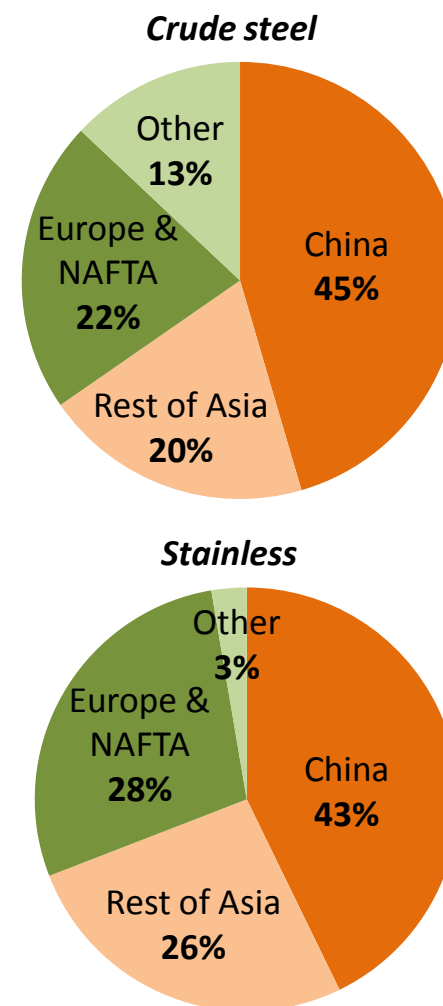


China's dominance of the steel sector means that its growth rates are the key drivers of all steel-related markets. The collapse of Chinese steel growth in 2012 has taken the raw material sector by surprise

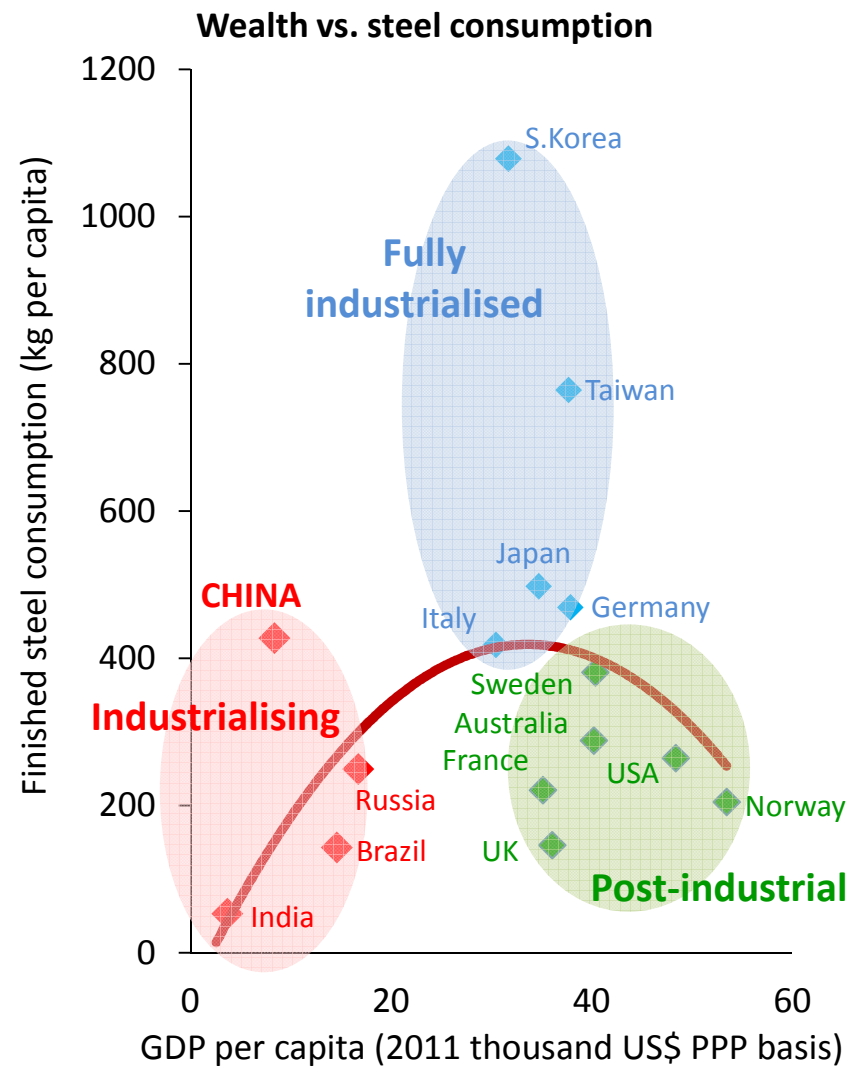


World steel output by region, 2012



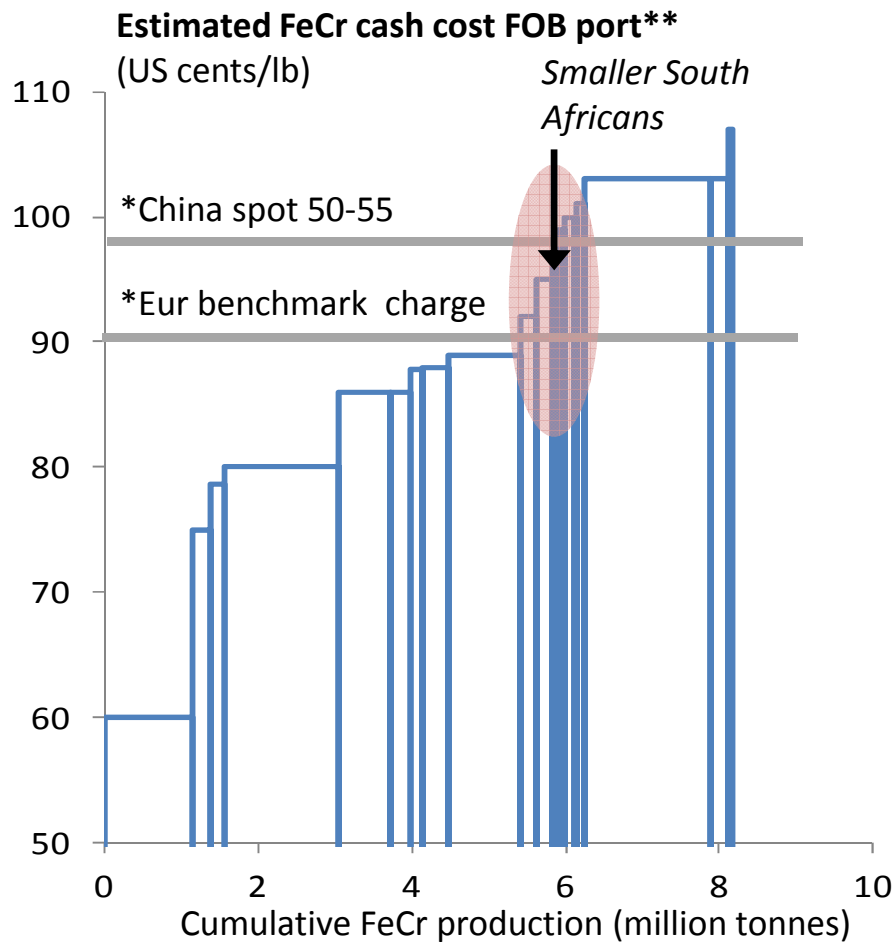
Source: World Steel Association, Eramet, CRU, K.Fowkes

The disappearance of Chinese steel growth may be explained by poor short-term indicators – it may also be true that, despite optimistic forecasts, Chinese carbon steel consumption is approaching a plateau



Source: HSBC, Markit, SteelConsult, World Steel Association, K.Fowkes

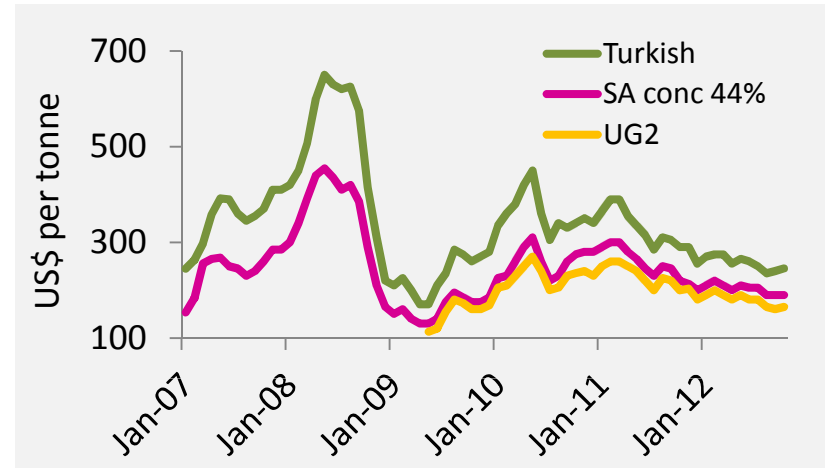
FeCr prices have weakened not just in response to softer demand – falling Cr ore prices, and their beneficial impact on production costs in China, also appear to have been an important factor



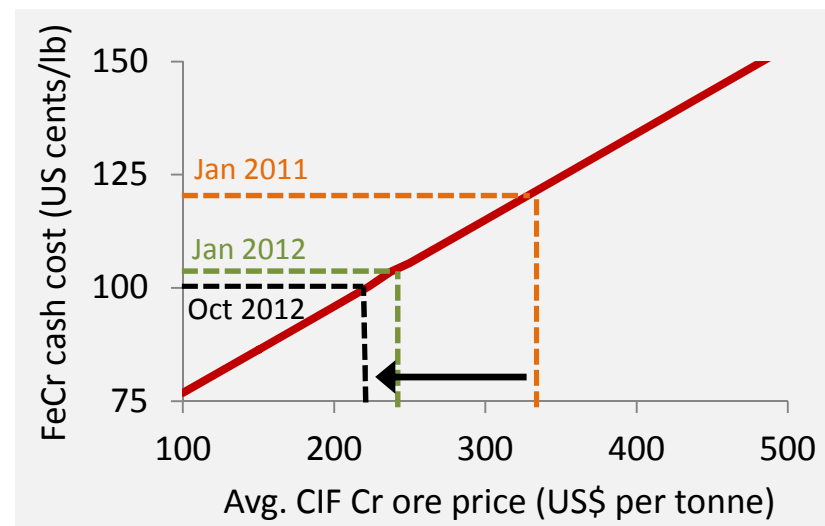
* CRU price adjusted to remove delivery costs and discounts
** Average cash costs for 2012

Source: CRU, Ryans Notes, K.Fowkes

Cr ore prices, CIF China



Sensitivity of Chinese FeCr cash costs to Cr ore prices



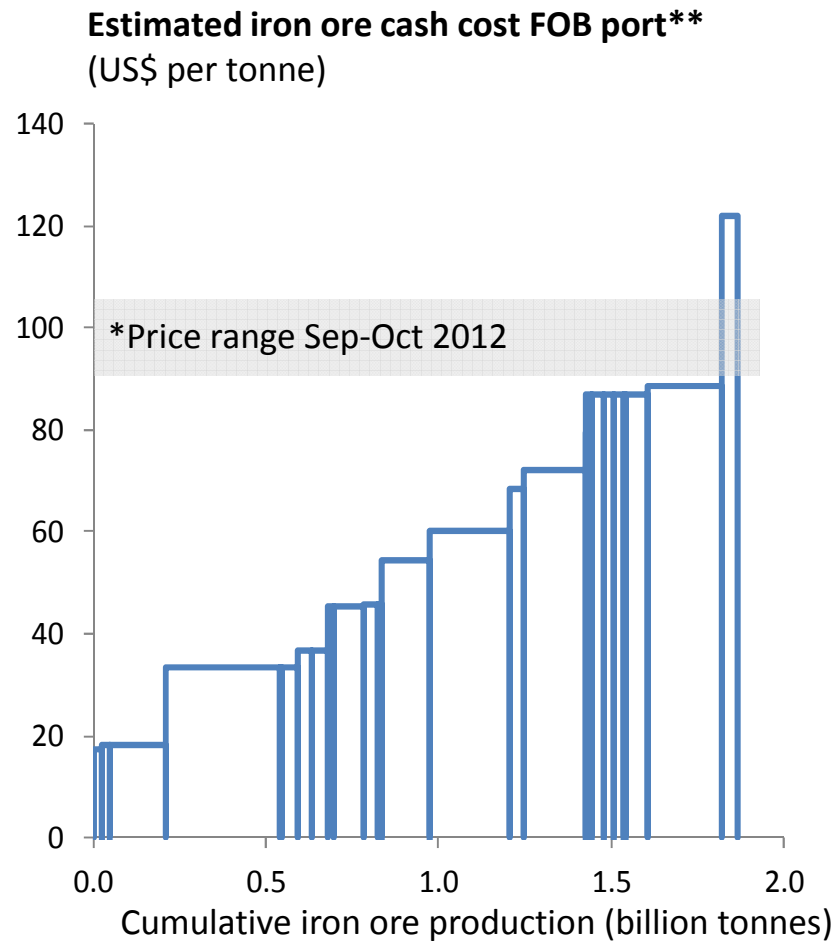
Key issues and points to watch: ferrochrome

- Global real demand likely to remain soft into first half of 2013, with few signs of China returning to its predicted growth path
- May be some temporary price benefit from lower FeCr / Cr stocks, however in terms of stainless production the evidence is that stocks have been rising
- Poor near term demand outlook outside of China too – European recession plus consolidation in light of Outokumpu-Inoxum. Impact on buying power/discounts may also hurt FeCr producers. US now slowing as well
- Potential for cost-push impact on FeCr prices from ~25% per year increases in South African power costs have so far been thwarted by:
 - Depreciating rand and Eskom buy-back scheme
 - Corresponding increase of Cr ore exports at lower and lower prices

There will come a time when this cannot be sustained, but maybe not in 2013

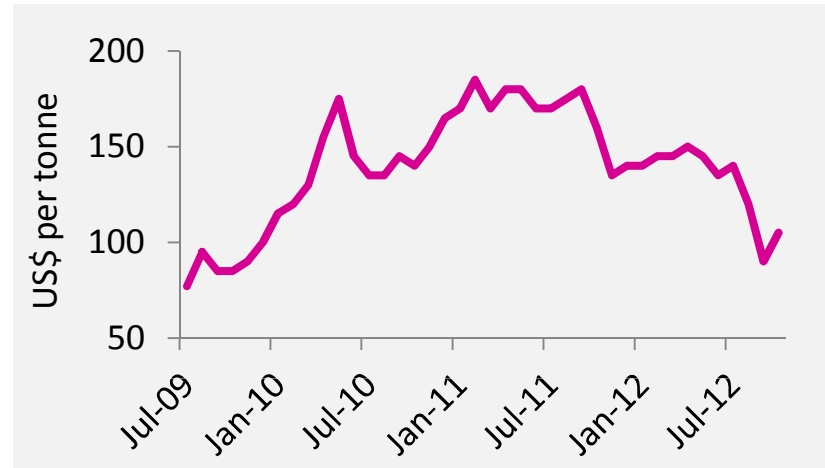
- Average FOB cash costs of Chinese production around 100 cents/lb and South Africans (except Xstrata) of 90-100 cents/lb will continue to set the floor of the market in the near term

Iron ore prices are reacting to aggressive output expansion at a time when demand growth (in China therefore globally) has stalled. Cost curve provides support at \$90/tonne but major rebound unlikely

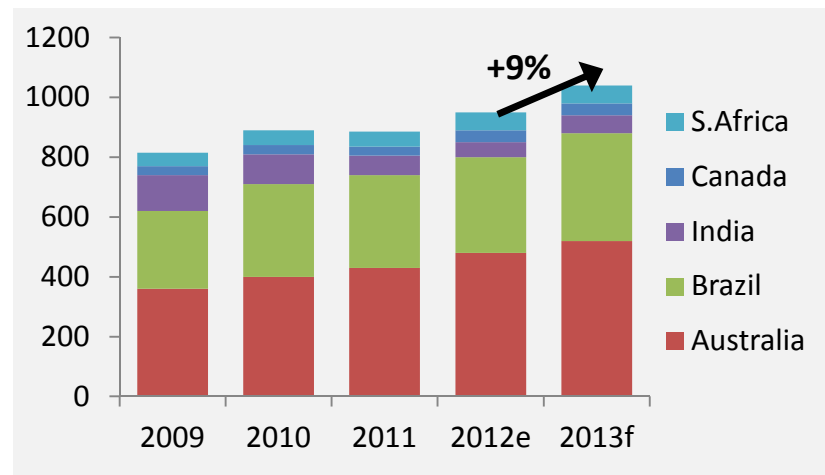


* TSI reference price , 62% Fe fines CFR China
 ** Average cash costs for 2012

TSI iron ore reference prices, CFR China



Iron ore production from top-5 exporting countries
(million tonnes)



Key issues and points to watch: iron ore

- Iron ore demand looks to be flat for the rest of 2012 and into the first half of 2013 – however views on the medium and long term outlook diverge
- Producers have predicated major expansions on the assumption of ~5%pa demand growth in China for the next 10 years
 - No serious divergence from this view as yet, despite only 1% growth in China in 2012 and weak outlook for early-2013
 - Some tinkering and delays....but many expansions still going ahead. Platts expect output from main exporting countries to rise by 9% in 2013
 - In near term prices will adhere to floor around \$90/tonne, reflecting cash costs of higher cost western players and average Chinese mines
 - If demand remains largely flat then without cancellation of many expansions, prices risk falling through the \$90/tonne floor and testing the marginal cost of the majors