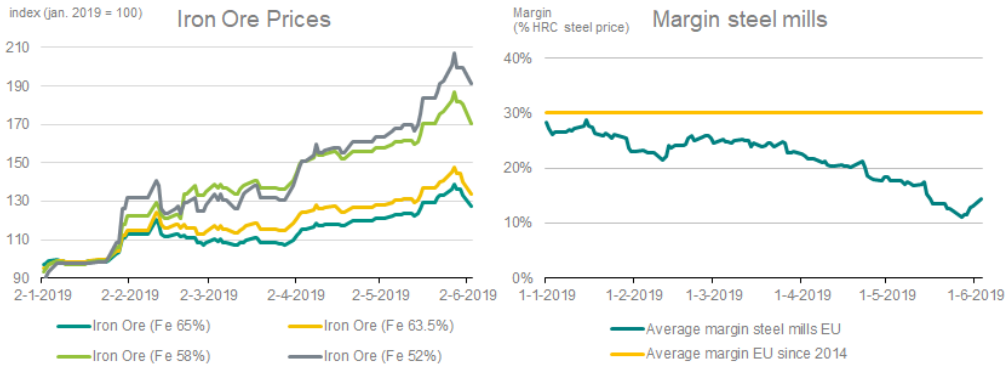
rose further, reaching historic levels. These turning points led to divergent price trends. Since January this year, the price of steel has been falling, the price of coking coal has remained virtually stable and the price of iron ore has been rising. In light of all that, the challenges for steel mills remain.

Low steel prices create a sustainability dilemma

The persistent low steel prices, in combination with the higher prices for iron ore and coking coal, has put pressure on the margins of steel mills. To ease the pressure on profitability, steel mills start by looking for cost savings. The costs of iron ore and coking coal together form over 50% of the total costs of making steel. Sourcing of cheaper raw materials is therefore attractive for mills, many of which switch to the cheaper types of iron ore. However, this entails another problem. Cheap also means lower quality and that, on balance, requires more energy in the production process which results in an increase in CO_2 emissions.

For many steel mills, this can present a dilemma: continue to meet environmental objectives (and therefore continue to use high-quality ores) or safeguard the financial health of the company (and thus continue to purchase ores of lower quality). The latter is often the case. Price trends for this year show that the price of the lower quality ore (52% and 58% iron content) has risen more sharply than the price of high-quality iron ore (63.5% and 65% iron content). Clearly, the lower quality ores are more popular.

Figure 2: Price index iron ore in various qualities and margins* steel mills



Source: Thomson Reuters Datastream, ABN AMRO Group Economics

Margin (%) = regional steel price - (costs of iron ore + costs of coking coal + costs of scrap + costs of transport + costs of energy + labour & capital costs + other costs) in relation to the steel price (via the Basic Oxygen Furnace (BOF) route); costs of labour & capital are fixed costs over time. Excl. costs of ferroalloys, fluxes, refractories and other costs.

Excessive supply in the steel market keeps prices low

The high price of iron ore and coking coal is not the only thing creating challenging conditions in the steel market. Demand for steel is currently weak and will remain so for some time to come. With the summer season approaching, activity in many end-user sectors - such as housing construction and infrastructure projects - continues to be soft. In addition, sales of passenger cars in China, the US and the EU are very disappointing. But downbeat end-user demand is often not a reason for steel mills to significantly lower the utilization rates. This means that structural oversupply will remain high, which will contribute to lower steel prices.

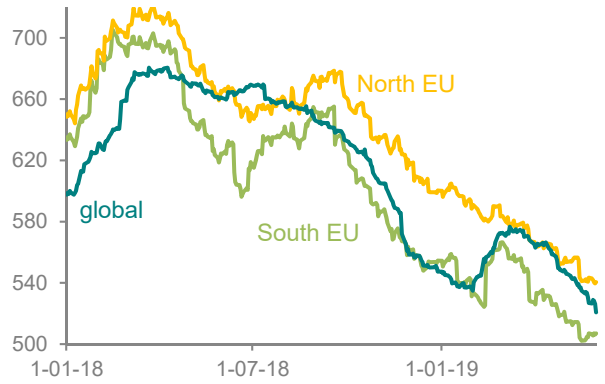
Also, the trade dispute between China and the US also has a high impact on the steel market, particularly in China. Business activity growth in heavy industry in China is slowing

and this is dampening sentiment. Nevertheless, a price increase is still plausible. If it becomes clear that a trade agreement between China and the US is out of reach, there is a good chance that the Chinese government – and other central banks and governments – will stimulate the economy. In addition, meaningful capacity reductions in China and Europe can bring the global steel market more into balance and ensure a price recovery.

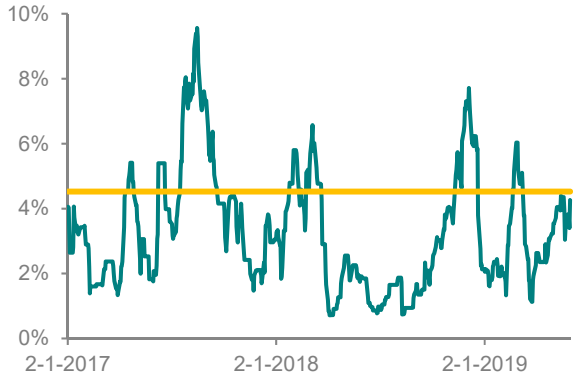
The efforts of the European Commission (EC) to protect the European steel market against dumping of cheap foreign steel seem to be bearing fruit. European steel imports have fallen in recent months. However, this has not yet led to price recovery. This is mainly because overcapacity is also a structural problem in Europe. In addition, the demand for steel is weak. The combination of overcapacity and weak steel demand makes it difficult for steel mills to pass on the relatively high prices of iron ore and coking coal. For significant price recovery, there must therefore be substantial adjustments in supply (capacity reductions) and/or in demand (strong growth in activity in the automotive sector and construction). However, this is scenario is more unlikely.

Graphical Insights

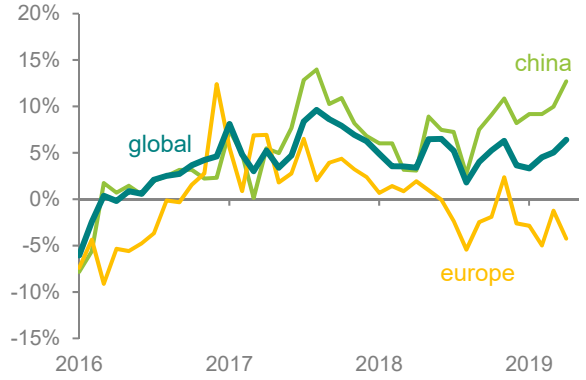
Steel price Europe vs. Global (USD/t)



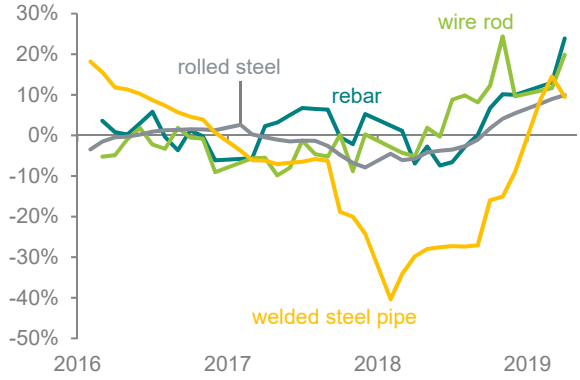
Price volatility Global Steel Price (in %)



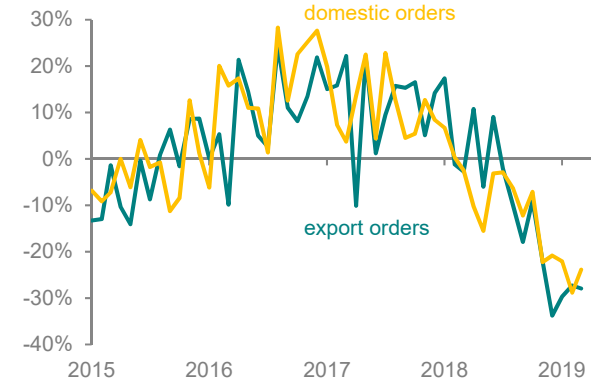
Crude Steel Production by Region (in % yoy)



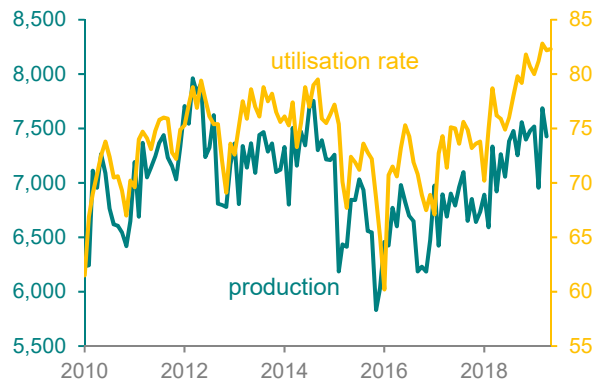
Output China steel products (in % yoy)



Germany orders development steel (in % yoy)



US utilisation rate (%, rhs) & steel production (Mt, lhs)



Sources: Thomson Reuters Datastream

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