

PANORAMA SECTORS

The Coface economic publications

December 2012

Contents

■ Sector barometer	3
By Jennifer Forest and Khalid Ait Yahia	
■ Focus	5
The world's steel	
By Jennifer Forest	
■ Chinese steel.	7
Consolidation that carries short-term risk	
By Khalid Ait Yahia	



In the framework of its economic reports, Coface is publishing its first Panorama Sectors.

The report provides readers with a global sector barometer, analysing the situation of fourteen major economic sectors. The originality of the analysis is that it is based on aggregating the accounts of 6 000 companies in three of the world's major regions: the European Union, North America and Emerging Asia, as well as with company payment behaviour recorded by Coface. There is an overview of each sector, with reference to three indicators pointing to the dynamism, financial robustness and credit risk of the companies within it.

This Panorama also focuses on the development of global steel production, and, in particular, highlights the dominance of China, which, in the space of 10 years, has become not only the world's leading producer but also the world's first consumer of steel.

The final section of this Panorama contains an analysis of the strengths and weaknesses of this major player. In the short term, China's steel industry is weak. Overcapacity makes the companies in the sector -and at the same time their exposure to credit risk- all the more vulnerable to the global economic and the Chinese economic slowdowns. However, restructuring within the sector, which is part of the Chinese government's long-term strategy, will strengthen the financial viability of these companies and ensure the Middle Kingdom's continued dominance of this key sector in the world's economy.

RESERVATION

The present document reflects the opinion of the Coface Economic Research Department, on the date of its drafting and according to the available information; it can be modified at any time. The information, analyses and opinions contained herein were prepared on the basis of many reliable and serious sources; however, Coface in no way guarantees the precision, exhaustiveness or reality of the data contained in the present document.

The information, analyses and opinions are provided for information purposes, and only constitute a supplement to the information that the reader can obtain elsewhere.

Coface has no obligation to achieve a result but only an obligation of best intents, and it assumes no liability for possible losses suffered by the reader as a result of using the information, analyses and opinions contained in the present document.

This document, as well as the analyses and opinions contained therein, belong exclusively to Coface; the reader is authorised to consult and reproduce the said information for purely internal purposes and subject to explicitly mentioning Coface, and to not altering or modifying the data. Any usage, extraction or reproduction for public or commercial purposes is forbidden without the formal approval of Coface.

Sector Barometer

By Jennifer Forest and Khalid Ait Yahia, Economic Research Department, Coface

The business sectors were hit by the global economic slowdown, with, however, marked differences depending on the geographic region business.

Global turnover for all sectors was up 4%, reflecting developments in international trade, which grew by 3.2%. This performance varies, however, depending on the sector: retail, metals, textile, all experienced real difficulties, in contrast to pharmaceuticals, which held steady. Meanwhile, there is a strong trend towards relocation of production and European Union demand to Emerging Asia.

Sectors	Turnover growth* (TU) and financial robustness index (FR)						Credit risk indicator
	Emerging Asia		North America		European Union (15)		
	TU	FR	TU	FR	TU	FR	World
Chemicals	16.6%	●	1.8%	●	0.1%	●	●
Pharmaceuticals	30.1%	●	3.2%	●	-3.5%	●	●
Wood-paper	3.3%	●	7.3%	●	3.8%	●	●
Transportation	7.1%	●	9.3%	●	-0.2%	●	●

● Moderate risk ● Medium risk ● High risk ● Very high risk * From Q3 2011 to Q3 2012 Sources : Datastream, Coface

→ Chemicals

There is fierce competition in the sector. Despite the impact of high raw materials costs, Emerging Asia is booming. The selective Chinese stimulus measures will help sustain demand and prevent the erosion of margins.

In North America, the impact of shale gas development allows producers to be more competitive and gain export market share, resulting in average profitability of almost 14% in Q3 2012. European producers are affected by sluggish local growth and competition from the United States, resulting in higher credit risk in the plastics sector.

Finally, the situation is difficult for the refineries, hit by lower diesel consumption and oversized productive apparatus, which is squeezing margins and putting pressure on profitability.

→ Pharmaceuticals

Drugs manufacturers on both sides of the Atlantic are still benefiting from rising health spending, resulting in an evolution of profitability of 17% for European companies, despite the slowdown that has been in place since 2010. However, efforts to curb expenditure will impact negatively on repayments and intensify competition among generic drug companies, whose market share is increasing, especially now when many patents are moving into the public domain («patent-cliff»).

In Emerging Asia, introducing universal healthcare coverage in China is one of the government's priorities, in line with efforts to focus more on consumption-led growth. In India, the drugs industry is competitive with vigorous performance in generic drugs and highly qualified human capital.

→ Paper-wood

This sector is in good financial health with turnover growing by 3.3 to 7.3% depending on the geographic region. Due to falling paper consumption in the industrialised countries, demand is shifting to the emerging countries of Latin America and Asia, where consumption is growing strongly. Investments and production are also moving to these same countries. In the European Union, this sector, in competition with China, is undergoing concentration and

rapid change and needs to move towards higher value-added production such as the recycling of waste paper.

This sector is holding up well in North America where the United States is the leading paper manufacturer ahead of Asia and Canada. After restructuring, the industry has posted good performances thanks to still steady demand.

→ Transportation

It mainly comprises maritime and air transport.

Stiff competition and high oil prices have caused air transport profits in North American and Europe to wobble and are squeezing margins and making companies less robust financially. Freight has also slowed.

After the losses and massive debts incurred in 2011, margins in the maritime sector are still under significant pressure due to the economic slowdown in 2012. Dominated by Europe (Maersk alone represents 16% of the market) followed by Asia, the sector has made a slight profit due to the drop in the number of boats operating in response to weakened demand.

So, the financial robustness indicator is worsening for the whole industry while the credit risk indicator is improving due to risk management policies.

FINANCIAL ROBUSTNESS INDICATOR

Coface assessments are based on financial data published by over 6000 listed companies in three major geographic regions: Emerging Asia, North America and the EU15.

Four indicators are tracked, in particular: turnover development moving total over the last 12 months, profitability ratio (operational result/turnover), net indebtedness (net debt/total assets), and cash flow performance.

CREDIT RISK INDICATOR

The credit risk indicator is based on Coface payment experience for the companies in the sector.

Sectors	Turnover growth* (TU) and financial robustness index (FR)						Credit risk indicator
	Emerging Asia		North America		European Union ⁽¹⁵⁾		
	TU	FR	TU	FR	TU	FR	World
Mechanicals	6.3%	●	7.2%	●	0.2%	●	●
Metals	11.8%	●	-0.9%	●	5.6%	●	●
Automobiles	5.0%	●	4.9%	●	5.2%	●	●
Construction	-3.1%	●	6.2%	●	0.7%	●	●
Energy	15.5%	●	0.0%	●	4.6%	●	●

● Moderate risk ● Medium risk ● High risk ● Very high risk * From Q3 2011 to Q3 2012 Sources : Datastream, Coface

➔ Mechanical engineering

Steps taken to cool China's property sector have affected construction, the main client of the machine tools sector. Nevertheless, the sector's industrial companies have granted their clients payment facilities as a way of supporting their activity; turnover has risen 6% year on year. This rise in sales is linked to high credit risk, as the buyers' solvency is precarious.

Buoyed by its exposure to high-growth regions, the German Mittelstand is faring well, as shown by the 4.4% rise in cash flow, year on year. However, contraction in Europe's car industry presents a risk for assembly line suppliers.

➔ Metals

China's economic slowdown in conjunction with steps to cool the property sector have forced local metallurgy companies to post losses this year, driving down the profitability ratio by 38%. Nonetheless, this has not prevented a rise in production. China's steel industry (see also pages 6 and 7), by far the biggest in the world, needs to reinvent itself and follow in the steps of Korea's steel industry, which has moved upmarket in recent years.

European metallurgy is in trouble. It is suffering from overcapacity and its main clients (the construction and automotive sectors) have been hit by a decline in buying. This is increasing pressure on prices in a sector which traditionally has high fixed costs. This has affected margins, which have fallen by 41%.

Although sustained by the relatively good health of the automotive and capital goods sector, North American metallurgy is feeling the effects of the gloom in construction. This is true especially for steel, which also has to contend with inflows of cheap Chinese steel, which drives down prices.

➔ Automobiles

The situation is uneven and the European market is contracting (10.6% fewer new car registrations during the first ten months of 2012). The volume producers are suffering from overcapacity and from Asian competition, resulting in a 45% collapse in cash flow, year on year. Luxury vehicle makers, mainly German, have been faring well. Indeed, they are focused on their reputation, presence in growth markets, as well as cost containment to generate comfortable margins.

North American industry is convalescing, with support from Canadian and American federal aid. Local manufacturers seem to be over the worst of the crisis as evidenced by a 12% rise in new registrations over the first ten months of 2012, and a 20% rise in cash flow year on year.

In Emerging Asia, the growing middle class is showing itself through steady demand for car ownership, a symbol of social success. In China, public subsidies for car purchases are spurring car sales as part of the effort to redirect growth towards domestic consumption. In South Korea, the chaebols⁽¹⁾, helped by the won's depreciation and contained wage costs, are nibbling away at the market share of Europe's volume manufacturers.

➔ Construction

It is a key sector in a country's economic development. In North America, and particularly the United States, with real estate prices having reached their floor (-30% compared with the peak observed in July 2006), rising demand for new housing and over the past 6 months, increased confidence indicators among developers is fostering a slight recovery in activity. Nevertheless, this sector is still risky.

In Europe, economic difficulties continue to put pressure on households and public institutions, which are reigning in investment. The number of building projects is still falling (especially in southern Europe) and an immediate recovery is unlikely. Companies in this sector have substantial levels of debt and concentration is low. Payment incidents in the sector are not unusual, especially in Italy, and point to considerable risk.

In Asia, the situation is quite different. Following sharp price rises in China, the government has intervened to deflate the speculative bubble and thus enable households to find homes at an affordable price.

➔ Energy

Renewable energy has been hit hard by cuts in public subsidies in Europe and North America. This is particularly visible with the collapse of the solar panel manufacturer, Q-Cells. Public support schemes in Emerging Asia through loan guarantees and preferential tariffs for the purchase of electricity have given rise to overcapacity. With local markets unable to absorb the supply, cheap solar panels have flowed into North America and Europe, accentuating further the difficulties encountered by local producers.

The shale gas revolution in North America has left in its wake a spectacular fall in the region's prices, making coal-fired electricity generation uncompetitive. The exploitation of these deposits thus gives America's industry, especially its chemicals industry, a competitive advantage.

Finally, Brent oil prices are high with companies operating in the oil segment presenting low credit risk due to their ability to generate cash flow.

(1) South Korean business conglomerates

Sectors	Turnover growth* (TU) and financial robustness index (FR)						Credit risk indicator
	Emerging Asia		North America		European Union (15)		
	TU	FR	TU	FR	TU	FR	
Agro-food	17.7%	●	4.2%	●	-0.4%	●	●
Retail	38.7%	●	7.1%	●	-0.3%	●	●
Textile-clothing	15.9%	●	8.2%	●	7.6%	●	●
Services	22.9%	●	7.3%	●	0.3%	●	●
Electronics, IT	0.9%	●	7.3%	●	-4.5%	●	●

● Moderate risk ● Medium risk ● High risk ● Very high risk * From Q3 2011 to Q3 2012 Sources : Datastream, Coface

→ Agro-food

Is one of the most important sectors in term of creating value and jobs, though. It reacts differently depending on the geographic region. Food consumption is still a priority, even when households are affected by the financial crisis. Meanwhile, the significant rise in raw materials prices has triggered different behaviours. In Europe, this increase has not really impacted on sales prices: global turnover for the sector is down by 0.4%, which is not the case in North America, where turnover has risen by 4.2% or in Asia where it is up 17.7%. Nonetheless, the loss ratio for this sector is still high and payment failures in Spain and Italy are climbing, according to Coface's underwriters.

→ Retail

Is affected by the economic difficulties experienced by the industrialised countries, where households already have their appliances and renewing them is not a priority. However, it is doing well in emerging countries where households are acquiring new appliances.

So in Europe the sector is suffering, with negative turnover performance and very weak margins. It will have to review its model to better integrate new technologies.

In the United States and Canada, turnover is growing with sales through traditional networks losing out to electronic commerce.

In Asia, incentives have been introduced to sustain sales, buoying the sector's turnover (+39%). This sector's loss ratio is trending more positively due to the strong concentration of various actors.

→ Textile-clothing

With production mainly from Asia, is undergoing rapid change. In Emerging Asia, textiles are still booming with turnover sharply higher (+23%). China is now the number one exporter of textiles and clothing, with the European Union and the USA as the top two importers. Furthermore, in North America and Europe this sector is suffering from a fall in demand (world consumption is down by 7.2%) due to the economic climate. As well as this, the price of cotton has fallen while stocks have risen (global production is up by 7.7%).

The luxury segment continues to perform well with companies achieving high margins.

→ Services

Regardless of whether they are services for the retail market or for companies or local authorities, are risky as evidenced by Coface's payment experience. A sector with low concentration, dominated by small-scale firms, it manages to generate substantial turnover, especially in Emerging Asia and North America due to lively demand. Its profitability remains limited, however, with relatively weak margins as a result.

In North America, services linked to healthcare and education are performing well and contributing to growth in related employment.

→ Electronics, IT

The economic slowdown in China and the recession in Europe are affecting the sale of electronic and IT products resulting in a 5% fall in turnover in these regions, year on year. Purchases of computers tumbled by almost -8.3% in Q3 2012, according to Gartner.

North America's large groups posted a sharp decline in sales, while Asia's groups are benefiting from their more flexible cost structure to gain market share. These difficulties are also shared by electronic component manufacturers, with prices falling during the crucial end-of-year period for their margins. The software sector is a victim of the review of IT budgets in the countries hit by Europe's debt crisis. Nonetheless, certain sectors like banking and insurance will continue to spend as they implement the Basel III and Solvency II directives.

Finally, the distribution of electronic products and services is affected by competition with e-sales at the same time as having to contend with high structural costs, as evidenced by the collapse of Game Group in the United Kingdom and Surcouf in France. The sector presents high credit risk.

FOCUS

The world's steel

By Jennifer Forest, Economic Research Department, Coface

In ten years, China has come to dominate steel production, accounting now for 45% of world production.

	From dec. 2011 to nov. 2012	October 2012	2010	2011
	Production (Mt)	Steel world price (\$/t)	Export rate*	Concentration index**(HHI)
World	1 494.5	717	76.4%	0.152
Evolution	+4.2%	-10.7%	-	+6.3% (2011/2005)

Source: World Steel Association, Datastream, United Nations, Meps Ltd

* Export rate: total of steel exported / total of steel produced

** Concentration index called also Herfindahl-Hirschmann Index (HHI), is calculated from the market shares of all the companies of one sector. Closer is the index to 1, more concentrated is the production.

Recent trends

Trends in world steel production and prices over the past 20 years can be broken down into 4 phases :

- **Constant increase in production until 2009** (+117% between Q1 1993 and Q1 2009). This 16-year rise is mainly explained by continuous demand in the emerging countries, especially during the 2000s. From August 2008 to May 2009, the price of steel went into sharp decline (-55%) as a result of higher stocks linked to a fall in exports to China.

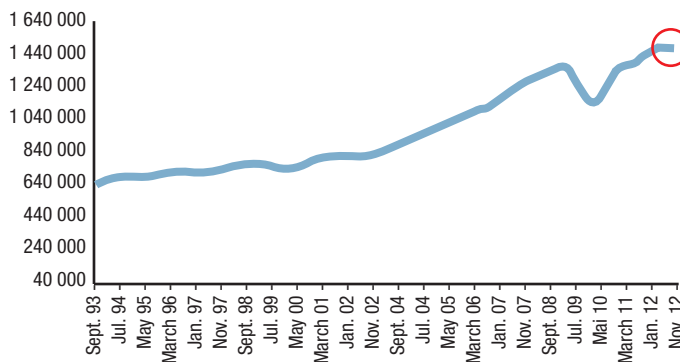
- Then in the second half of 2009, **steel production fell by 22%** (compared with 2nd half 2008), due to the collapse of the construction sector in the United States and Europe as the financial crisis began in September 2008.

- **During the period 2010-2011, production rose again**, with substantial Chinese demand fuelled by the stimulus plan of 2009. Until March, prices were bullish, though volatile, due to stronger demand for steel linked to the economic recovery in the emerging countries.

The price of steel then fell: -10.7% between October 2011 and October 2012 as a result of weaker demand. Production overcapacity in China and western Europe put greater pressure on prices and are eroding producers' margins. Recorded prices are, moreover, similar to those at end 2007.

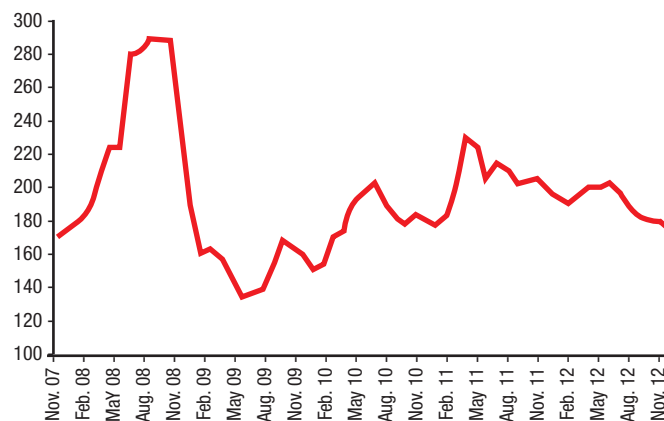
- **End 2012 - steel production has never been so high**, with nearly 1.5 billion tonnes produced in the last twelve months (+4.2%). In the last six months, however, production has been stabilised in order to restrain overproduction: currently the production capacity utilisation rate is only 76.5% (compared with 82.1% in April 2012). Demand is expected to continue to slow in 2013, resulting in more overproduction and lower prices, which is likely to curb steel production next year.

World Steel Production, thousands of tons, moving total over the last 12 months



Source : World Steel Association

World steel price index (January 2007 = 100)



Source : Datastream

Main market players

Geographically, 65% of steel are produced in Asia, of which 45% in China (which in 2001 accounted for only 17.8% of world production). China has become the leading steel producer in the world and is expected to maintain this lead in the years to come. China is also the main consumer: 45% of the world's steel is consumed in China.

Second is the European Union, which accounts for 11% of production (compared with 22% in 2001), with ArcelorMittal alone representing 6.5% of world production. In ten years, production has shifted from Europe to Asia, while at the same time demand for steel has shifted to the emerging countries. The fall off in European demand is due to a slowdown in demand for steel in the automotive and construction sectors.

North America and the CIS countries (including, in particular, Russia and Ukraine) each represent 8% of world production. The United States is handicapped by weak Chinese and European demand for American steel and by a still uncertain American recovery, The CIS steelmakers export mainly to Europe (34.1% of output in 2011) and China.

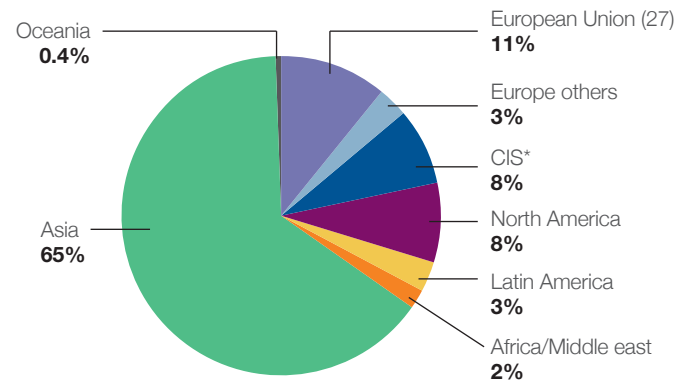
The five largest companies in the steel sector account for only 17.6% of world production, revelatory of a fragmented market composed of a host of players, whether public or private. The HHI, or Herfindahl-Hirschman index, calculated by the United Nations is 0.152, pointing to low concentration in the sector.

Main actors of the sector

Top 5 *	Company	Country	Production share
1	ArcelorMital	Luxembourg	6.5%
2	Hebei Steel Group	China	3.0%
3	Baosteel Group	China	2.9%
4	POSCO	South Korea	2.6%
5	Wuhan Group	China	2.5%

Source : World Steel Association
* in 2011

Distribution of the production by region in September 2012



Source : World Steel Association
* Commonwealth of the Independant States

Completed December 3rd, 2012

Chinese steel Consolidation that carries short-term risk

By Khalid Ait Yahia, Economic Research Department, Coface

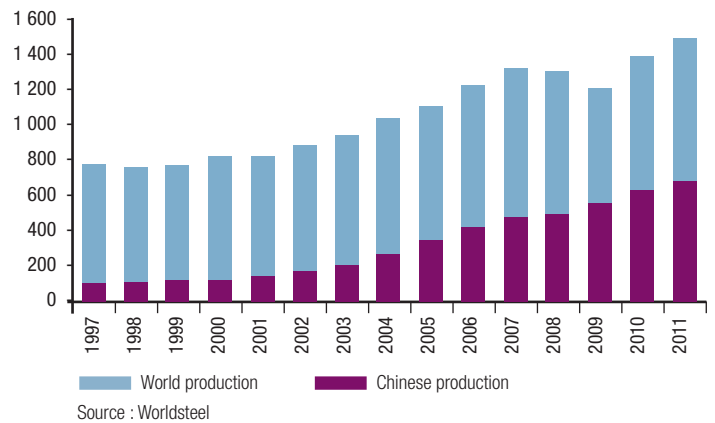
- China’s steel industry has been hit hard by the slowdown in the Chinese economy and the sluggish growth of its main trading partners
- The accounts have been strongly affected and the whole industry is having difficulty financing itself
- Credit risk is particularly high, due to the current economic slowdown and industry restructuring
- Nonetheless, due to the strategic nature of this industry, Chinese authorities have taken steps to reinvigorate the sector which will reinforce corporate robustness.

China’s steel industry underwent sustained expansion between 2000 and 2012, as did the Chinese economy. Since being admitted to the WTO in 2001, the «Middle Kingdom» has become the world’s leading manufacturer and consumer of steel products, making it a market heavyweight with regard to the raw materials used in steel production. This rise in power now seems, however, to have reached its limits. The steel sector has since been suffering the effects of the global economic slowdown and the repercussions of the Beijing authorities’ discretionary policies.

This article will try to show that the difficulties faced by the Chinese steel industry, although quite tricky, will not hamper its ability to recover nor its dominance in the global steel industry and the production of raw materials. We will also see that the necessary restructuring of the industrial base and the move in production to the upmarket segment is part of a strategy drawn up and steered by the Chinese government in Beijing.

World and Chinese steel productions

(In million of tonnes)



A SECTOR UNDER TENSION

For over a decade, China’s steel industry has been gaining in power and is now the leading producer in the world ahead of Japan, with an output of 684 million tonnes in 2011, or 45% of total world production. The aim of such sustained expansion, at an average annual growth rate of 15% since 2001, is to meet internal demand fuelled by government objectives intended to promote the real estate and infrastructure sectors, and thus to respond to rapid urbanisation, itself a response to domestic migration. Although estimates vary, one can state that over 54% of demand for steel comes from the construction and public works sector, followed by the machine tools and automotive sectors (18% and 6% respectively).

A multiplicity of actors which fosters overcapacity

China’s productive fabric is plural in nature, characterised by the strong presence of central and provincial governments through their capital stakes in the largest domestic steel companies. A simple example would be Baoshan Iron and Steel, better known as Baosteel or WISCO, whose majority shareholder is the SASAC, the body responsible for managing central government capital holdings. Of the world’s 10 leading steel manufacturers, 6 are Chinese, which according to the World Steel Association (cf. box) account for a total of nearly 217 million tonnes.

Key players in the Chinese steel industry

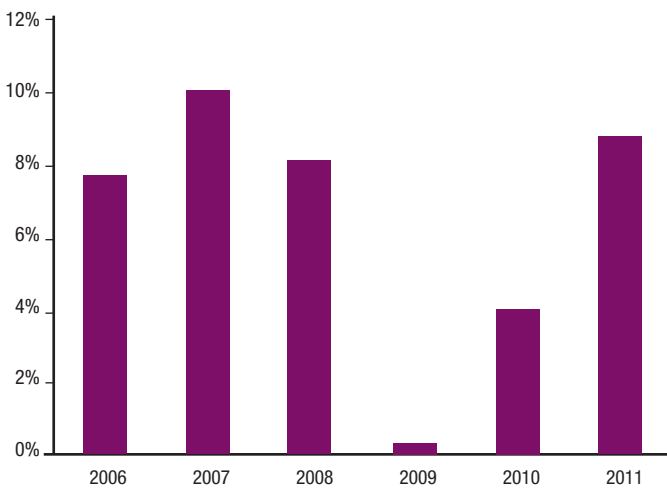
	Production in 2011 in million of tonnes	Corporate production as share of production in 2011	Profitability 2011: net income/sales
Hebei Iron and Steel Group	44.4	6.5%	1.0%
Baosteel Group	43.3	6.3%	3.3%
Wuhan Iron and Steel companu	44.4	6.5%	1.0%
Shagang Steel	31.9	4.7%	1.8%

- ▶ Hebei Steel, the world’s second-largest steel manufacturer after ArcelorMittal, was established in Hebei province in 2008 after the merger of Tangsteel and Hansteel
- ▶ Baosteel is China’s second-largest publicly owned steelmaker and was founded in Shanghai in 1998 after the merger of two metallurgy companies
- ▶ Wuhan Iron and Steel Company, also known as WISCO, was founded in Wuhan in 1958
- ▶ Shagang Steel is China’s leading private steelmaking group, founded in Jiangsu province in 1975

For their part, the provinces and municipalities also have a SASAC whose portfolio includes investments in local steelmakers. The importance of the public shareholding is explained by the strategic nature which steel has for the Beijing authorities. The sector is steered according to various five-year plans which serve to channel the government's economic and social decisions.

Nevertheless, the importance of the state does not limit the entrepreneurial spirit⁽¹⁾, and this brings us to another characteristic of the Chinese steel industry: the presence of thousands of small and medium-sized steel producers, competing fiercely on price but marked by low productivity even though they are more reactive than the large plants. As we will see, the dual character of this sector, in which large state-owned enterprises co-exist with a multitude of small regional foundries hampers the implementation of the five-year plans. Moreover, the sector is structured in a way that favours production overcapacity. In 2011, Chinese production totalled almost 684 million tonnes of steel, while internal consumption was only able to absorb 624 million tonnes, leaving nearly 60 million tonnes of excess, about 9% of output. In 2012 and 2013, according to World Steel, Chinese demand would increase by only 2.5% and 3.1% respectively to total 639 and 659 million tonnes, not enough to absorb output against a background of sluggish growth.

Overcapacities (gap between production and demand) as production percentage

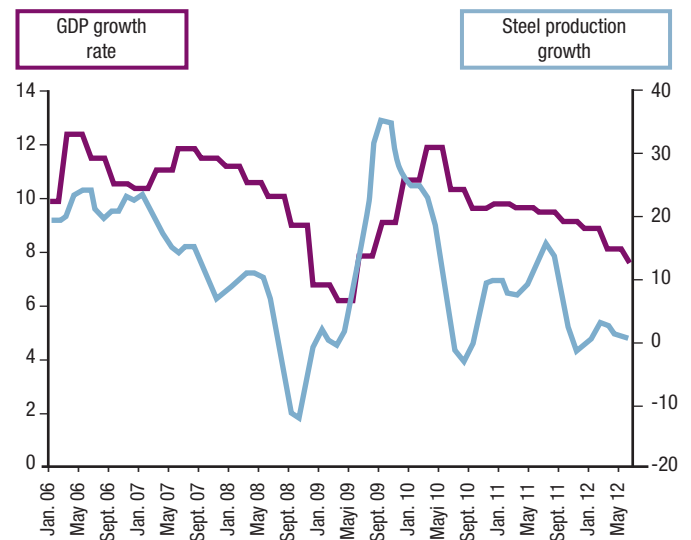


Source : BREE (Bureau of Resources and Energy Economics) and Coface

Growing financial tensions...

The steel industry, as an upstream industrial and manufacturing activity, seems to act as a leading indicator of the economic cycle, as can be seen in the chart below. The industrial output growth rate in the first 9 months of 2012 is 9.2%, reflecting a four percentage-point slowdown compared to the rate of 13.5% over the same period in 2011, according to the NBS figures.

This weak growth in production has hit the country's manufacturing business. The Purchasing Managers' Index (PMI) dropped to 49.2 in August 2012 and 49.8 in September 2012, before climbing again to 50.2 in October. According to the NBS, the steel and ferrous metals component of this index has been falling continuously since the start of 2012, due to lacklustre demand. Again according to the NBS, profits accumulated from January to August 2012 are down 68% compared to the same period in 2011. Finally, industrial inventories are close to their historic highs, pointing to a contraction in activity and weak demand. These elements are, in particular, indicators of shrinking Chinese steel manufacturers' order books.



Source : NBS (National Bureau of Statistics)

China's steelmaking apparatus, in contrast to her Korean and Japanese peers, mostly produces low value-added steel destined for end-use consumption by the construction and public works sector. This production is dependent on iron ore and coke producers, mainly located in Brazil and Australia. China imports most of its iron ore consumption, which in 2011 made up 70% of ore used in the oxygen process⁽²⁾. Only 30% of China's needs are covered by its mines, which contain iron whose quality is inferior to that of Brazilian iron ore, while its operating costs are higher. This massive presence on the iron ore market has pushed prices for this commodity to unsustainable levels and affected steel producers' margins. Since April 2012, however, a price correction due in part to weak Chinese demand has become apparent, though prices are still high. Nearly 40% of production costs stem from iron ore, which has hit profits. The other indispensable ingredient in the manufacture of steel products, namely coke, represents almost 26% of the cost price for a tonne of steel, according to estimates by JPMorgan⁽³⁾. Prices for this commodity have followed the same trend as those of iron, after climbing to levels which ate into the margins of foundries.

(1) YU H. & YANG M., January 2010, «China's steel industry: an update», EAI Background Brief No.501.

(2) BREE, June 2012, «Resources, Energy and Tourism. The China Review».

(3) JPMorgan, 8 March 2010, «Hands-on China Report».

We have seen that lack of discipline on the part of producers leads to excess production which impacts on prices. With even greater competition, prices come under downward pressure in the face of falling demand resulting from weaknesses in the property market and contracting demand from European economic partners. Margins are then hit especially hard: iron ore accounts for almost 40% of the cost price for a ton of steel and coke for 26% (whose prices have fallen less quickly than those of steel).

Iron ore price in China (\$ Per tonne)



Source : Datastream

The steel industry has high costs and suffers from a patent lack of flexibility as regards blast furnaces and so is not able to adapt its supply to variations in demand. Accordingly, any sign of weak demand has an immediate negative impact on producers' profitability. The CISA, China Iron and Steel Association, announced a 96% fall in members' profits for the first half of 2012 compared with the same period in 2011. The sector's margin during the first half of 2012 – compared to net result on sales – amounted to 0.13%, while for the same period in 2011, it reached 3.06%. This dramatic drop in profits has a detrimental effect on cash positions, as shown by Central Bank of China data on demand for short-term credit by companies in the sector. Over 72% of financing requests were for short-term credit intended to provide additional liquidity.

... supported by the anti-crisis policy of 2009

After the Lehman Brothers collapse in 2008 and the shrinking of international trade in 2009, the Chinese authorities introduced a stimulus plan intended to support activity through stimulus measures. The authorities also provided a massive injection of liquidity by loosening the quotas on bank loans⁽⁴⁾. The vast majority of this

credit boom benefited the state-owned enterprises. Private companies were victims of eviction, as the selectivity of the state-owned banks regarding the supply of credit forced them to turn to the "shadow banking" sector (credit market not regulated by the PBoC), with usurious interest rates and opaque operations. The difficulties of accessing finance experienced by thousands of SMEs is one of the top worries of Chinese businesses in 2012, according to a survey carried out by Coface China in 2012 on company payment behaviour⁽⁴⁾.

The opening up of the liquidity tap has led to rising debt levels for state-owned enterprises, whose results have been hit by the resulting interest payments. The high degree of responsiveness on the part of the authorities has led to the financing via the state-owned banks of major projects carried out by the large state-owned enterprises, while the provincial and municipal authorities have supported their producers via subsidies and grants⁽⁵⁾. The excessive nature of this plan has been denounced, a posteriori, by a number of observers⁽⁶⁾. The oversized production apparatus and the excess capacity have been further inflated by the stimulus plan and not cut back since the end of the plan (June 2010).

Following the excesses of the 2008-2009 stimulus plan, the Chinese property market went through runaway growth which led to a speculative bubble on this market⁽⁷⁾. The inflows of liquidity were manna for a huge number of economic agents, at the risk of increasing their debt levels. The central government has used the macroeconomic instruments available to it – limiting access to credit and raising interest rates five times between October 2010 and July 2011, which, in the end affected the steel sector by curbing the growth of the property and construction sector. This main outlet for steel was hard hit by the actions of the Central Bank of China, which led to a contraction in activity at the foundries. The repercussions of this monetary policy were felt even within the metal products trade sector, a buffer between the furnaces and the end clients. These traders have been hit by weak sales in conjunction with having to repay loans taken out when liquidity was plentiful. These loans, collateralised generally with steel products, fed speculation on the property market, resulting in a speculative bubble. The Chinese banks fell victim to numerous repayment failures by the traders. The quality of certain bank assets thus worsened substantially, especially short-term loans intended to provide liquidity during a period of cash scarcity. According to data published by the PBoC in October 2012⁽⁸⁾, 71% of the total credit awarded by Chinese banks in the first nine months of 2012 was intended to protect companies against a lack of liquidity. This situation is more problematic for small and medium-sized foundries, which have no support from central government and whose existence is slowing the implementation of the 12th five-year plan. State-owned enterprises like Hebei Steel and Shagang, because of their dominant role in the State's strategy, are supported at all costs by the large national banks. According to the Coface China study on company payment behaviour carried out in 2012⁽⁹⁾, 48% of the observed payment failures resulted from a cash flow problem, confirming the data published by the PBoC. Competition affecting margins was the second major reason resulting in payment failure. The steel industry fits this picture on account of its fragmentation and the high degree of competition which characterises it.

(4) Boubil C. Summer 2012, «Companies in China: beneficiaries or collateral victims of economic policy?», Coface country risk Overview.

(5) Sharma S. August 2012, NDRC 2009 in "Chinese Economy in the Aftermath of the Global Financial Crisis: Challenges to Macroeconomic Rebalancing", International Journal of China Studies Vol3 N.2.

(6) Mukherji R. August 2012, «The Chinese hangover: as infrastructure spending drops, so does demand for Chinese steel», PIMCO Viewpoint.

(7) The Japan Research Institute, Jne 2012, Asia Monthly Report, No 135.

(8) People Bank of China press release of 13 October 2012 on monetary statistics.

(9) «Coface China Corporate Credit Risk Paper – 2012», March 2012.

BETTER MANAGED SUPPORT

Since June 2010, the Chinese authorities have moved to “cool down” the Chinese property sector in response to the ever-inflating speculative bubble, depriving millions of households of access to affordable housing⁽¹⁰⁾. The government’s objective was to prevent an explosion linked to the difficulty of accessing housing during a period of renewed inflation. The steps taken consisted in raising interest rates and the banks’ reserve requirements in order to slow down the expansion of the money supply. One should add to that the implementation of the «eight new articles», a compulsory housing purchase scheme, knowing that the land is state-owned. For example, in Beijing and Shanghai, restrictions on the purchase of second homes were applied and a ban on buying property applying to anyone who hadn’t lived in those cities for more than five years.

The restrictive monetary policy led to a slowdown in the supply of credit, which had a knock-on effect on construction. Again, according to the Coface China study, construction is the sector with the highest level of payment arrears over 60 days. This is the result of the more restrictive monetary policy applied from the second half of 2012. Upstream, the steel industry is similarly affected although to a lesser extent.

More selective support scheme

In an effort to maintain social stability, the authorities have at the same time embarked on major social housing programmes, which have had consequences on the construction and steel sectors. 36 million homes will have been erected by 2015, allowing as many families to find homes without having to suffer the vagaries of the property market. The effects of this ambitious project, estimated at (over?) 120 billion dollars, will offset only in part the decline in construction and public works activity. It should, nevertheless, enable a slight rally in demand for steel products.

These social programmes are part of a more general framework to support demand, the purpose of which is to offset the drop in exports. Beijing is using more selective measures (fine tuning) to support economic activity without falling into the traps of the previous plan⁽¹¹⁾. Since the third quarter of 2012, and in the face of contained inflation and a significant risk of slower economic activity – third quarter growth was 7.4%, the lowest level since 2009; the PBoC let the monetary aggregate M2 return to the previous sustained growth levels, thus foreshadowing inflows of liquidity necessary for economic recovery. This loosening of monetary policy led to a drop in administered rates coupled with a fall in required reserve ratios.

One should add the green light given by the NDRC⁽¹¹⁾ (National Development and Reform Commission) to several infrastructure projects for the railways, water treatment plants and health care centres which could well provide a boost to local steel companies with depleted order books. This body, which is dependent on the Council of State and responsible for planning and setting broad economic policy guidelines, has accelerated its approvals of major public investment projects linked to the recommendations and

objectives contained in the 12th five-year plan. Confronted with the slowdown, these measures fit completely into plans to reinvigorate the economy’s key sectors, of which steel is part. An example is the green light given by the NDRC, during September 2012, to 25 urban and interurban rail transport projects for an amount close to 127 billion dollars. In response to the rail disasters which left many bereaved in China in 2011, the authorities had suspended their railway lines projects.

The provincial authorities have not been resting on their laurels but seeking to revitalise their economies by increasing spending in a bid to support investment, an already bloated component of GDP (about 45%). An estimate was provided by the French Ministry of Finance in September 2012 after which announcements were made by different provinces pointing to 1600 billion USD, or 21% of Chinese GDP. Nonetheless, although the measures are in part real, we think this figure is worrying, considering the difficulty communities are experiencing in accessing finance and their already very high debt levels. It is still the case that despite the effect of their announcements, local authorities are expected to come to the aid of local steel producers, as in the past, by opposing the different measures for restructuring the steel sector. Moreover, some provinces, in particular those in the coastal regions depend on fiscal revenue from the steel producers who maintain a significant level of employment. The measures to be carried out by the local authorities are part of the 12th plan, intended to refocus the Chinese economy and place more emphasis on domestic consumption rather than on investment. The rebalancing effects will only be visible in several years’ time.

Restructuring the sector

The prudence of the local authorities in managing the slowdown in Chinese growth must also be understood from a long-term perspective. At the end of 2010, the 11th five-year plan ended without its objectives having been achieved. This is particularly true for the steel industry, for which the intention is to end the fragmentation of production across several thousand producers and the move to upmarket steel products. This fragmentation undermines market discipline and fosters overcapacity, damaging not only the environment and natural resources, but also profitability. Cutting production capacity and closing a large number of foundries is one of the steps taken by Beijing. However, this objective is opposed by the local authorities for whom the foundries are a fiscal and massive employment resource. The last five-year plan, which runs over the period from 2011 to 2015, starts from where the previous plan left off, as regards its objectives for the steel industry. As we have seen, many of the steel products are of low added value, incorporating little R&D, while China imports good quality steel from South Korea or Germany for car production, for example.

Now China is one of the world’s biggest carbon dioxide emitters and, as a major polluter, the steel industry, is one of the biggest culprits. We referred above to the fact that China is the leading consumer of iron ore and coke, raw materials whose use releases

(10) The Japan Research Institute, June 2012, Asia Monthly Report, No 135.

(11) DGTrésor, September 2012, China Economic Bulletin.

huge quantities of CO₂. In contrast to other major producing countries, consumption of raw materials by China's steel industry is too in relation to output. The authorities have made it an objective to limit production as a way of guaranteeing environmental protection and increased value-added steel products.

To facilitate the sale of certain products in a market characterised by overcapacity, the industry ministry is cutting or even abolishing the 17% VAT applied to high quality steel for export. This measure only applies to the large state-owned enterprises, as they are the only ones producing steel of this quality, with the small and medium-sized foundries positioned on low value-added steel. The abolition of this tax is targeted in order to avoid giving producers a blank cheque and so as not to encourage them to carry increasing production. According to JPMorgan⁽¹²⁾, with the removal of VAT, China's products will come into direct competition, at lower prices, with products from her Asian neighbours.

CHINA HAS INTRODUCED FAR-REACHING CHANGES TO THE FIXING OF PRICES

A dominant position on the raw materials market ...

Steel production requires a combination mainly of iron and coke at high temperatures. China's rising power within the steel industry has made it the leading consumer of metallurgical coal and iron ore, which affects the prices of both commodities even if per capita consumption is lower than in the industrialised countries⁽¹³⁾. This increased dominance in the raw materials market has been called the «Supercycle» and has led to a prolonged period of increased production and higher prices, benefitting producer countries and companies, increasing fiscal revenues, profits and investment projects as a result⁽¹⁴⁾. According to UNCTAD data, China imports two thirds of its iron ore consumption, 600 million tonnes, mainly from Australia and Brazil. This dependence on foreign suppliers is due not only to the need to meet large steel production volumes, but also to the quality of the ore. The ore extracted from Chinese mines is lower in quality with low iron composition compared to the ore extracted by Vale and Rio Tinto in the Brazilian and Australian mines. Moreover, Chinese ore is more expensive to produce which, as has been the case since April 2012, means mine closures to avoid selling at a loss. If the iron ore price falls below 90 USD/t, the Chinese mines can no longer compete. Regarding metallurgical coal, China is almost self-sufficient according to figures from the AIE with only 10% of her consumption met by imports, in particular from India and Indonesia.

... which gives it a say in determining prices

China's steel industry is, therefore, a dominant market power due to the volumes imported and this market presence is reflected in the prices of these raw materials, especially of iron ore. The world's steelmakers and mining companies, BHP Billiton, Rio

Tinto et Vale, come together annually to fix the price of supply contracts for iron, offering protection against spot market price volatility. Nevertheless, the emergence of China as the world's number one steel producer led iron ore producers to modify the way they fixed their prices in 2008-2009, since the Chinese foundries defaulted on the contracts binding them to the mining companies, preferring to buy more cheaply on the iron markets. The corollary of this Chinese demand, which is growing, has been the establishment of quarterly contracts, which are a truer reflection of price movements since the Q1 2012.

The visible drop in demand for steel since the end of 2011 has resulted in falling iron ore prices which are now lower than those fixed in the quarterly forward contracts pushing the mining companies to renegotiate in response to the demands of their Chinese clients. The Chinese plants are more willing to profit from weaknesses in the iron market when prices are low. However, the mining companies have stated that it will not be possible to return to the previous method of fixing prices, should prices rise again⁽¹⁵⁾. The three largest mining companies referred to above derive a large proportion of their profits from iron ore exploitation and have seen their profits dip as a result of falling prices.

Rising power accompanied by friction

Chinese power is expressed also through its steel exports. As we have seen, China has a structural production overcapacity so its plants need to try and sell their products on foreign markets. These products flood the American, European and Asian markets forcing these countries to carry out surveys and take reprisals against products considered as subsidised⁽¹⁶⁾. In 2011, China exported nearly 47.9 million tonnes of steel, less than 10% of its production, but equal in volume to total German production. Asia, excluding Japan, represents nearly 52% of steel exports, followed by Latin America and the EU at 27%. According to Worldsteel data, the United States is in fourth position. The Chinese central government subsidises the energy consumed by the foundries and directs the savings collected by the state-owned banks to this sector, providing cash flow facilities and funds to finance the necessary investments. Further, it offers tax rebates to exporters to facilitate the disposal of their products and make them more competitive against foreign steel products^(16, 17). This aggressive market policy aimed at conquering foreign market share has resulted in friction between European and American steelmakers and Chinese exporters, giving rise to complaints about unfair practices lodged with the WTO and investigations by the European Commission into dumping. An example would be the court cases brought by American steelmakers before the USDOC (US Department Of Commerce) and the USITC (US International Trade Commission) on dumping, between 2009 and 2010, relating to certain steel products such as drilling components for the oil industry. These complaints have resulted in higher customs duties in the United States, increases of between 10 and 16% on the value of imported goods.

(12) JPMorgan Asia Pacific Equity Research, 31 July 2012.

(13) BREE, June 2012, «Resources, Energy and Tourism. The China Review».

(14) Standard and Poor's, 1 March 2011, «The potential risk of China's large and growing presence in commodities markets».

(15) SteelOrbis Prime, vol. 5 N°2

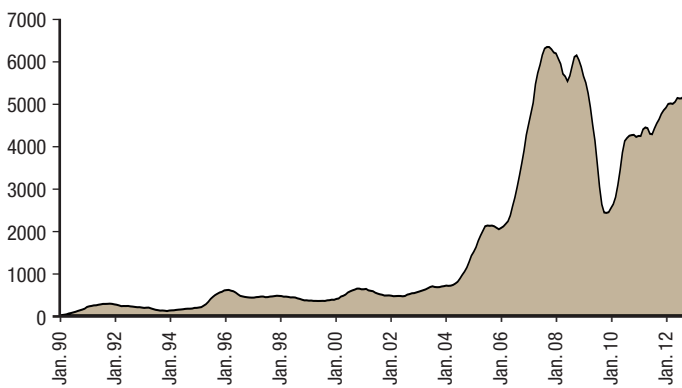
(16) Tang R., September 2010, «China's steel industry and its impact on the US: issues for Congress», CRS..

(17) In Des Heiden P. 2011, «Chinese sectoral industrial policy shaping international trade and investment patterns – Evidence for the iron and steel industry», IN-EAST Université de Duisburg.

In Europe, Eurofer, the association representing European steel-makers, has lodged complaints with the European Commission against certain steel products sold cheaply to construction companies. The most recent case was in 2012. Eurofer has pointed to the subsidies received by Chinese steelmakers from the Chinese government and local authorities.

China's steelmakers are going through turbulent times, which are forcing them into state-led restructuring. The sector is seeing its margins eroded and debt levels increasing.

Steel Chinese exports in thousands of tonnes - trailing 12 months



Source : Datastream

The restructuring will no doubt create victims but is necessary as it will enable better medium-term credit risk. This industry is very varied, consisting of large state-owned enterprises which benefit fully from state guarantees both when looking for finance and regarding their access to the local market. The Chinese economy is characterised by continuous investment efforts over two decades, which drives the consumption of steel products to meet huge urbanisation and infrastructure needs. The central government makes no secret of this, especially during these times of social demand and access to better living conditions. They are attempting to satisfy the needs of a large population wanting to improve its standard of living and that of its children. Steel consumption will follow but will be more in line with the expectations of the Chinese people as they improve their living conditions. The authorities are very aware of this and are seeking to shift the productive apparatus towards improving product quality and higher value-added goods. During this period of change, which will cause many companies to go to the wall, credit risk could be tight. However, in the longer term, the outlook for the sector remains favourable. This search for added value will meet the needs of the ever-growing car industry as well as the desire to densify the rail and airport network. A larger middle class is emerging, symbolised, apart from car ownership, by the ownership of nondurable goods like household electrical appliances, a desire for recreational activities and travel.

Completed December 3rd, 2012