

# Bulk Commodities Update

by NAB Group Economics

July 2014



## Key Points:

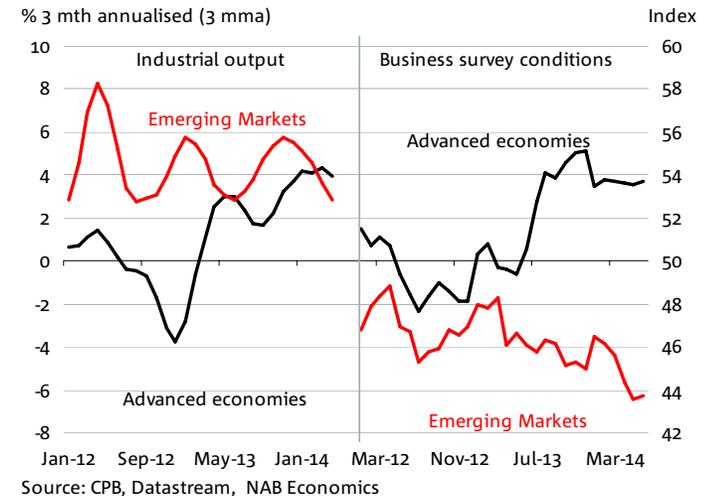
- Economic trends in China – the key consumer for bulk commodities – are mixed, with stabilising trends in the industrial sector (having slowed across Q1) in contrast to a slowing trend in the real estate sector (a major consumer of steel).
- Global steel production has continued to increase – with growth driven by China (despite efforts from authorities to control the sector). In the first half of the year, China accounted for just over half of global production.
- Profitability in China’s steel sector has improved in recent months, however this has been due to input costs falling more rapidly than steel prices (which remain weak when compared with recent history).
- Iron ore prices have struggled for direction in July, having trended away from recent lows in mid June. China’s imports have remained strong, however stockpiles at ports rose to record levels in recent times. We expect prices to settle at around US\$100 at the end of 2014 and down to US\$95 a tonne at the end of 2015.
- Stable but limited price data across the past month likely indicates limited physical trade in the metallurgical coal spot market recently. Reflecting the weak profitability in the sector, we expect prices to recover from the current lows – albeit only relatively modestly – trending up to US\$150 a tonne (for hard coking coal) by the end of 2015.
- Thermal coal prices have continued to drift lower, however we expect limited further downside to prices, due to poor profitability in the sector. The increasing level of idle production capacity should limit any significant upside potential. We forecast contract prices to ease to US\$80 a tonne in the next Japanese financial year (unchanged from our previous outlook).



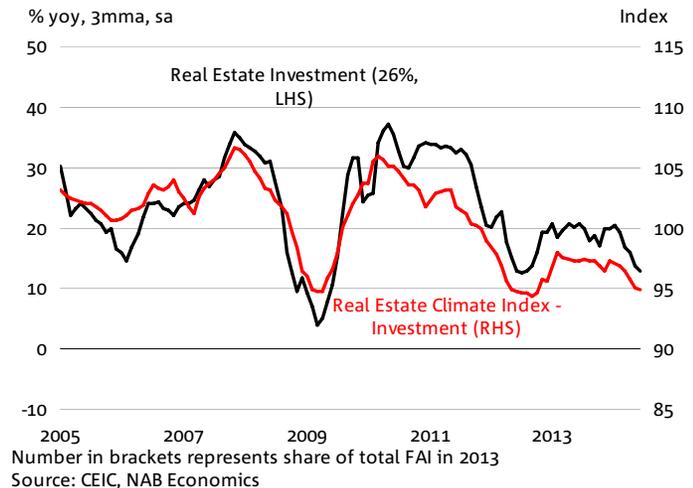
# Economic overview

- China's economy remains the key driver of trends in bulk commodities. In 2013, Chinese imports accounted for around two-thirds of iron ore trade and around a quarter of thermal and metallurgical coal (having been a net exporter as recently as 2008).
- China's latest National Accounts data shows that the economy grew by 7.5% yoy in the June quarter. This result was consistent with partial economic indicators, which showed the economy stabilising in the June quarter, following on from the declines recorded in Q1.
- There are mixed trends for key bulk commodity consumers. China's industrial sector has stabilised, with PMI surveys have been showing improving trends since April. The official PMI, produced by the National Bureau of Statistics and more representative of the larger state-owned sector, edged up to 51.0 points in June (from 50.8 points previously). The HSBC Markit PMI (which includes more SME firms) pushed up to 50.7 points (from 49.4 points) – the highest since November 2013. This sector is a key consumer of steel and coal-fired electricity.
- In contrast, the construction sector is slowing – with this industry accounting for over half of China's steel consumption. The slowing trend is evident in both residential and commercial property – with sales and new starts contracting in recent months.
- More broadly, the pace of global economic growth has slipped more recently – down from 3.3% yoy to 3% between late 2013 and early 2014. Bad weather in North America contributed to this result (with conditions improving since then – US second quarter GDP was 4% at an annualised rate), however the recovery in the Euro-zone has faltered and Japan faces some uncertainty due to the April increase in the VAT.

**Figure 1: Signs of improving conditions in advanced economies continue, surveys weaken for emerging**



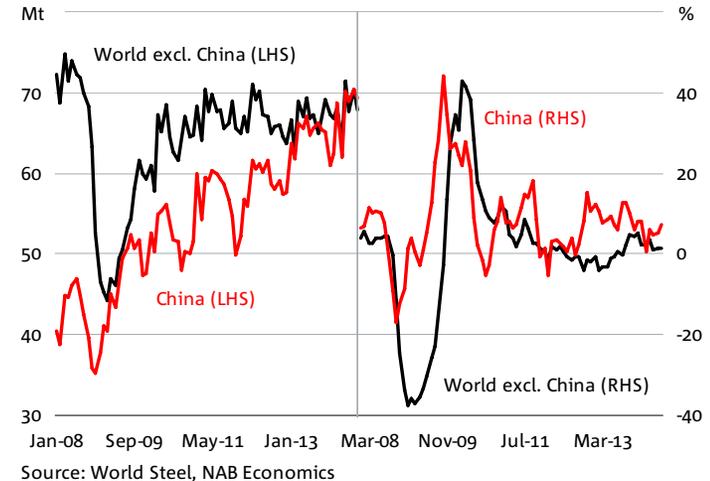
**Figure 2: Slowing conditions in China's real estate sector poses risks for steel demand**



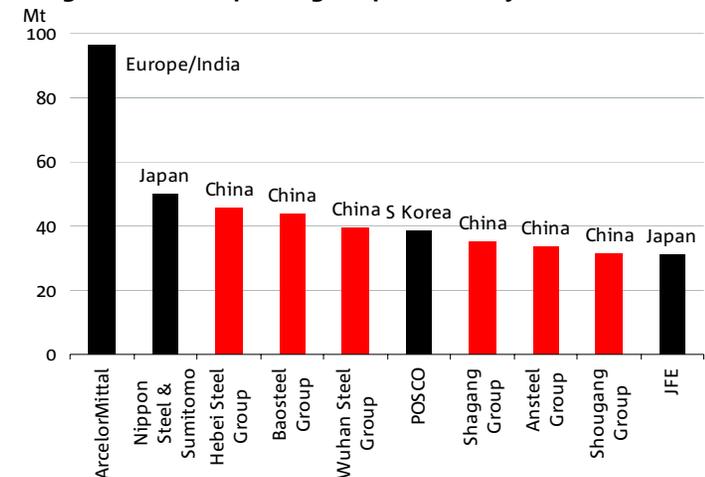
# Global steel production

- In the first half of 2014, global steel production totalled 819 million tonnes, an increase of 3.7% year-on-year (World Steel).
- Despite efforts to address excess capacity, tighten financial conditions and minimise air pollution, China's steel production has continued to grow. Over the first half of the year, Chinese steel production grew by 5.3% yoy to 410 million tonnes – the first time China has exceeded 50% of global production for an extended period.
- Outside China, the largest increase in production was in South Korea – which recorded growth of 9.1% yoy in the first six months of the year, and Germany (increasing by 4.2% yoy). Combined, these three countries accounted for 85% of the increase in global steel production over the period.
- A key challenge for China's steel industry is its highly fragmented nature. This can be illustrated by the share of output by company. Six out of the top ten producers worldwide are Chinese firms, however the largest – Hebei Steel Group – is only ranked third worldwide. Steel is an industry with significant economies of scale.
- China's Ministry of Industry and Information Technology (MITT) announced in mid-July that 48 million tonnes a year of outdated steel capacity would be shutdown by the end of September. It is unlikely that these cuts will impact on physical production, as much of this capacity is already offline. In addition, the MITT list includes blast furnaces under 400 cubic metres, which had previously been ordered closed by the end of 2011 – indicating issues with compliance around previous orders.

**Figure 3: China's steel production exceeded the rest of the world in the first half of 2014**



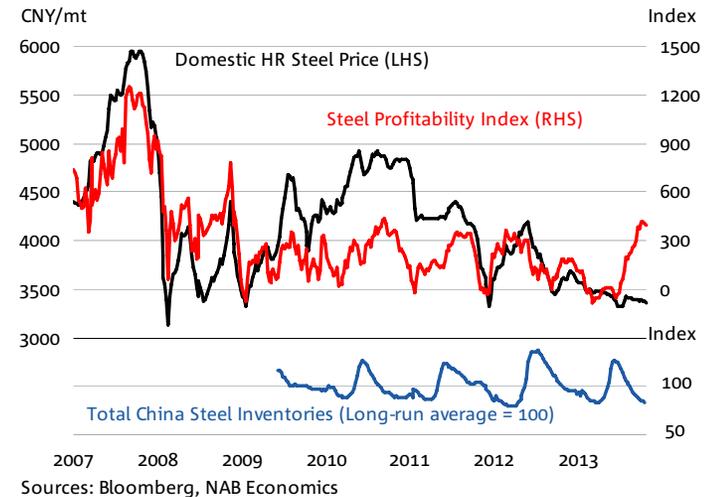
**Figure 4: China's steel industry is comparatively fragmented – impacting on profitability**



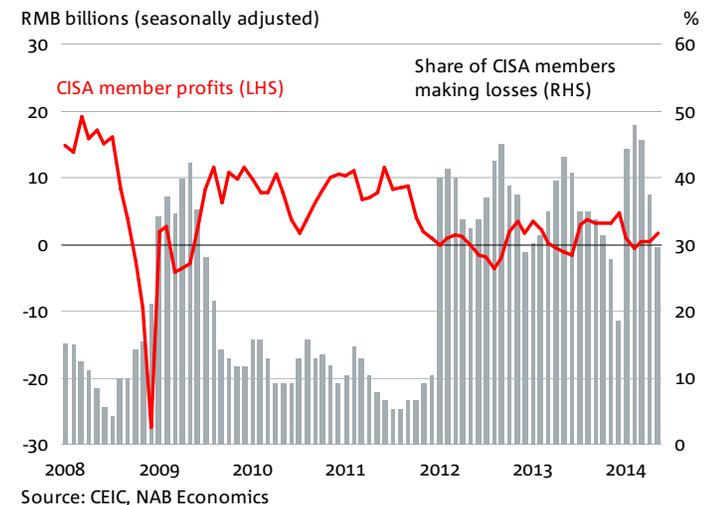
# Global steel production (cont'd)

- Recent months have seen improving conditions within China's steel industry. The steel profitability index – with takes into account domestic steel prices and the costs of inputs – has improved strongly since March, rising to its highest level since June 2011.
- That said, improved profitability reflects the fact that input costs – iron ore, metallurgical coal and steel scrap – have contracted more rapidly than domestic steel prices (which remain weak when compared with recent history).
- Steel prices have remained constrained, despite steel inventories falling below the typical seasonal levels recorded in the past three years.
- The improving conditions are evident for China's larger steel makers. In the first five months of the year, almost 30% of China Iron and Steel Association (CISA) members recorded losses – down from 48% over January and February. In May, members recorded total profits of around RMB 2.9 billion (compared with losses of RMB -1.7 billion in February).
- Debt in the Chinese steel sector remains a critical issue – particularly given tightening financial policies related to steel makers. The average debt ratio for CISA members is 70%, with the rate having stabilised from around July 2013 onwards.

**Figure 5: Steel profitability has improved, but driven by lower input costs, with steel prices low**



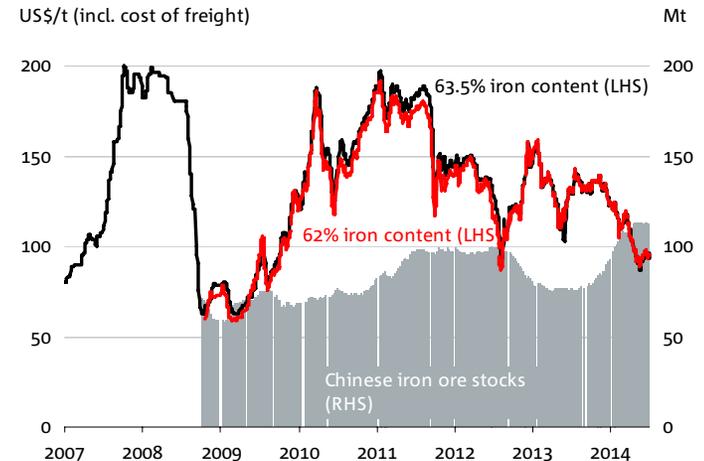
**Figure 6: Profits for larger steel mills have improved with fewer firms making losses**



# Iron ore

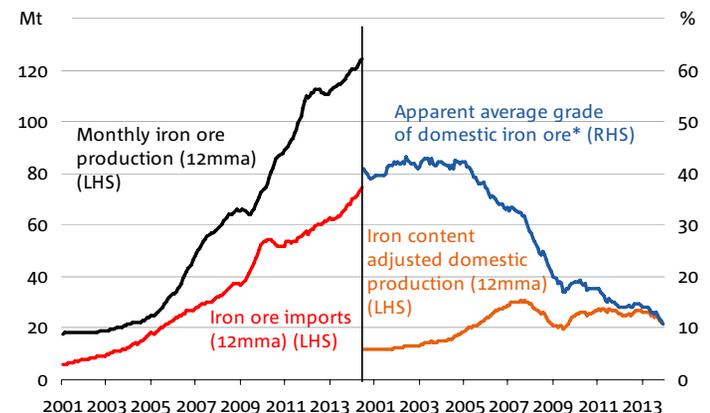
- Iron ore prices have struggled for direction in July, having trended away from a recent low of US\$89 a tonne in mid June. Spot prices trended upwards across the second half of June and the first half of July – approaching US\$100 a tonne – before falling away again later in the month.
- Chinese iron ore imports have remained strong – with imports across the first half of the year increasing by 19% to 457 million tonnes. That said, imports were somewhat softer month-on-month in June, at 75 million tonnes, down almost 9 million tonnes from May (albeit some of this trend is seasonal).
- The strong growth rate of China’s imports has driven stockpiles at the country’s ports to record levels – almost 114 million tonnes in early July, before easing slightly lower. There remains some considerable uncertainty around stocks – particularly ownership given the connection to commodity financing.
- Reports suggest that the weak spot prices have forced the closure of some Chinese iron ore mines – albeit this has not yet appeared in production data. According to MySteel Research, around 80% of Chinese iron ore mines have cash costs between US\$80 and US\$90 a tonne.
- Domestic ore production was at an all time high in June, totalling 139 million tonnes. That said, the indicative quality of Chinese iron ore production has continued to fall. Based on pig iron production and the assumed quality of internationally traded ores, the average grade of Chinese iron ore fell to 10.8% in the twelve months to June 2014 – an all time low (compared with 62.5% for imported material).

**Figure 7: Iron ore prices recovered marginally from mid-June lows, but stocks are still high**



Source: Bloomberg, Thomson Datastream, NAB Economics

**Figure 8: Chinese iron ore production continues to rise, but ore quality is falling**



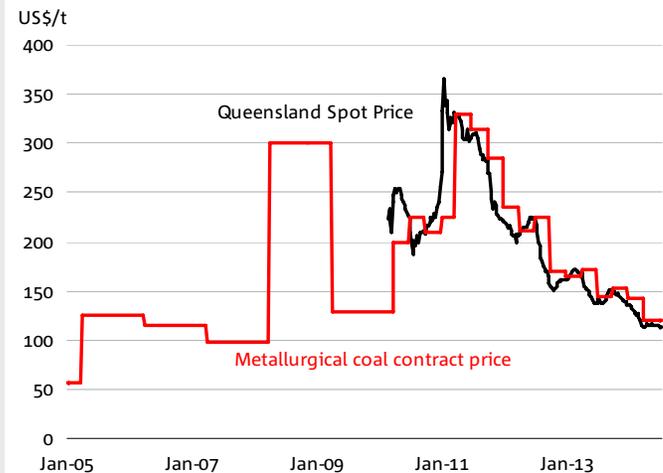
\* Based on pig iron production, excludes changes in ore inventories, assumes constant average grade for imports at 62.5%

Source: CEIC, NAB Economics

# Metallurgical coal

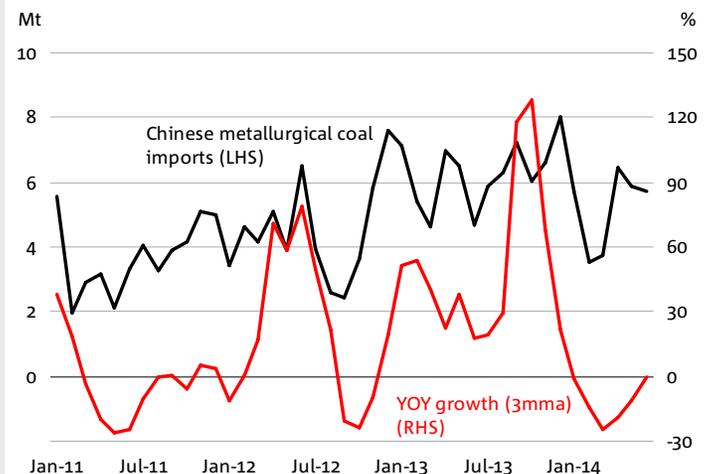
- Spot prices for metallurgical coal appear to have remained stable across the past month – albeit gaps in data likely indicate limited physical trade in the spot market over this period. Prices in mid July were around US\$113.50 a tonne, largely unchanged from the levels of late June (Energy Publishing).
- Contract prices for the third quarter were rolled over at US\$120 a tonne – slightly ahead of our expectations of US\$117 (based on trends in spot markets in the June quarter). This may have reflected an increase in demand for contracted volumes, given announced production cuts.
- Since the negotiation of second quarter contracts, metallurgical coal producers have cut production by around 20.8 million tonnes (in annual capacity terms) (Bloomberg). Most of the cuts have come from North America – with 56% of the total coming from the United States, along with a further 19% from Canada – while Australia accounts for just under a quarter of the total. In addition, a range of projects have been delayed until conditions improve.
- Based on Wood Mackenzie estimates of cash costs, around 55% of global metallurgical coal production is unprofitable at the current contract price. Given the supply-demand balance at the present time, reducing cost pressures is a key goal for producers.
- Reports suggest that some producers in Queensland are attempting to renegotiate the existing take-or-pay contracts with infrastructure providers as well as contracts with mining services firms. In the case of the former, these contracts limit the potential for production cuts for otherwise unprofitable capacity.

**Figure 9: Spot prices remaining relatively stable, but seemingly minimal trade in July**



Source: Energy Publishing, Bloomberg, NAB Economics

**Figure 10: Chinese metallurgical coal imports have recovered after weak first quarter**

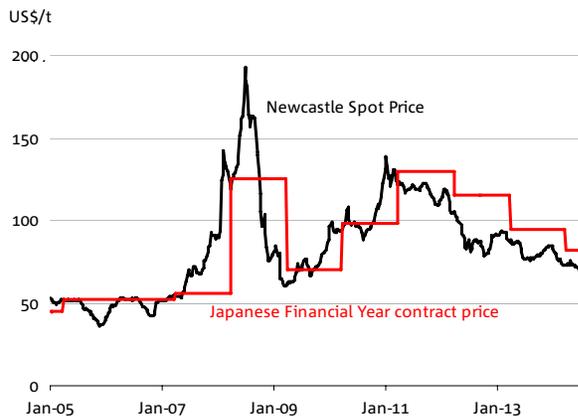


Source: CEIC, NAB Economics

# Thermal coal

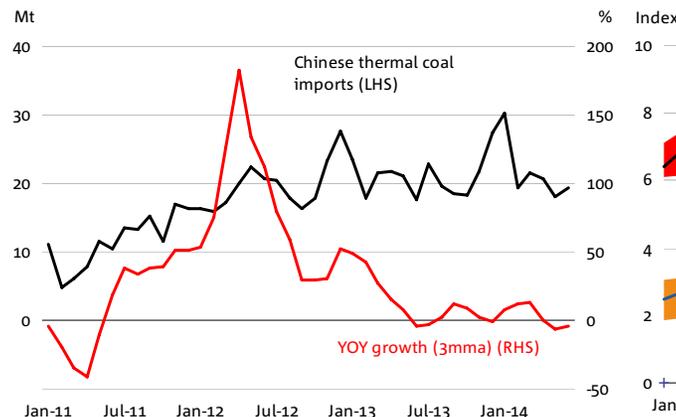
- Spot prices for thermal coal have continued to ease in July, with prices at the port of Newcastle falling to US\$68.15 a tonne mid month – the lowest level since September 2009 (as coal markets were recovering from the GFC).
- China’s imports of thermal coal have been relatively weak in recent months – compared with trends in 2012 and the first half of 2013 – with year-on-year growth rates negative in April and May (down -5.1% and -14% respectively), before improving somewhat in June (an increase of 9.4% yoy).
- Stockpiles at China’s major coal ports – Qinhuangdao and Guangzhou – appear relatively strong (particularly in the latter, where stocks are above the average levels over the past four years). This likely limits spot demand at present, indicating a well supplied market.
- The continued decline of prices has made profitability more challenging in recent times. According to cash cost estimates reported by Morgan Stanley, around 13% of global supply is unprofitable at the current Japanese financial year contract price, while in excess of a quarter are profitable at current spot prices. Given little likelihood of a large scale price recovery, producers are attempting to address cost pressures – including attempting to renegotiate the take-or-pay contracts with infrastructure providers that so far have limited the supply response.

**Figure 11: Thermal coal prices have continued to drift lower – below US\$70 a tonne**



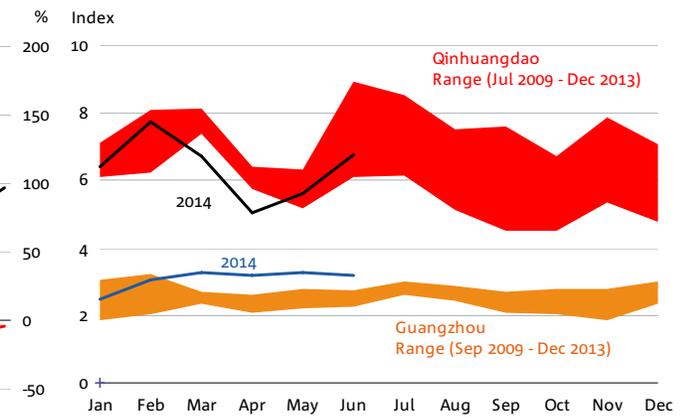
Source: McCloskey's, BREE, NAB Economics

**Figure 12: Growth in China’s thermal coal imports have been particularly weak**



Source: CEIC, NAB Economics

**Figure 13: Adequate stockpiles at China’s major ports contributing to soft prices**

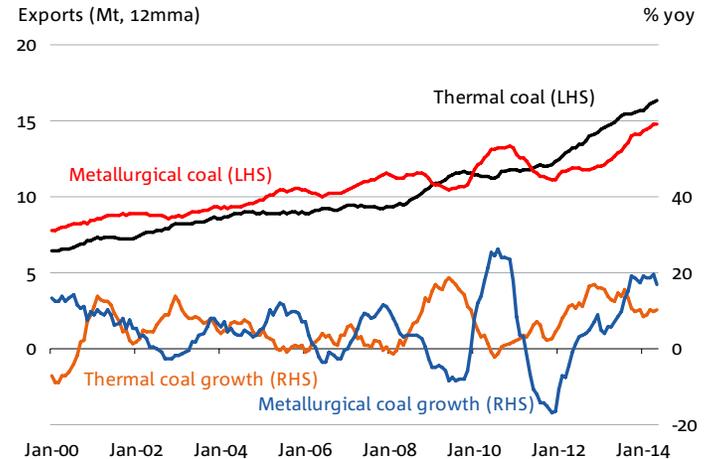


Source: CEIC, NAB Economics

# Australian exports

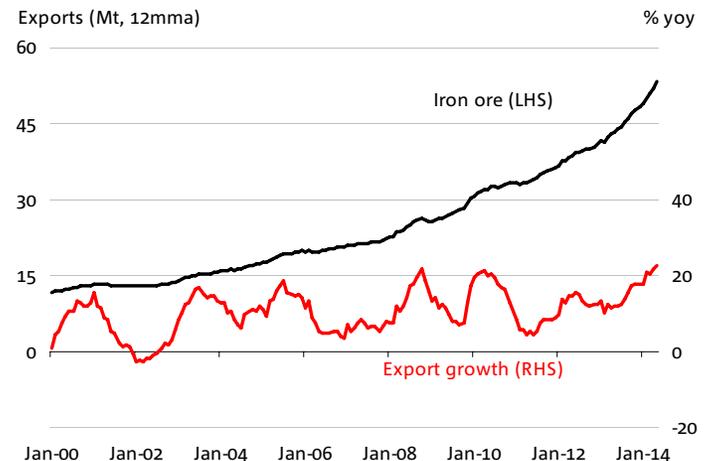
- Constraints on Australian exports of coal and iron ore have contributed to the large scale increases in commodity prices over the past decade. Major investment in new mines as well as rail and port capacity have increased the ability of Australian producers to supply global markets.
- On a twelve month moving average basis, Australian thermal coal exports have increased since late 2010, while metallurgical coal exports started to increase from early 2012 – as production gradually recovered from flood related disruptions in Queensland. The rate of growth in thermal coal exports has slowed more recently – likely reflecting weakness in demand and profitability rather than supply constraints. Anecdotal reports suggest that the port of Newcastle was operating at around 70% of capacity in July.
- In contrast, the growth in exports of iron ore has accelerated since late 2011, as major producers have expanded capacity. Expansions in iron ore supply chains have been comparatively easier for iron ore producers than coal – access issues have been internalised through integrated ownership of infrastructure allowing for a more co-ordinated approach.

**Figure 14: Growth in metallurgical coal exports has outpaced thermal in 2014**



Sources: Bloomberg, NAB Economics

**Figure 15: Iron ore export growth has accelerated as new capacity has come on line**



Sources: Bloomberg, NAB Economics

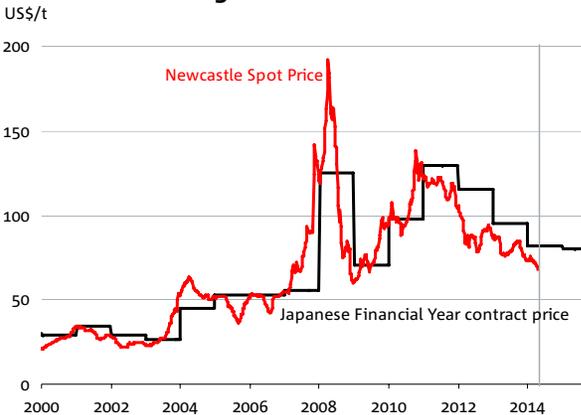
# Price outlook

- Thermal coal prices have continued to drift lower, however we expect limited further downside to prices, due to poor profitability in the sector. The increasing level of idle production capacity should limit any significant upside potential. We forecast contract prices to ease to US\$80 a tonne in the next Japanese financial year (unchanged from our previous outlook).
- Quarterly contract prices for metallurgical coal were unchanged for the third quarter (against our expectation for a modest fall). Reflecting the weak profitability in the sector, we expect prices to recover from the current lows – albeit only relatively modestly – trending up to US\$150 a tonne (for hard coking coal) by the end of 2015.
- Current weakness in iron ore prices could signal some downside risk to our forecasts – which remain unchanged. Our hybrid price (weighted combination of spot and contract prices designed to follow actual prices received by producers – is tipped to settle at around US\$100 at the end of 2014 and down to US\$95 a tonne at the end of 2015.

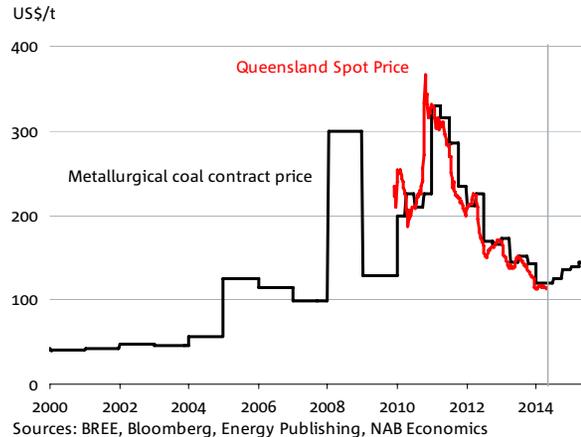
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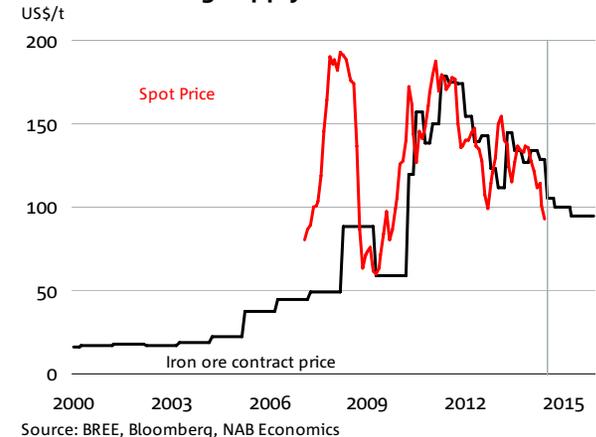
**Figure 16: Thermal coal prices to edge lower in next contract negotiation**



**Figure 17: Metallurgical coal prices expected to recover from current lows**



**Figure 18: Iron ore prices expected to drift lower on rising supply**



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