

China steel industry

What are the drivers? How can overcapacity be solved?

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Key themes

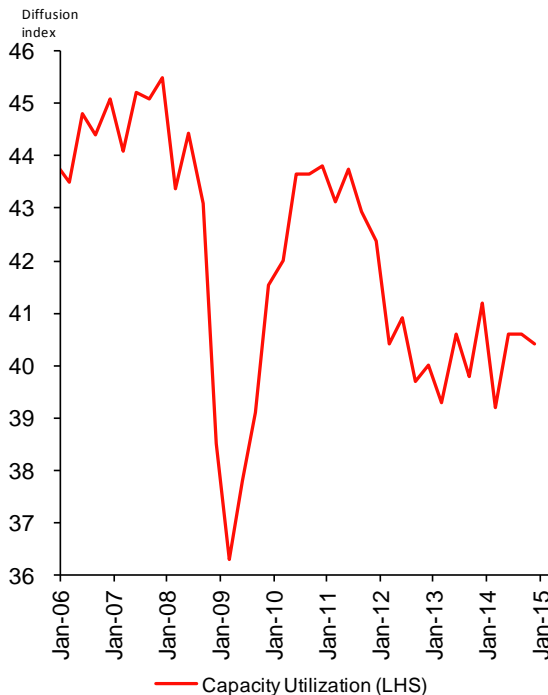
- China's steel industry is a micro example of the country's broader macro problems.
- It is also at the forefront of the changes being implemented to improve industrial sector efficiency and reshape China's economy.
- While demand growth is certainly slowing, it is not yet at a peak – China will remain an industrial economy, although it will shift to focussing on value rather than simply volume.
- A combination of supply side reforms and demand side shifts creates real opportunities for meaningful margin expansion for the best of China's steel mills.



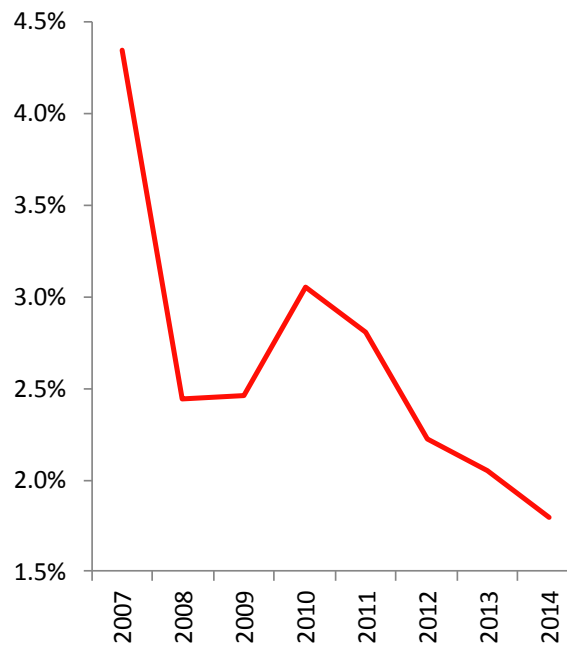
Many of China's macro problems stem from low corporate capacity utilisation rates

➔ Low utilisation rates => low profitability => rising debt problems

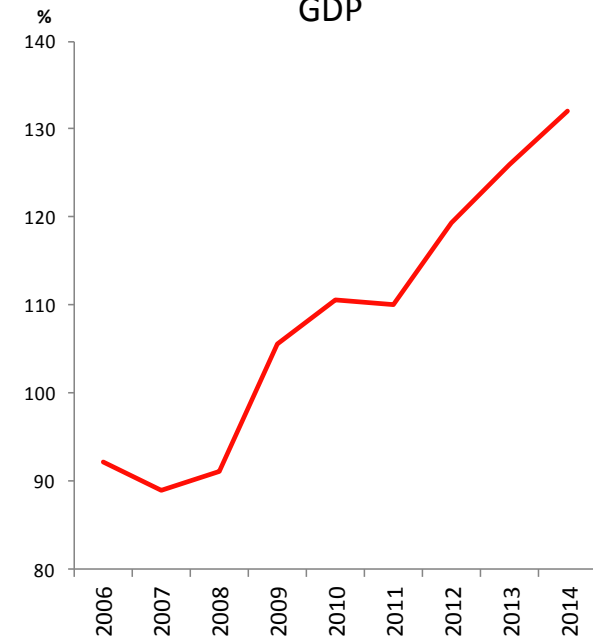
Corporate sector utilisation rates



Corporate Return on Asset

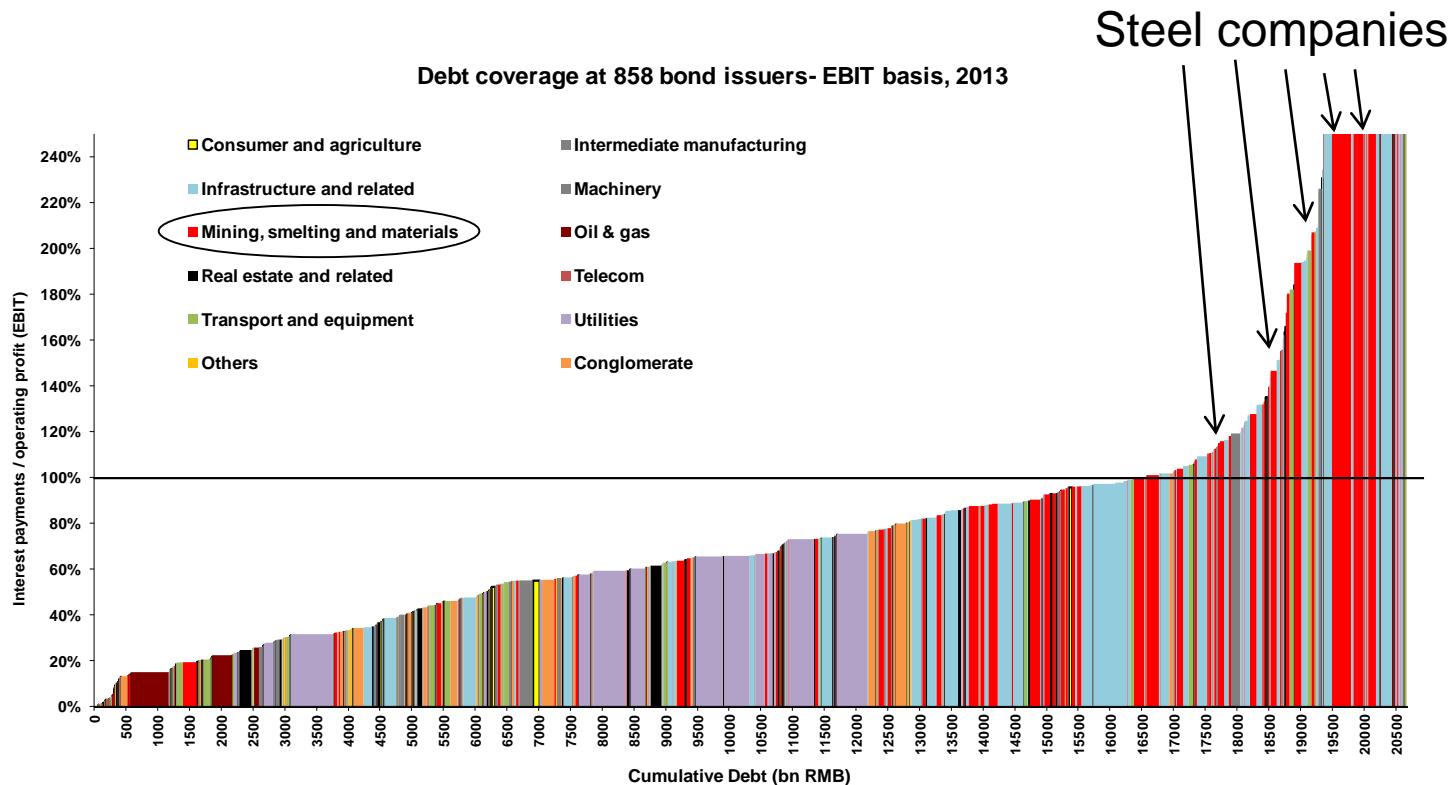


Corporate sector debt as % of GDP



Source: NBS, PBOC, Wind, Macquarie Research, June 2015

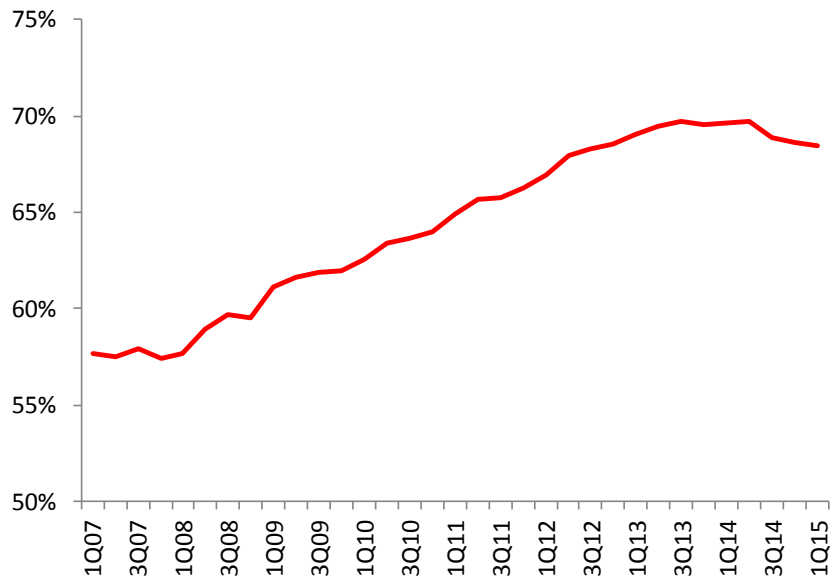
Materials companies are at the sharp end of China's current difficulties



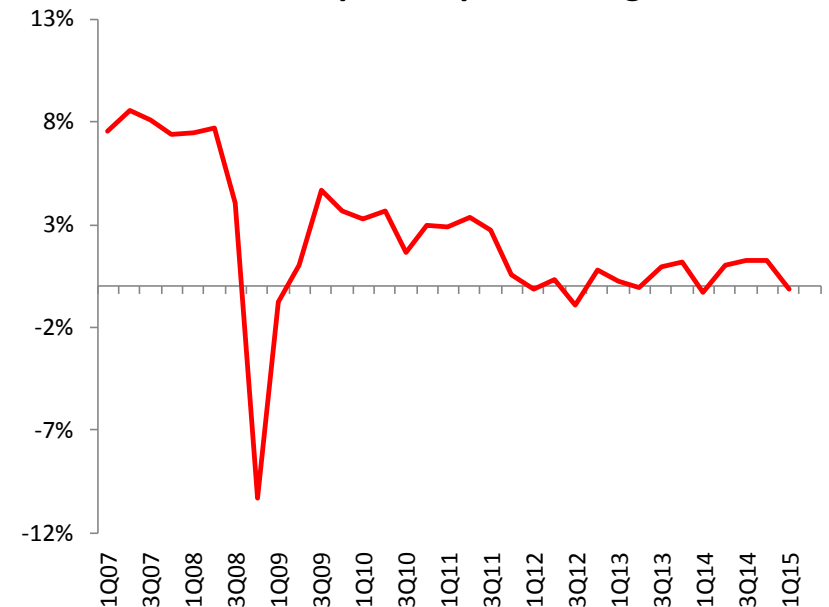
Steel mills are a micro example of China's economic woes...

➔ Excess capacity, low profitability, excess leverage, highly polluting, collateralization scandals...

CISA mill liabilities/assets

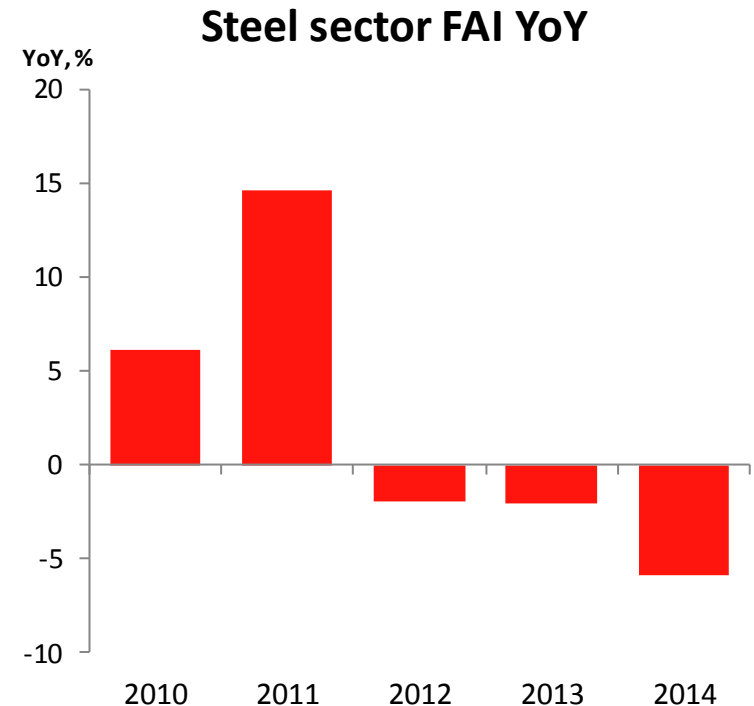
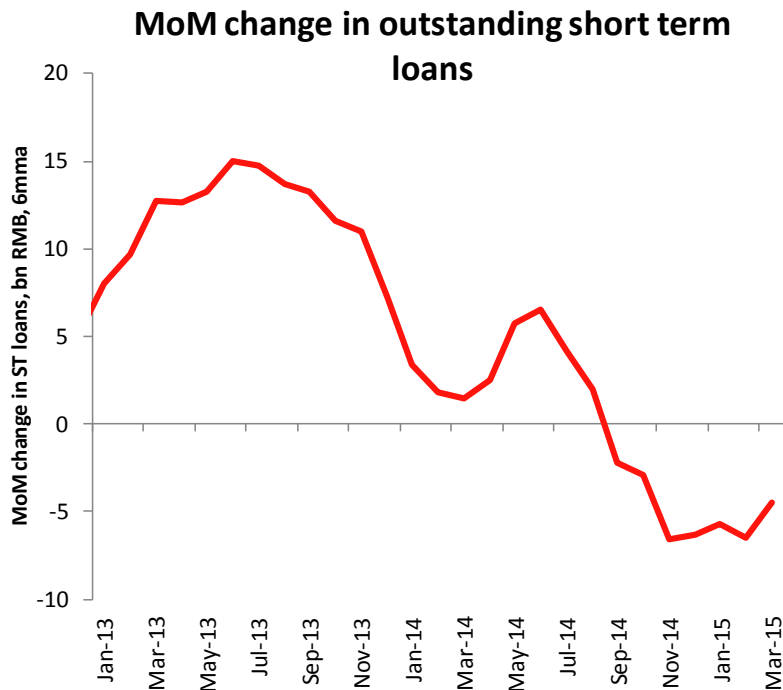


CISA mill pre-tax profit margin



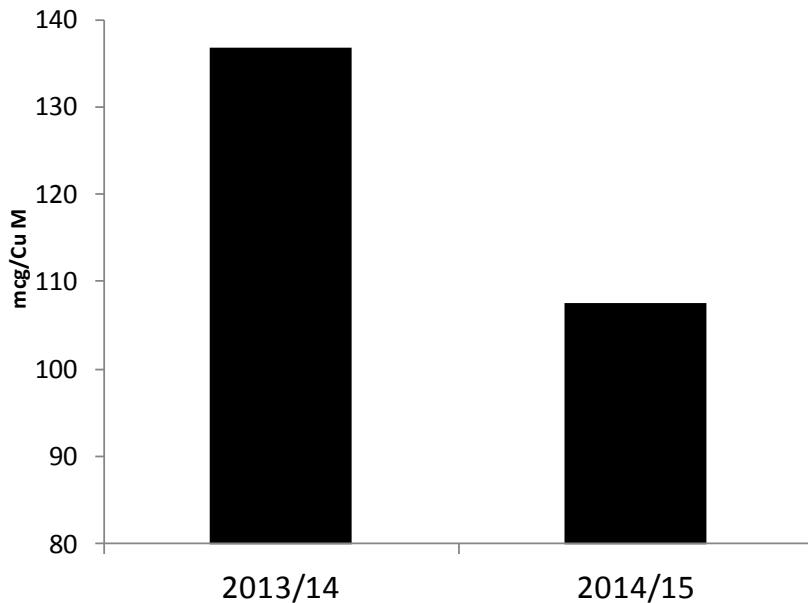
...but the steel sector also exemplifies some recent economic reforms

➔ Credit policy and administrative controls have been used to restrict capacity additions

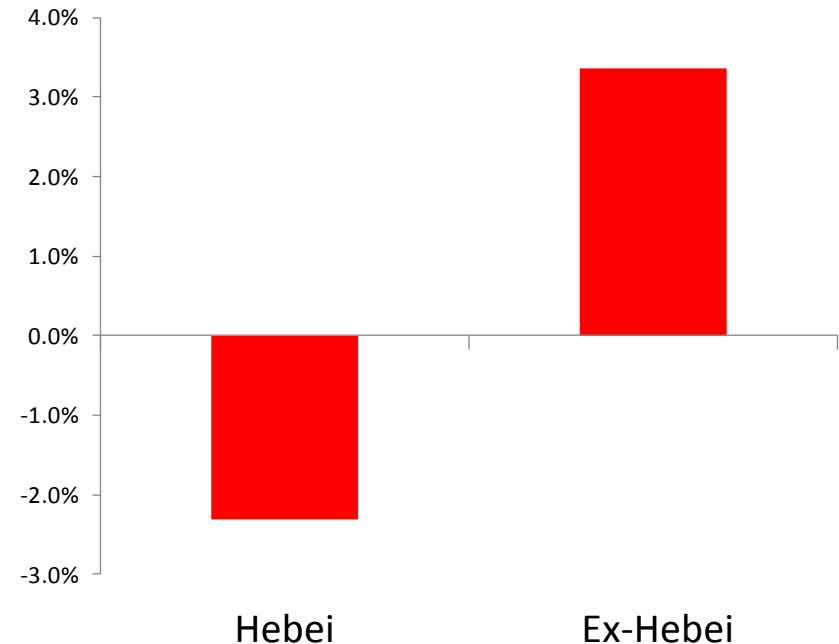


Environmental protection measures are being used to apply pressure to existing capacity

**Average winter PMI 2.5 levels
Beijing - Hebei - Tianjin**

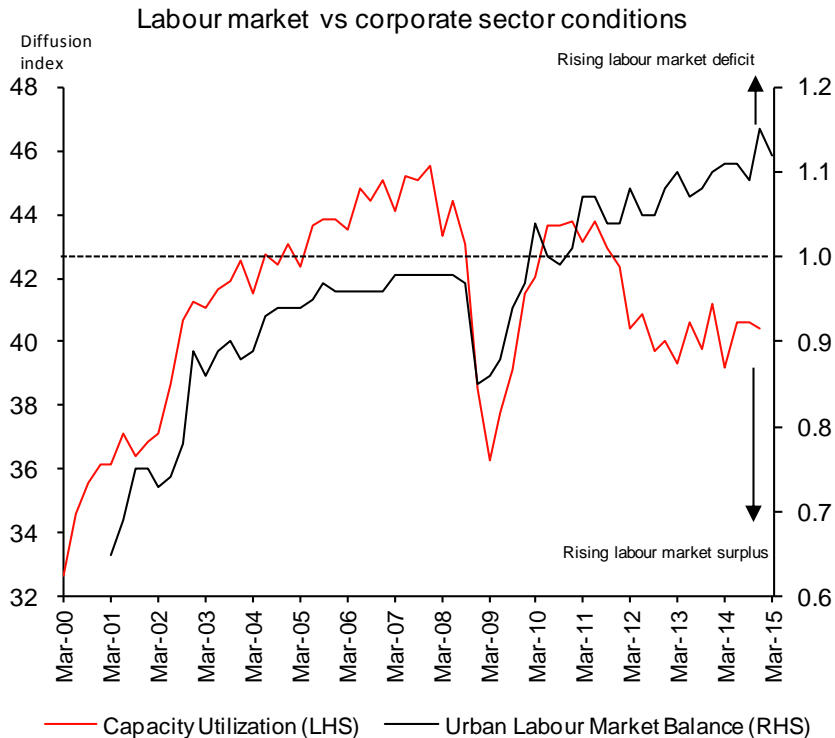


YoY output in steel production, 2014



Operational efficiency is becoming a priority over social concerns

➔ Anshan Group closing its Chengdu Steel subsidiary represents a shift in SOE behaviour

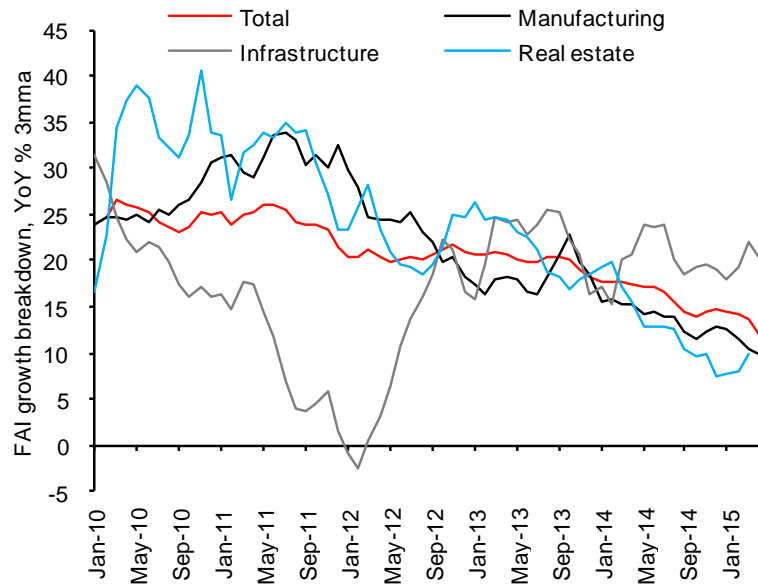


	Old Targets	New Targets	Notes
Annual	Net Profit	Net Profit	No change
	Net Asset Returns	Economic Value Added (EVA)	Given EVA looks at returns after adjusting for the cost of capital, it focusses attention on long run economic viability
Medium Term (~3yrs)	State capital appreciation	State capital appreciation	This refers to growth of the state's equity holding, where equity is defined as net assets
	3 year growth of main business revenue	Total asset turnover (3yrs)	Reflects a shift to monitoring utilisation of assets rather than simply looking at revenue generated

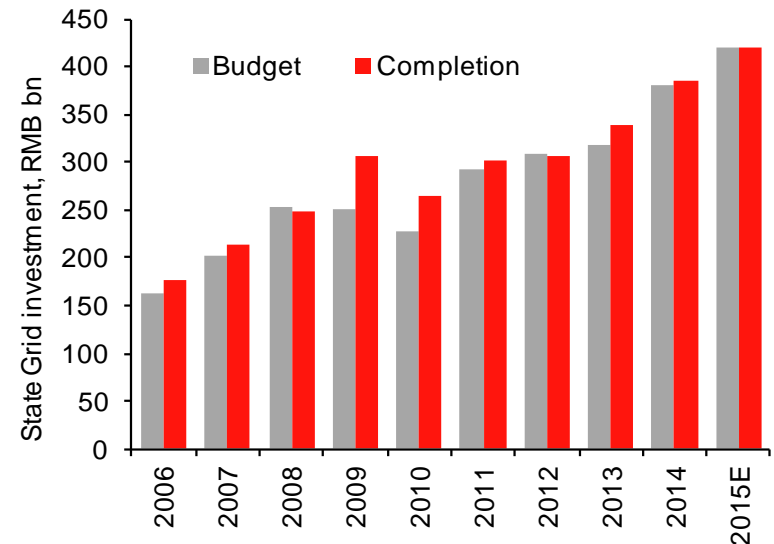
While the supply side of the equation is being reformed, there is still some support for demand

➔ Infrastructure remains a balancing force in the economy, but the more that is done to rationalise the supply side, the less needs to be done to support demand

Fixed asset investment



State grid budget and completions



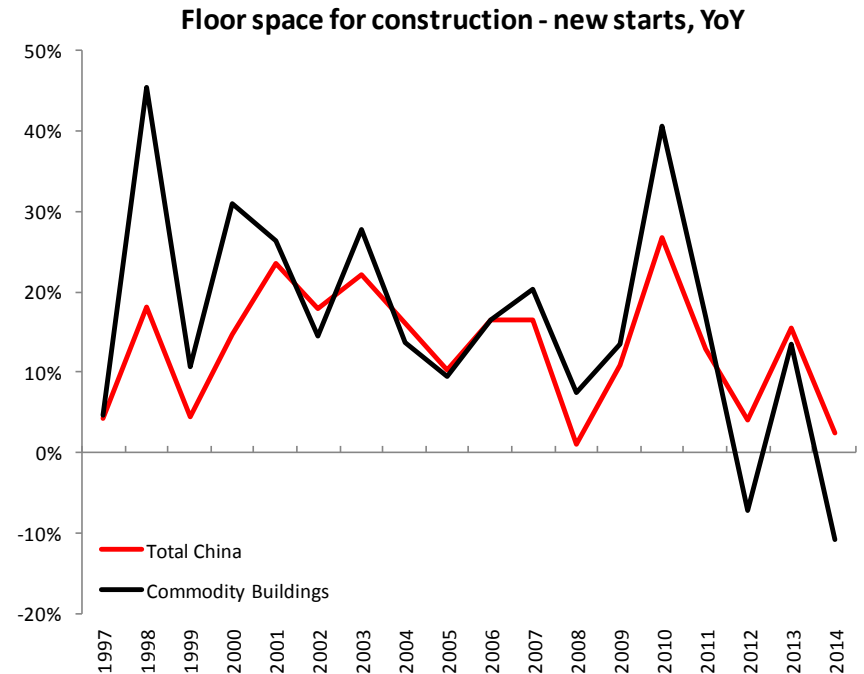
There are some early signs of recovery in steel sector conditions





The more organic side of demand is struggling but conditions perhaps not as bad as they seem

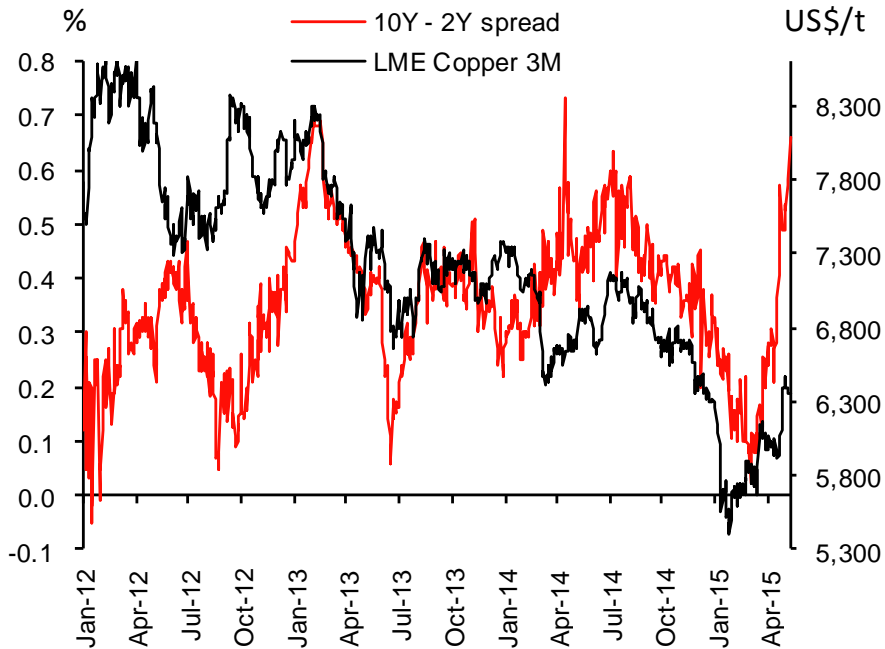
➔ As per 2012, top tier cities have responded quickly to monetary easing – will the rest of China follow?



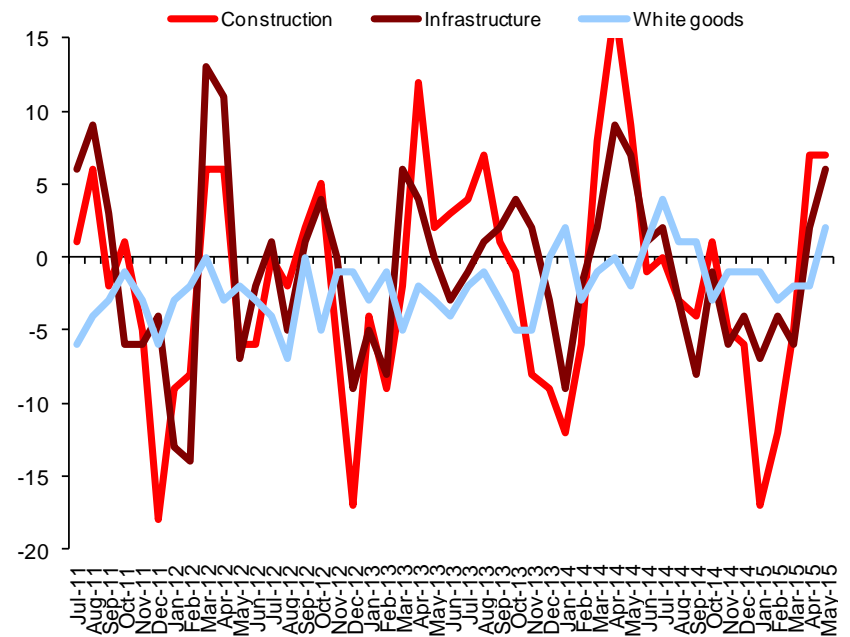


For now, markets have turned more positive after a weak 1Q but cycles can be short

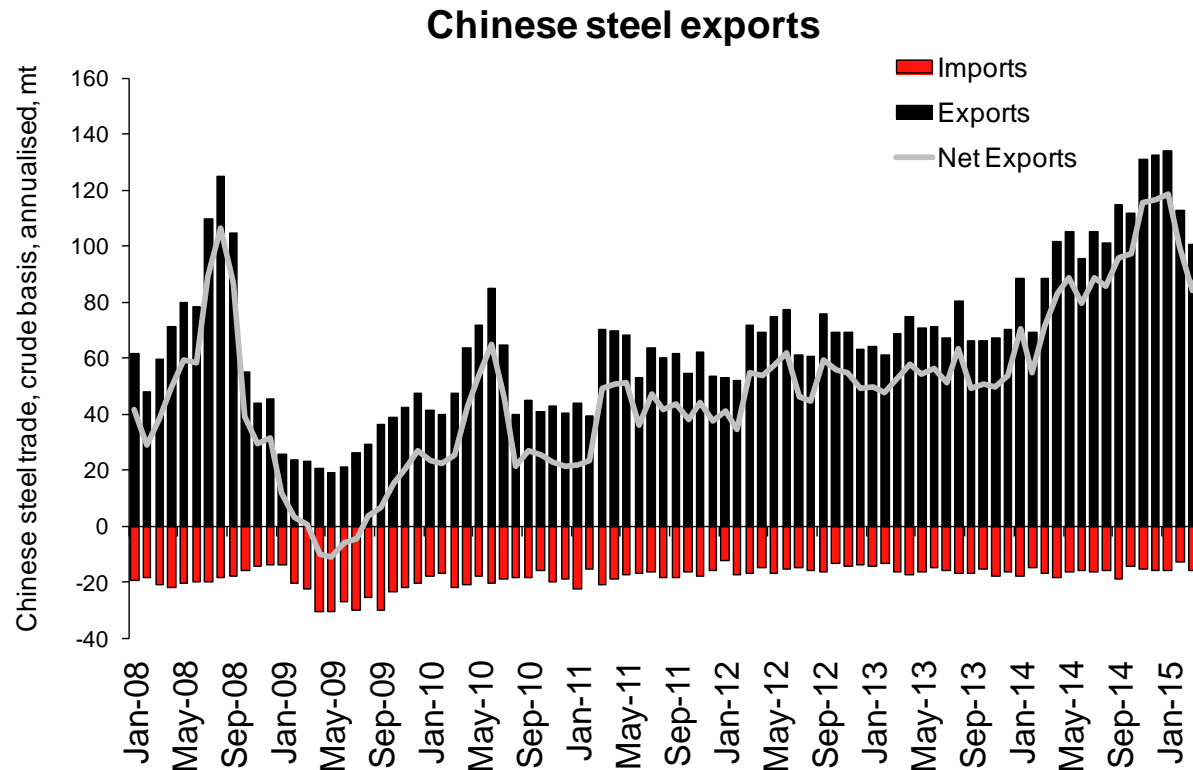
Interest rate swap spreads and copper prices



Net change in orders at traders - end use sectors

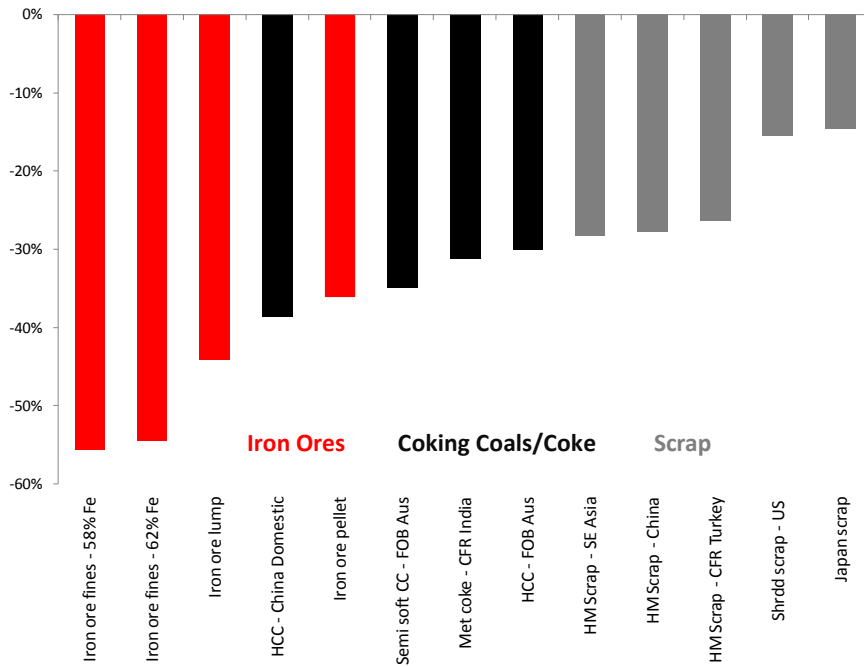


Exports have been extremely helpful for maintaining utilisation rates

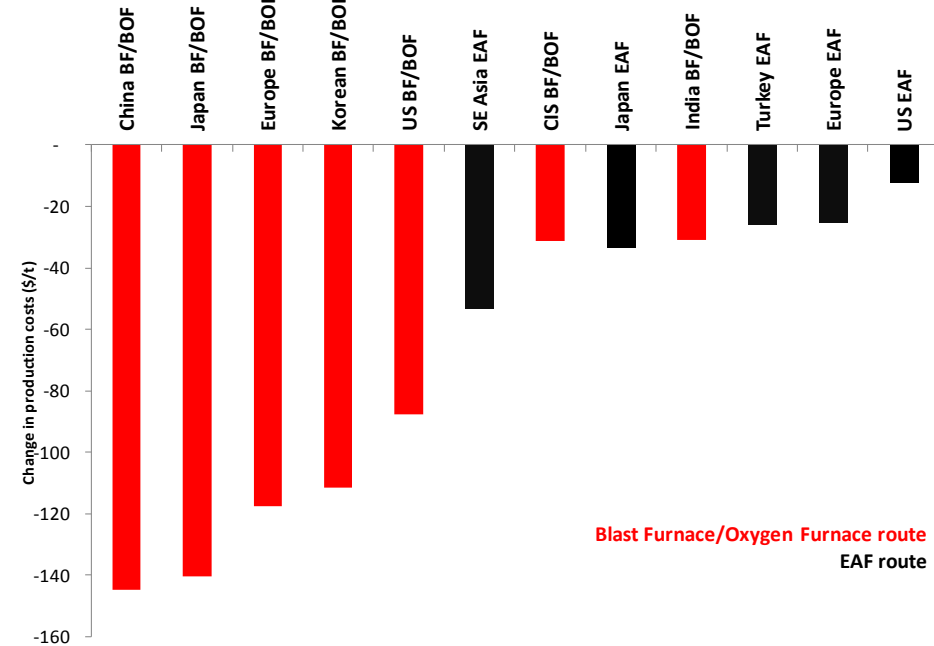


Raw material price declines have favoured Chinese mills over other regions

Raw material price changes, Jan 2013 - 1Q15

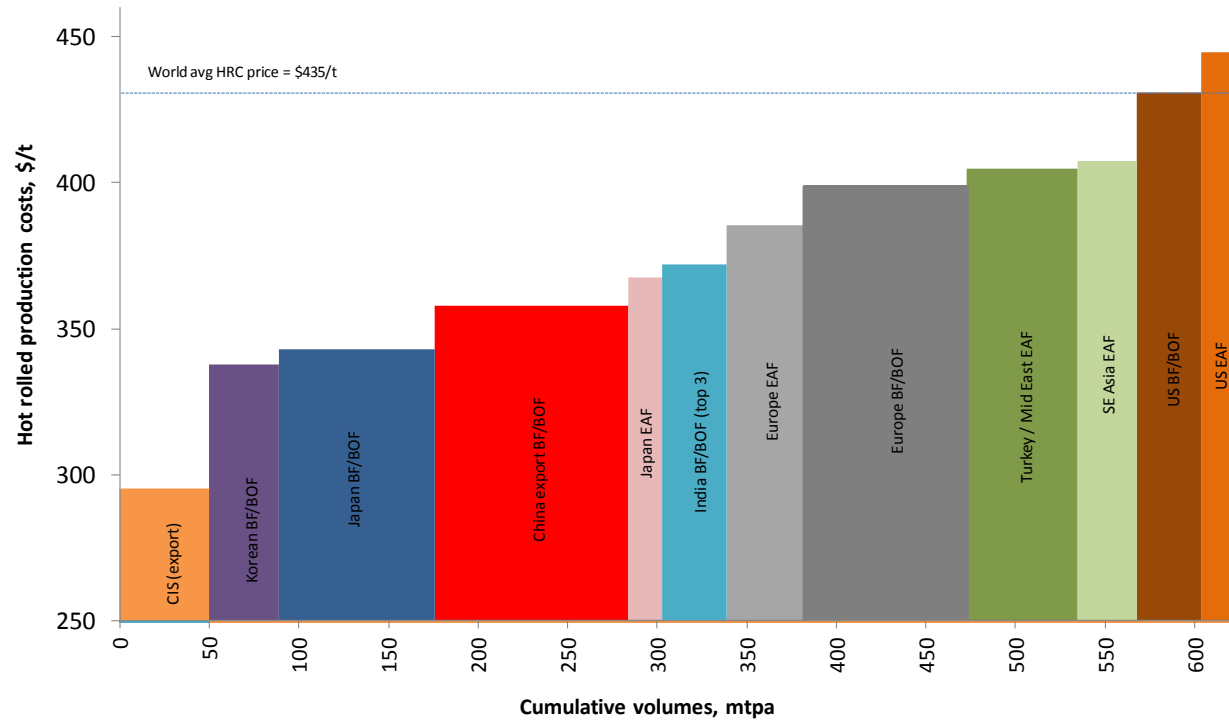


Changes in production cost by region and process - 1Q13 to 4Q14



China has maintained a favourable position on the global steel cost curve

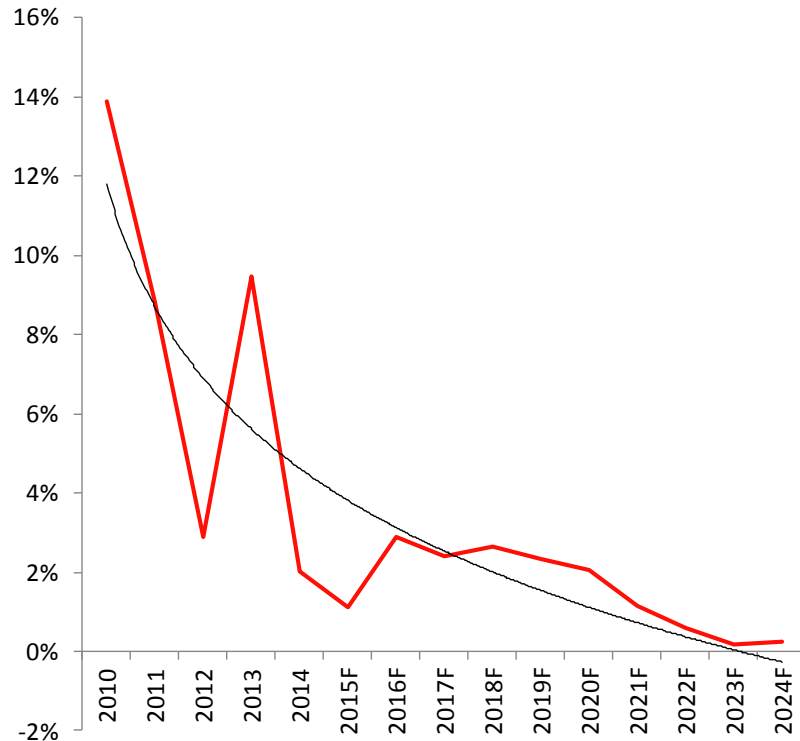
Selected steel cost curve - 1Q15



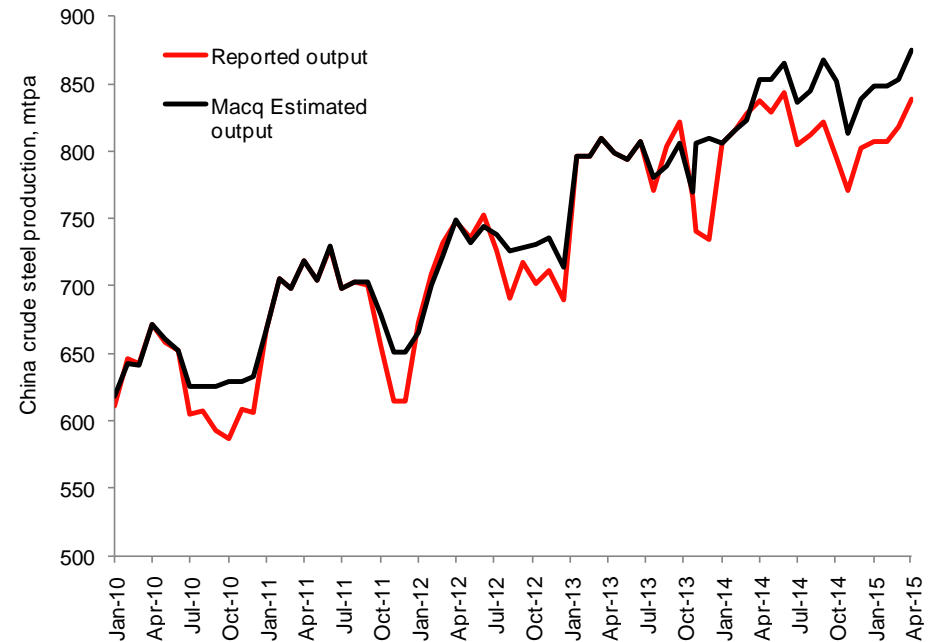
Has China's steel demand hit a peak?

➔ Our view is no – but structurally lower levels of growth mean demand is more susceptible to YoY declines in cyclical down years

YoY growth in China's steel demand

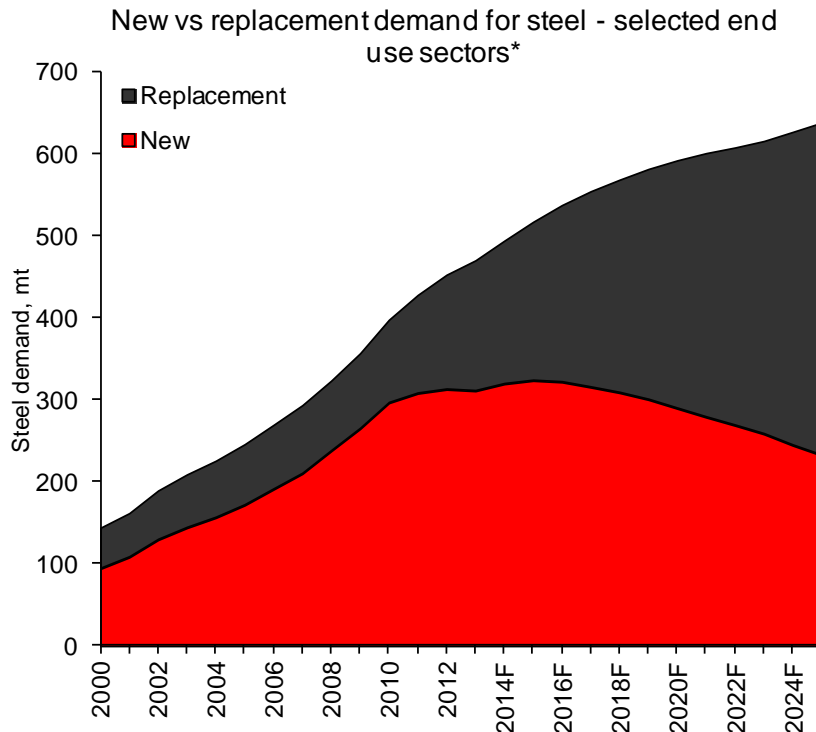


Crude steel production

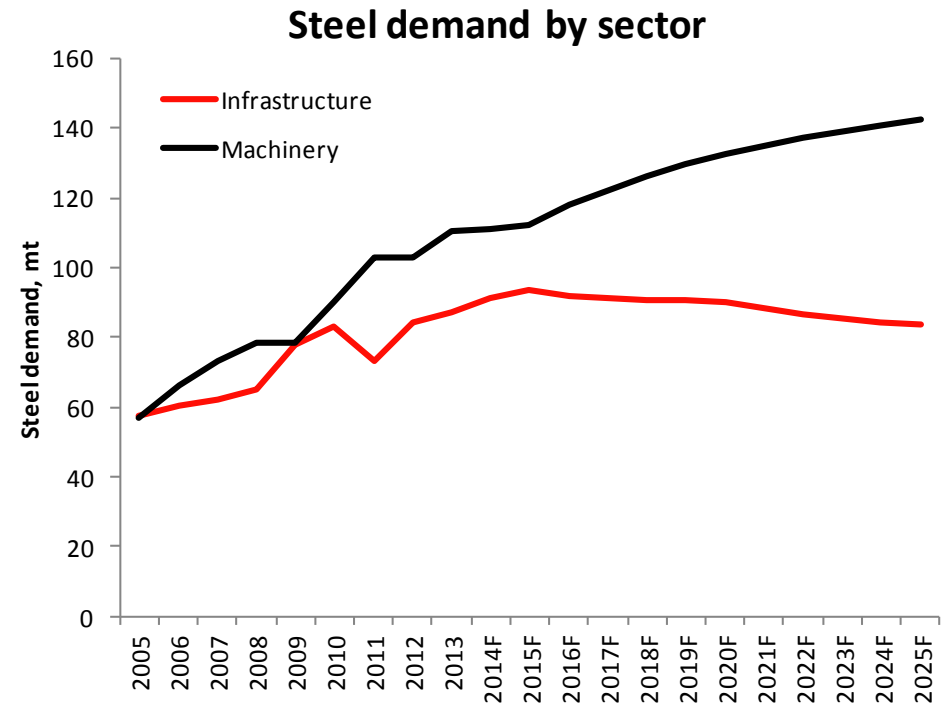


Source: CISA, NBS, Macquarie Research, June 2015

The drivers of demand are changing – more replacement and more value focused

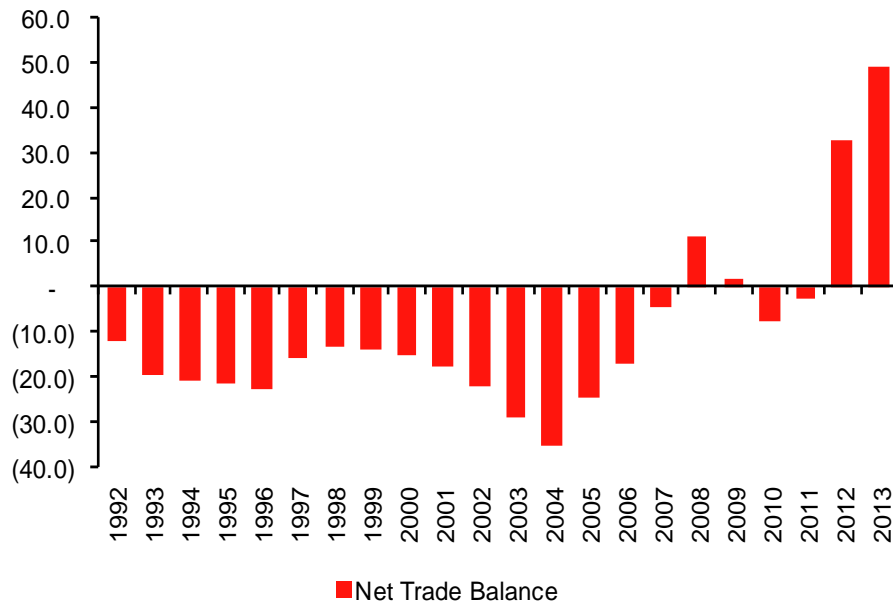


*Sectors included are construction, autos, rail, road, machinery and white goods

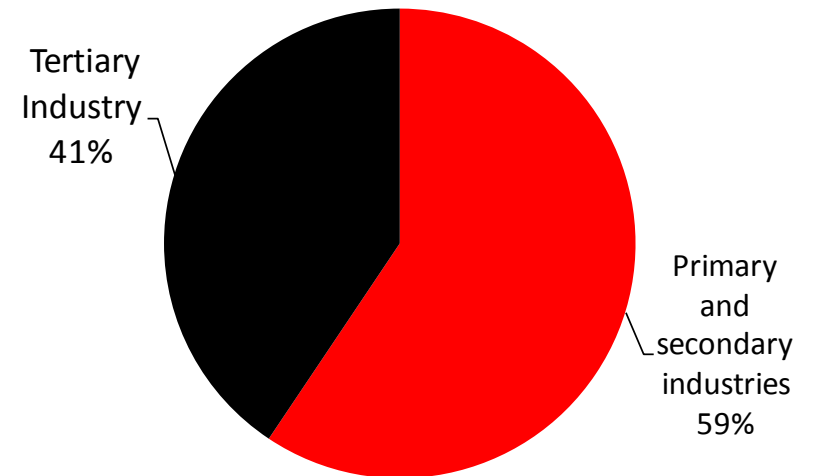


China is keen to remain a major manufacturing economy

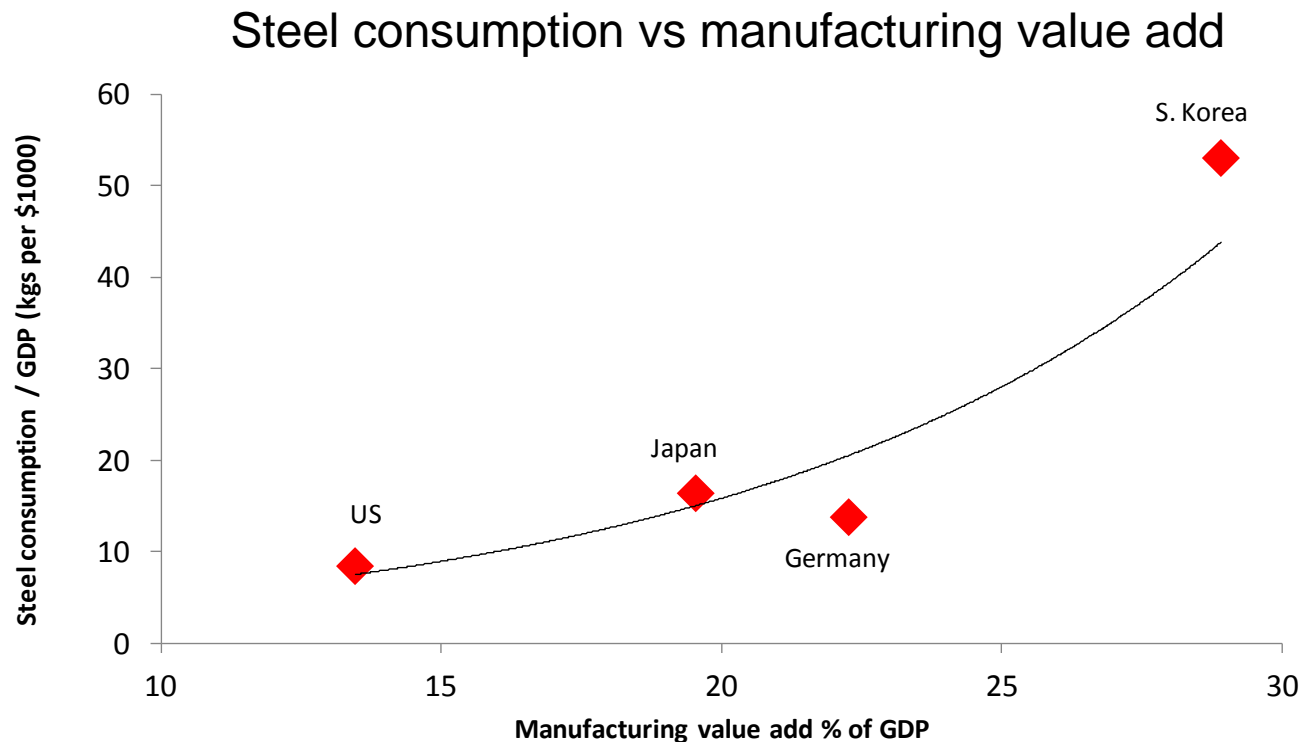
China net trade in machinery and tools (US\$ bn)



Employment by industrial sector



A higher share of manufacturing value add tends to correlate with higher levels of steel consumption



The outlook for China's steel industry

- Continued growth in demand for now, albeit at much lower levels
- A shift in demand drivers away from construction and infrastructure more towards higher value added machinery and consumer products. Replacement demand and upgrading to feature more heavily.
- Supply side controls with bring improving operating conditions for the mills that survive the restructuring.
- Sustainable margin recovery likely, especially for those mills that can increase the higher value added steel required for the next phases of China's manufacturing development.

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<p>Recommendation definitions</p> <p>Macquarie - Australia/New Zealand</p> <p>Outperform – return > 3% in excess of benchmark return Neutral – return within 3% of benchmark return Underperform – return > 3% below benchmark return</p> <p>Benchmark return is determined by long term nominal GDP growth plus 12 month forward market dividend yield.</p> <p>Macquarie – Asia/Europe</p> <p>Outperform – expected return >+10% Neutral – expected return from -10% to +10% Underperform – expected <-10%</p> <p>Macquarie First South - South Africa</p> <p>Outperform – return > 10% in excess of benchmark return Neutral – return within 10% of benchmark return Underperform – return > 10% below benchmark return</p> <p>Macquarie - Canada</p> <p>Outperform – return > 5% in excess of benchmark return Neutral – return within 5% of benchmark return Underperform – return > 5% below benchmark return</p> <p>Macquarie - USA</p> <p>Outperform – return > 5% in excess of benchmark return Neutral – return within 5% of benchmark return Underperform – return > 5% below benchmark return</p>	<p>Volatility index definition*</p> <p>This is calculated from the volatility of historic price movements.</p> <p>Very high–highest risk – Stock should be expected to move up or down 60-100% in a year – investors should be aware this stock is highly speculative.</p> <p>High – stock should be expected to move up or down at least 40-60% in a year – investors should be aware this stock could be speculative.</p> <p>Medium – stock should be expected to move up or down at least 30-40% in a year.</p> <p>Low–medium – stock should be expected to move up or down at least 25-30% in a year.</p> <p>Low – stock should be expected to move up or down at least 15-25% in a year.</p> <p>* Applicable to Australian/NZ stocks only</p> <p>Recommendation – 12 months</p> <p>Note: Quant recommendations may differ from Fundamental Analyst recommendations</p>	<p>Financial definitions</p> <p>All "Adjusted" data items have had the following adjustments made:</p> <p>Added back: goodwill amortisation, provision for catastrophe reserves, IFRS derivatives & hedging, IFRS impairments & IFRS interest expense</p> <p>Excluded: non recurring items, asset revals, property revals, appraisal value uplift, preference dividends & minority interests</p> <p>EPS = adjusted net profit /efpowa* ROA = adjusted ebit / average total assets ROA Banks/Insurance = adjusted net profit /average total assets ROE = adjusted net profit / average shareholders funds Gross cashflow = adjusted net profit + depreciation *equivalent fully paid ordinary weighted average number of shares</p> <p>All Reported numbers for Australian/NZ listed stocks are modelled under IFRS (International Financial Reporting Standards).</p>
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	AU/NZ	Asia	RSA	USA	CA	EUR	
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Neutral	34.12%	26.62%	35.21%	50.29%	34.93%	31.32%	(for US coverage by MCUSA, 5.68% of stocks followed are investment banking clients)
Underperform	16.89%	13.87%	15.49%	5.93%	5.48%	16.48%	(for US coverage by MCUSA, 0.87% of stocks followed are investment banking clients)

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