Iron ore riding an unsustainable wave

by NAB Group Economics

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National Australia Bank

- After trending lower across 2015, iron ore prices staged a short-term volatile rally in early 2016 – returning close to US$70 a tonne in late April. This coincided with a rapid increase in Chinese futures market trading volumes on the Dalian Commodity Exchange – which may indicate a temporary speculative bull market. Subsequent tighter regulation on the DCE brought prices back nearer to US$50 a tonne.
- This rally occurred against a backdrop of stronger Chinese steel market conditions – with demand recovering thanks to a rebound in construction activity (the sector that accounts for over half of China's steel demand). Steel prices rose faster than input costs between February and April, driving steel maker profitability to its highest level in almost seven years.
- We argue that the rebound in construction is not sustainable, with policy changes that have relaxed purchase requirements, looser credit and the poor performance of alternative investment options re-inflating the property bubble that had somewhat deflated across 2014 and 2015.
- The short-term boost to profitability should not be allowed to overshadow the significant long-term challenges that China's steel industry needs to address. Excess capacity in China's steel sector exceeds 300 million tonnes (around three times the 2015 output of Japan, the world's second largest steel producer).
- Medium term trends for steel – both in China and globally – appear subdued. Expectations that China's steel consumption will continue to decline in coming years will be a major constraint on iron ore demand, while sub-trend economic growth elsewhere provides little opportunity for China's declines to be offset. Over the medium term, we expect prices to settle at around US$40 a tonne.

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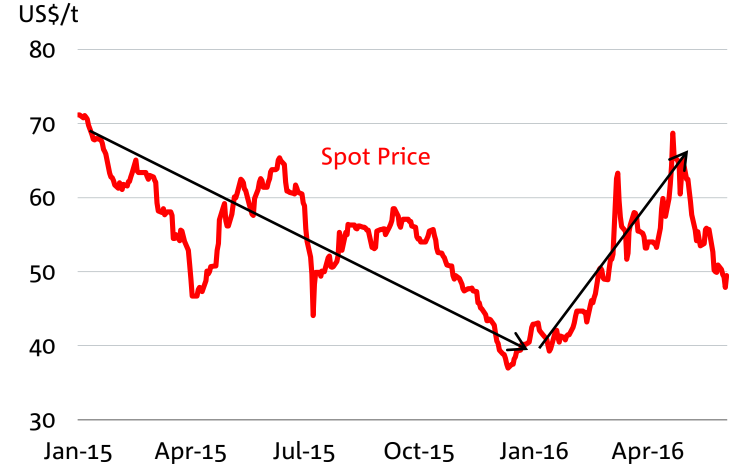
Overview – iron ore's volatile rally in early 2016

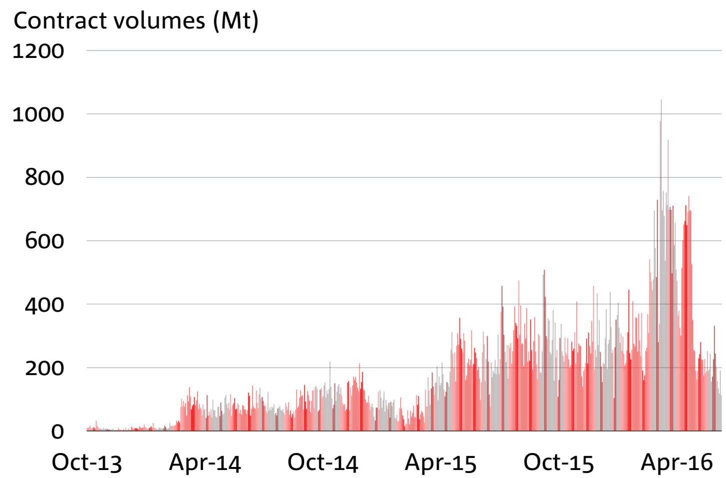
- Iron ore prices trended lower across 2015 – from around US$70 a tonne (for 62% fines landed in China) in January, to a record low (since the commencement of active spot market trading) of US$37.50 a tonne in mid-December. Weaker demand in China and elsewhere – as steel production fell – combined with growth in Australian exports drove the market into oversupply.
- However, since this point iron ore prices have trended higher – particularly from mid-February onwards. By late February, prices reached US$50 a tonne, and by late April almost hit US$70 a tonne.
- It was from mid-February that paper trading on the Dalian Commodity Exchange began to intensify. Compared to other commodity markets, iron ore futures trading has a very short history, and lacks detailed disaggregation of the long and short positions held by speculators – making trends in this market more opaque.
- That said, market volumes on the Dalian exchange surged across March and April – with two days in March where contract volumes exceeded China's total imports for 2015 – which at 953 million tonnes was a record level. This implies speculative inflows (anticipating stronger demand for iron ore) may have created a short-term bull market.
- However from mid-April, regulation of the exchange has tightened – with minimum margin rates lifted, transaction fees for iron ore increasing and supervision of the market stepped up – in an effort to curb 'excessive speculation'. In response, trading volumes have returned to levels typical across much of 2015, and spot iron ore prices have pulled back to around US$50 in early June.

Iron ore prices surged from effective all time lows in December, before drifting back towards US$50 a tonne



Source: Datastream, NAB Economics

Paper trading in China fuelled the recent rally, with daily volumes exceeding annual imports twice in March

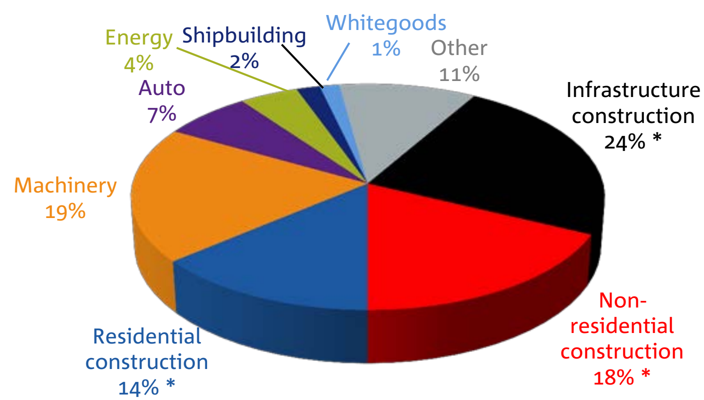


Source: Bloomberg, NAB Economics

Iron ore demand stronger on China's real estate rebound

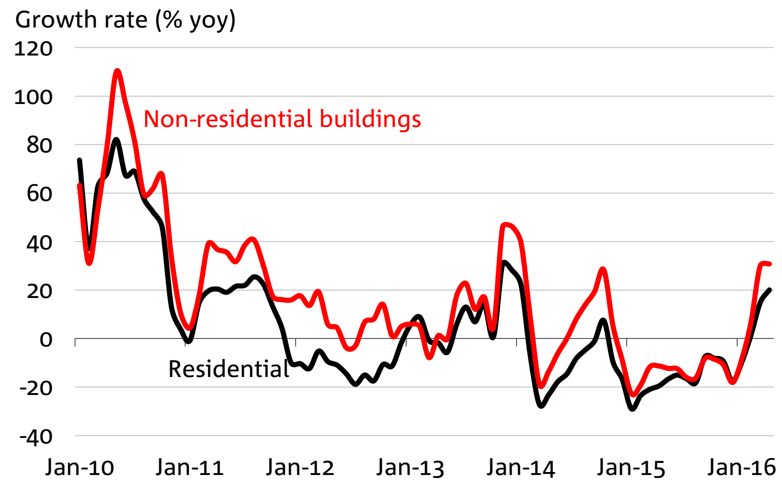
- The inflow of funds into iron ore was likely inspired by the rebound in investment in China's real estate sector – providing fresh support for steel demand (and by extension demand for iron ore and metallurgical coal). China's construction sector is a key consumer of steel – accounting for almost 56% of the country's steel use in 2013 (MIPRI).
- Until 2013, the property sector was a key contributor to China's economic growth – accounting for around 13% of GDP – however uncontrolled activity led to oversupply of housing and commercial floor space in a large number of markets, which flowed through to falling property prices across the country.
- Total new construction activity – as measured by floor space starts – declined across 2014 and 2015 (recording falls of 14% and 18% respectively) as the combination of falling prices and policy changes (including measures that favoured alternative investment options) constrained property demand.
- The weak construction trend reversed in early 2016 – with construction starts growing by over 19% yoy in the first quarter – returning near to the levels recorded in the same period of 2014.
- Much of this growth has been fuelled by debt. Outstanding mortgage loans grew strongly in Q1 – rising by almost 26% yoy to RMB 15.5 trillion (the largest increase since December 2010).

Construction the dominant sector for China's steel consumption



* Construction breakup based on 2010 estimate
Source: MIPRI, OECD, KPMG, NAB Economics

Activity in China's construction sector has recovered sharply in early 2016



Source: CEIC, NAB Economics

Is China's construction rebound sustainable?

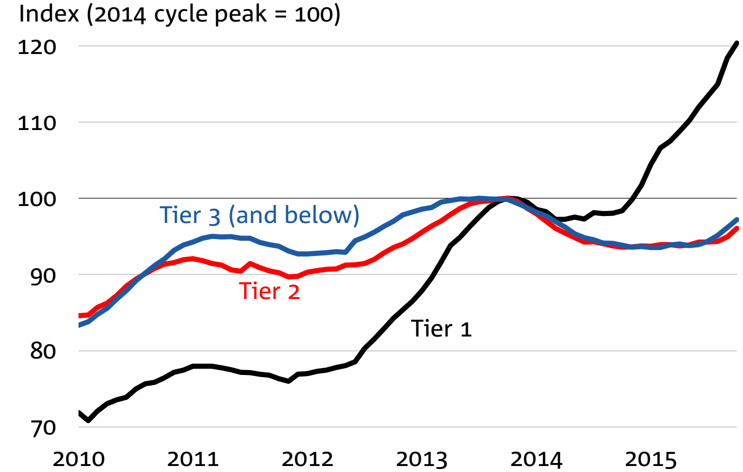
- There is little to suggest that a wholesale recovery in property markets has underpinned the rebound in construction activity. While average residential property prices have recovered and now exceed the previous peak in 2014 (by around 4.1% in April), this is largely a phenomenon in China's largest, tier one cities (Beijing, Shanghai, Shenzhen and Guangzhou) – where prices are over 20% above their previous peak. In contrast, tier 2 cities are still around 3.9% below their peak, and tier 3 (and below) cities are around 2.8% below.

- At a fundamental level, little has changed in China's property markets – with excess supply persisting in many locations (with tier 1 cities arguably the exception – however these cities are home to just 5.1% of the country's population).

- Instead we argue that policy changes that have relaxed purchase requirements, looser credit and the poor performance of alternative investment options (following the share market correction and crackdowns on shadow banking) have started to re-inflate the property bubble that had somewhat deflated across 2014 and 2015.

- In the absence of broad based fundamental support for current real estate trends, any policy changes that prove adverse to construction could result in a sharp slowdown in industrial activity.

Surging property prices are a phenomenon of China's largest cities – smaller ones not recovered to 2014 peaks



Sources: China Index Academy, Datastream, NAB Economics

China's beleaguered steel industry sees profits briefly rebound

- The recovery in construction activity has underpinned stronger demand for key inputs, including steel. China's steel prices have jumped in recent months – following on from a downward trend from February 2011 through to late 2015, when MySteel's East China price index dipped below RMB 2000 a tonne (the lowest levels on record, dating to late 1990s). From this cyclical low, prices surged back above RMB 3000 a tonne in late April – before subsequently retreating in May.

- Profitability for Chinese steel mills similarly improved (albeit briefly), despite the run up in iron ore prices. Falling steel stocks saw prices rise more rapidly than raw material costs up until the late April peak. At this point, steel prices were at their highest levels since September 2014, but steel profitability was at its highest level since mid-2009.

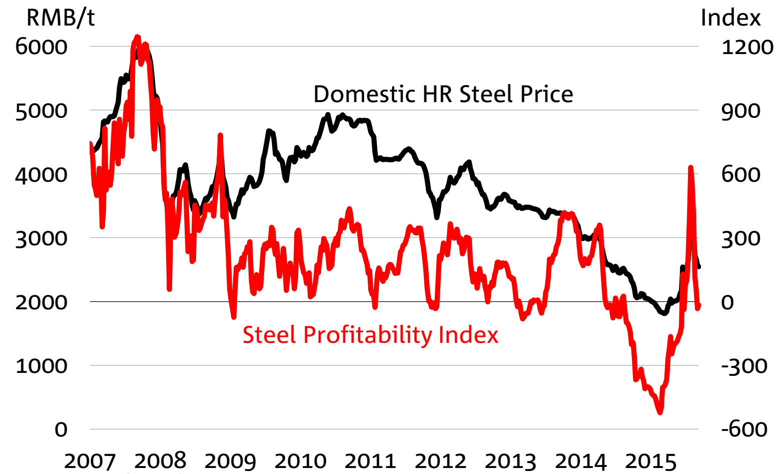
- The subsequent retreat in steel prices has brought profitability back down – near the lower levels of the range across most of the period from 2009 to 2014.

- The short-term increase in prices and profit margins should not be allowed to overshadow the significant long-term challenges that China's steel industry needs to address. According to the Ministry of Industry and Information Technology, China's steel production capacity is currently 1.13 billion tonnes – over 300 million tonnes larger than China's output in 2015. In comparison, the entire steel output of Japan – the world's second largest producer – was 105 million tonnes in 2015.

Steel prices suddenly reverse five year downward trend in early 2016

Source: Datastream, NAB Economics

Steel prices rose faster than input costs, pushing profitability is at its highest level in almost seven years



Sources: Bloomberg, NAB Economics

China's steel sector requires long-term adjustment, not the status quo

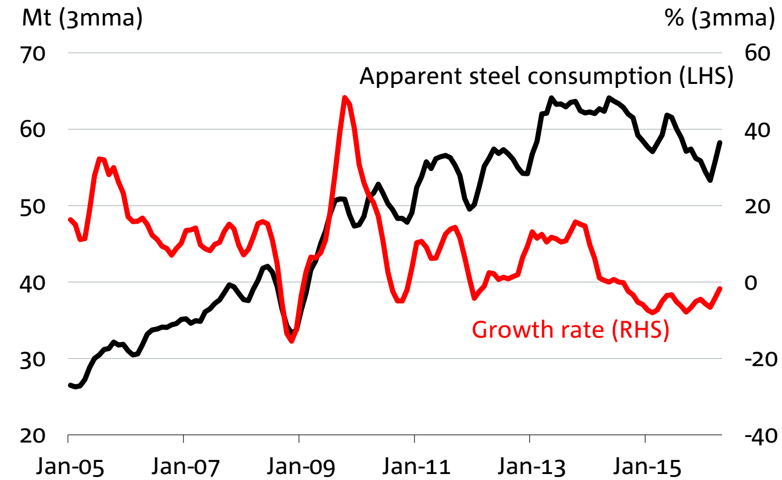
- In February, China's State Council announced plans to cut crude steel capacity by between 100 and 150 million tonnes over the next five years (at the social cost of around half a million jobs in the sector) – however this alone will not be enough to eliminate spare production capacity. There is limited upside to China's steel consumption – with the China Iron and Steel Association suggesting that consumption has already peaked and will now enter a long-term declining trend.

- Export markets also offer limited opportunity in coming years – with Chinese steel exports already generating significant trade tensions. In March, the US Department of Commerce imposed a preliminary 266% duty on steel from a range of countries (including China) in response to alleged dumping. Chinese steel export volumes have risen significantly in recent years – particularly as domestic construction has slowed – rising to almost 100 million tonnes in 2015 – again comparable to Japan's total steel output.

- Previously announced cuts have had a limited impact on total capacity – with older plants removed often simply replaced with new production facilities – highlighting competing priorities at local and central government levels.

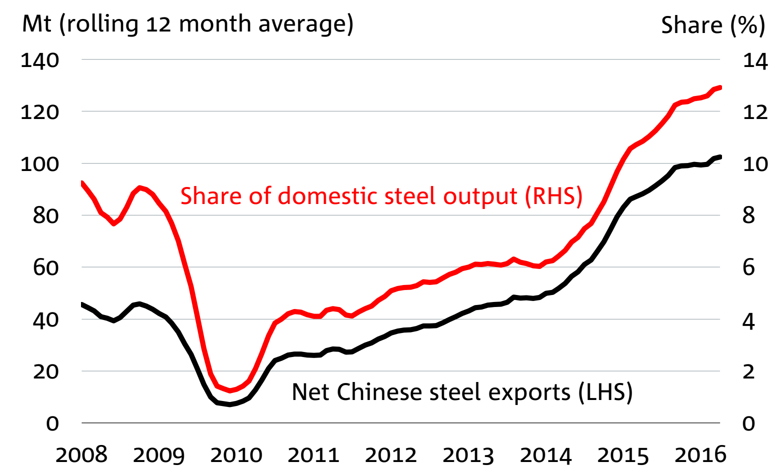
- In addition, air pollution associated with the steel industry remains a major concern. Of the ten cities that recorded the highest air pollution levels in Q1 2016, six were in Hebei province – the country's largest steel producing region – along with Beijing – which is surrounded by Hebei province. Ongoing high levels of steel production continue to threaten the health and wellbeing of residents in this region.

China's apparent steel consumption has been falling – despite recent uptick – with further falls expected



Sources: CEIC, Bloomberg, NAB Economics

Steel exports have risen since 2010, but trade tensions should limit further growth



Sources: Datastream, NAB Economics

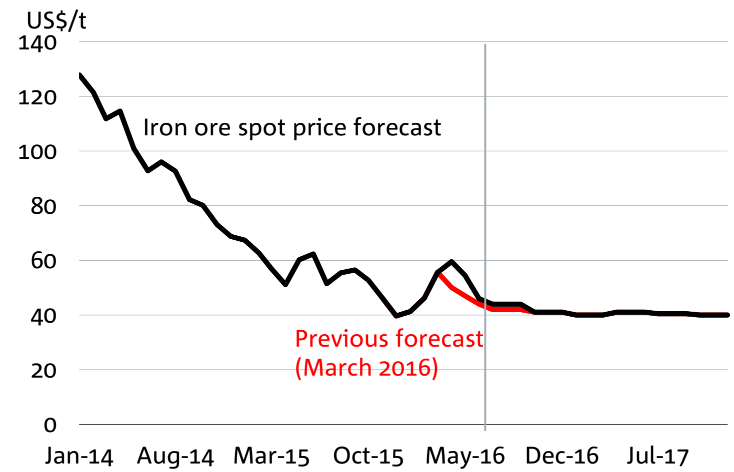
The implications for iron ore

- While the influence of paper trading on iron ore appears to have eroded – at least for now – the impact of the property-led rebound in China's steel production may continue in the short term. The duration of this period is uncertain – given our view that the increase in property construction is unsustainable.
- This degree of uncertainty could mean further volatility in iron ore prices in the short term – given the importance of China in global markets. In 2005, China accounted for around 38% of global iron ore imports. By 2015, this share had risen to almost two-thirds.
- Medium-term trends for steel – both in China and globally – appear subdued. Expectations that China's steel consumption will continue to decline in coming years will be a major constraint for iron ore demand, while sub-trend economic growth elsewhere provide little opportunity for China's declines to be offset.
- The short-term nature of the rebound in steel demand (and by extension iron ore consumption) means that the medium-term profile for our iron ore price forecasts is unchanged. However, prices are expected to remain marginally higher than our previous forecasts through the middle of 2016.
- As a result, spot prices are forecast to average US$ 46.5 a tonne in 2016 (up from US$ 44.4 a tonne previously). Over the medium term (from 2017 onwards), we expect prices to settle at around US$40 a tonne – a level that should support narrow profit margins for lower cost producers.

The share of Australian iron ore exports to China has risen from 50% in early 2006 to over 80% in early 2016

Sources: Bloomberg, NAB Economics

Subdued fundamentals means no change to our medium-term iron ore price forecasts



Source: Datastream, NAB Economics

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