

Bulk Commodities Market Update

National Australia Bank

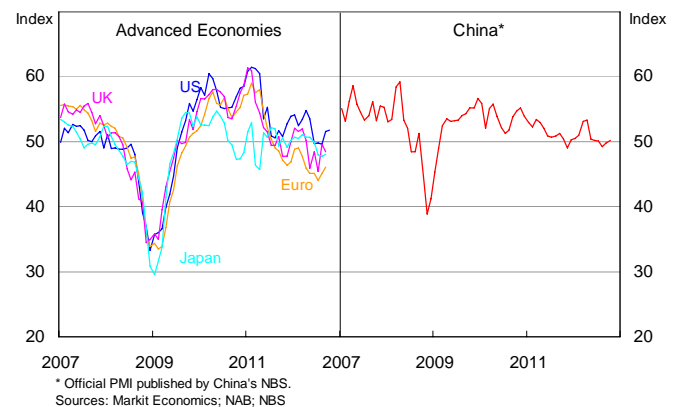
- **Bulk commodity prices have been mixed recently with coal prices generally stabilising around recent lows, while iron ore prices have performed surprisingly well, supported by recent signs of improvement in the Chinese economy.**
- **Growth in global crude steel production remains subdued in line with softer demand relative to last year; Chinese GDP growth has slowed for seven consecutive quarters. Steel prices in China have risen recently on restocking demand and anticipation of additional investment stimulus.**
- **The average spot price for iron ore increased in October to around US\$114 per tonne (CFR Tianjin), after bottoming at US\$86.7 per tonne in early September. The current spot price is around US\$120 per tonne.**
- **The average price for thermal coal shipped from Newcastle (FOB) fell by 7 per cent in October, following a 1 per cent decline in September.**
- **We have kept our coal price forecasts largely unchanged, but have revised up near-term iron ore prices to reflect the faster than expected recovery. Near-term demand conditions have improved but remain uncertain. Longer term fundamentals are still positive, helping to sustain historically elevated price levels, although downside risks are significant.**

Bulk commodity prices have been mixed recently with coal prices generally stabilising around recent lows, while iron ore has performed surprisingly well, as prices bounced back almost 40 per cent from their bottom in September. Prices for iron ore have now stabilised around US\$120 per tonne (CFR, Tianjin), which is the level where a significant share of Chinese ore production is thought to become unprofitable. This level was previously considered by analysts to be the floor price for iron ore, but large stocks at port (and possibly political influence) kept mills adequately supplied, allowing the price to fall well below US\$90 per tonne (CFR Tianjin) in September. Coal prices have not experienced the same sort of bounce as iron ore with adequate supplies exacerbating the impact from soft demand. Newcastle spot thermal coal prices are holding at slightly below US\$80 per tonne (FoB), and spot prices for premium HCC are currently around US\$150 per tonne (FOB), up from around US\$140 per tonne (FOB) in mid September.

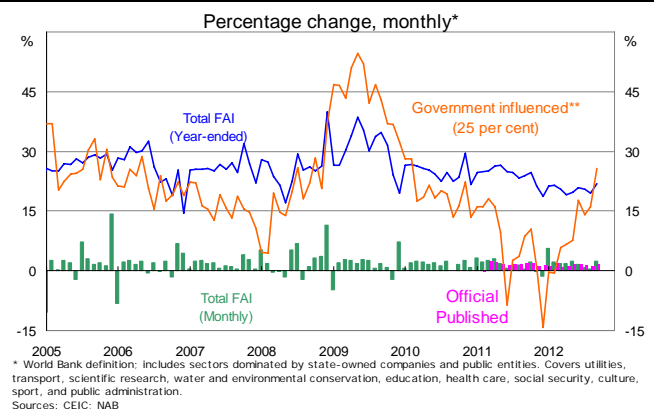
The mood in some commodity markets improved noticeably over the past month as the recent run of economic data hinted that economic activity, at least outside of Europe (and maybe Japan), has started to stabilise. Signs of a pick-up in infrastructure spending in China, more stable manufacturing activity in Asia and the US, along with rapid housing growth and improved consumer confidence in the US, have all help to (tentatively) boost optimism. However, there is still a significant degree of caution in the market as uncertainties continue to cloud the outlook. Metals markets have been a good example of this with the significant gains seen following the monetary easing announcements in September

being quickly unwound as buyers came to realise that the problems facing the economy have not gone away. The upcoming election in the US and looming fiscal cliff could still have a large impact on commodity prices, while uncertainty over the leadership transition and stimulus spending in China are also a risk. Debt problems in Europe will remain a theme for some time, particularly while the region continues to experience recession. Partial indicators suggest that activity in both Europe and Japan has continued to deteriorate in Q4 despite some signs of improvement elsewhere. PMIs for both China and the US have improved recently, but continue to suggest relatively subdued activity.

Global manufacturing activity stabilising at soft levels



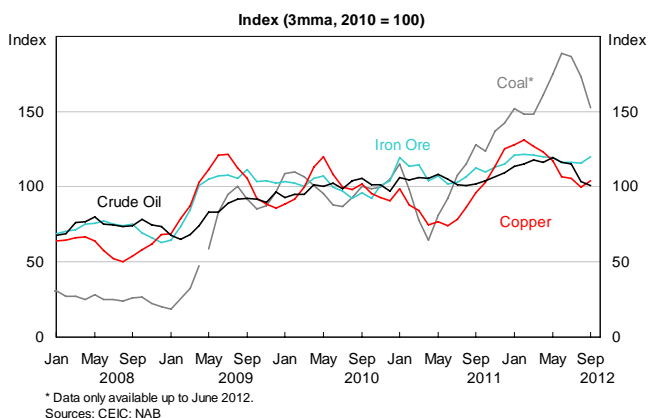
China's investment stimulus supporting demand for bulks



In a positive signal for commodity demand, the impact of government stimulus measures in [China](#) is starting to become more apparent in the investment data. Fixed investment growth accelerated to almost 22 per cent over the year to September, up from 19.5 per cent the previous month; a significant decline in investment costs (corporate good prices have declined nearly 4 per cent over the year), point to even stronger growth in real terms. The acceleration in growth was associated with another surge of government influenced investment – largely in utilities – which has increased by around a quarter since the same month last year (compared to 16 per cent year-ended growth in August).

Real estate investment growth now appears to be stabilising, a positive sign for economic growth, although any indications of a solid recovery could be quashed by authorities still determined to address concerns over affordability and overinvestment. All partial indicators for China, including retail sales, industrial production, exports and so on, showed signs of improvement in September. However, we are remaining on the lookout for more persistent signs of recovery given the uncertain over the global outlook and how the new leadership in China intend to approach economic policy.

China's commodity import volumes



In the **United States**, the labour market continued its slow recovery – in September the unemployment rate dropped to its lowest level since early 2009 – along with an improvement in economic indicators including the ISM manufacturing index. In contrast, business investment is looking more subdued than expected, and industrial production (IP) recorded its largest contraction in over three years in August – although, IP improved in September. The current situation in the US economy can be broadly summed up as ‘expanding modestly’, which is not actually a bad result given the various headwinds from the global economy and uncertainties surrounding the upcoming election and potential ‘fiscal cliff’.

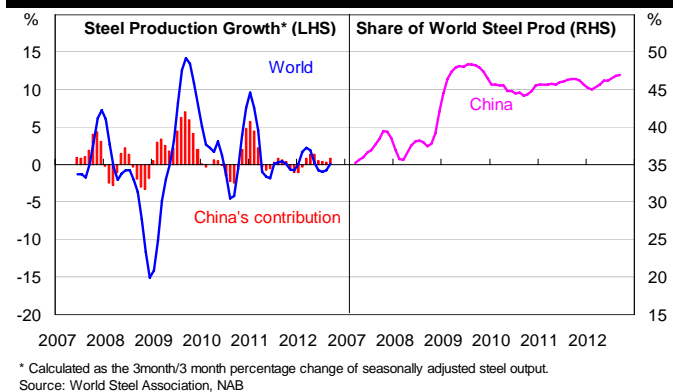
Steel Production

Despite the tentative signs of recovery/stabilisation in parts of the global economy, steel production growth has remained relatively modest. After growing almost 7 per cent in 2011, global steel production has slowed markedly to around 2 per cent in 2012 to date. This corresponds with sluggish economic activity around the globe, including a noticeable slowdown in Chinese economic growth (year-ended real GDP has slowed for seven consecutive quarters in China to 7.4 per cent). The demand for steel has suffered as a consequence. In October, The World Steel Association slashed its outlook for global steel consumption in 2012 and 2013. WSA now expect steel consumption to rise just 2.1 per cent this year, well down on the 6.2 per cent increase in 2011, and almost half the rate forecast by the WSA earlier in the year. Next year it expects conditions to improve, although only marginally, with demand increasing 3.2 per cent (revised down from a previous forecast of 4.5 per cent). The improvement in demand going forward is predicated on a brighter outlook for some parts of the global economy, including the US and Japan as well as stronger demand from India.

Data provided by the World Steel Association (seasonally adjusted by NAB) show that global steel production volumes rose 0.8 per cent in September (flat in unadjusted terms), while production in China declined by 0.8 per cent (down 1.2 per cent in unadjusted terms). Chinese steel production for the entire September quarter was a bit more positive, rising 1.7 per cent

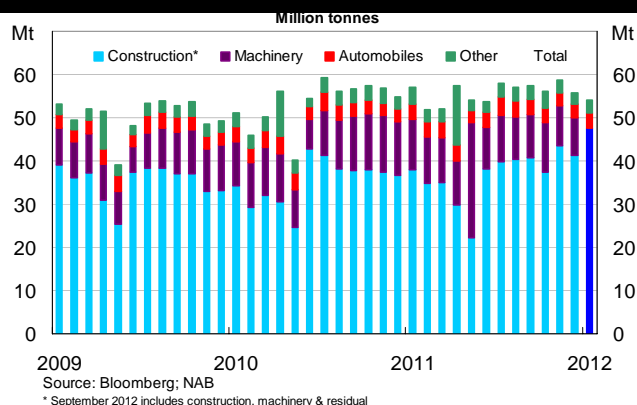
(sa), due to a solid increase in July. Lower prices in preceding months had encouraged mills to voluntarily cut back production, coinciding with some idling of capacity relating to normal seasonal maintenance. Consequently, reductions in production appear to have outstripped softer demand with steel inventories held by traders falling nearly 20 per cent since late July, while the stocks-to-use ratio has fallen as well. However, CISA (China Iron & Steel Association) reports that key medium and large sized steel mills remain relatively well stocked. Inventories at these mills are reported to be at 11.035 million tonnes, a rise of 270,000 tonnes, although this is down from reported stocks of 12.5 million tonne in mid-August.

World Steel Production



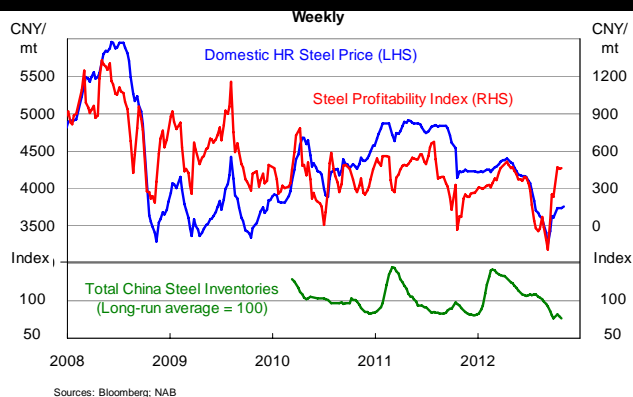
More recent improvement in end-user demand for steel may be contributing to both higher domestic steel prices and lower inventories – supported by a noticeable rise in new orders within China’s steel industry PMI. However, evidence of a more structural increase in end-user demand remains elusive, which could suggest that recent price rises are merely in anticipation of typical mill restocking ahead of the winter season. China’s apparent steel consumption softened in September, particularly stemming from construction and machinery – the largest source of steel demand – although steel used in the production of automobiles improved.

China's apparent steel demand has eased



Similarly, Chinese exports of steel products jumped more than 20 per cent in September, the highest level in 2 years, suggesting an oversupply in the domestic market. Increased exports are raising concerns from other steel producing countries that China may flood a global market still ailing from weak demand; US steel capacity utilisation fell to just 69.7 per cent in October, the lowest level since December 2010. Rebar prices in Europe and North America remain close to their lowest levels since late 2010.

Conditions remain tight for Chinese mills



Nevertheless, CISA recently reported that they expect to see a rebound in the Chinese economy in the final quarter of the year, largely driven by the construction of infrastructure projects, supporting end-user demand for steel. They also indicated that the government might introduce more measures to stimulate the economy in the wake of the leadership transition this month. Rising domestic steel prices, and lower cost for raw materials, have helped to bolster the profitability of mills and encouraging them to ramp-up production more recently. Our profitability index has jumped back to the more favourable levels seen earlier in the year (chart above). Timely data from CISA show that daily production at Chinese steel mills reached 1.999 million tonnes in mid-October, which is the fastest rate of production since late May, and a 4.3 per cent increase on the 1.9162 million tonnes per day recorded in the first 10 days of the month. China's steel industry PMI rose 3.6 points to 43.5 in September.

It remains to be seen whether this pace of production will be maintained given the current fragility of Chinese steel demand. Shanghai rebar futures have improved noticeably following the recent spate of more positive economic data out of China. However, they still suggest current tightness in the physical market will be partially unwound over coming months before prices start to rise again later next year. This is consistent with our own expectations for the Chinese economy to experience a relatively mild recovery until stimulus measures gain more traction in H2 2013.

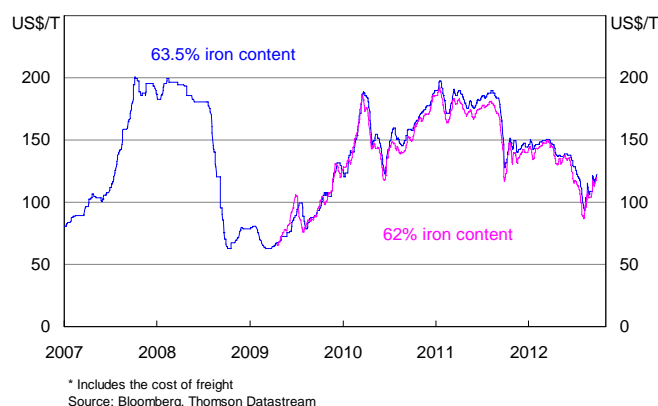
Overcapacity has become a big concern both within China and abroad. During a downturn in demand, the problem is exacerbated as state-owned steel mills continue to produce at a loss in order to maintain market share and jobs for tens of thousands of workers. Chinese authorities have recently announced that they are developing new plans to consolidate eight "vital" industries, which includes steel. If done correctly, this may begin to address the overcapacity issues in China's steel market and improve efficiency.

Iron Ore

Consistent with improving sentiment over the outlook for Chinese steel demand, iron ore prices have posted an impressive bull run in recent weeks that has sparking claims that the worst of the collapse in prices may be over. Spot prices have bounced back almost 40 per cent from their lows in early September and appear to have settled around US\$120 per tonne (CFR), consistent with the level were marginal Chinese production is thought to become unprofitable. Analysts were caught by surprise when prices dipped below this level in July/August, assisted by steel mills heavily running down their iron ore stockpiles to drive spot prices even lower. The drawdown of iron ore stockpiles meant that fewer than expected Chinese miners idled production immediately in response to negative profit margins (although Rio Tinto estimate

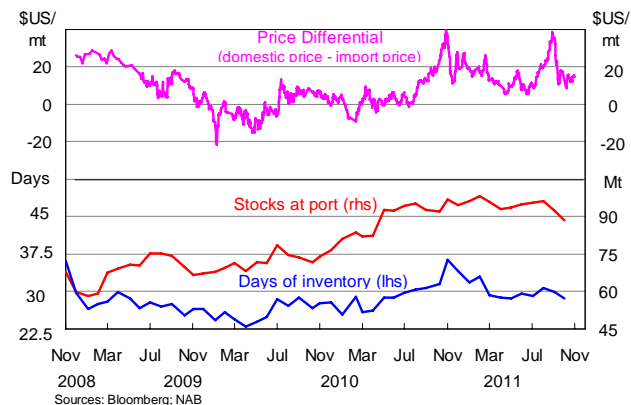
that close to 100Mt of unprofitable Chinese production has been curtailed). This is not unheard of in Chinese industries, particularly those with a large state influence, as maintaining employment and favour with authorities tends to take priority over turning a profit.

Chinese Iron Ore Prices*



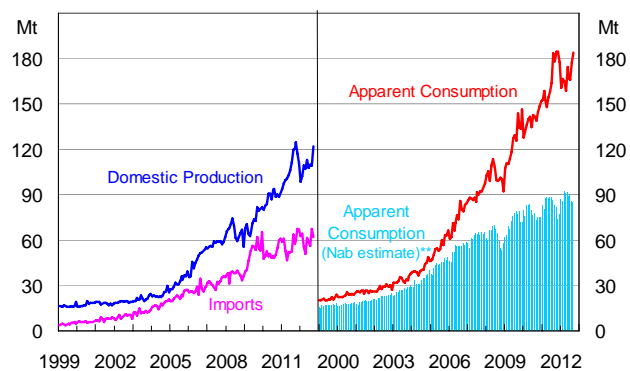
Surprisingly, Chinese iron ore production actually rose more than 11 per cent in September, to the highest level (129Mt) recorded since October 2011. Despite the increase in domestic iron ore production, and persistently high (albeit falling) stocks held at port, steel mills have taken advantage of the positive import arbitrage (which is now closed) to restock ahead of the winter period. However, the Baltic Capesize index suggests that the restocking phase may have slowed more recently. After surging close to 60 per cent since the start of the month, freight prices have eased 4½ per cent more recently.

Chinese Iron Ore Stocks at Port



Taking into account both the restocking at steel mills, and the spike in domestic production, China's apparent consumption of iron ore ticked up to its highest level on record in September, largely driven by the spike in domestic production. In contrast, import volumes fell almost 10 per cent in seasonally adjusted terms (a 4 per cent rise unadjusted). An alternative estimate of apparent demand, derived from pig iron production, suggests that consumption of iron ore fell by around 1½ per cent in the month (8 per cent below March's record peak), but while this measure implicitly takes into account declining ore content at Chinese mines it does not account for restocking at ports or Chinese steel mills. Therefore, with domestic production + imports rising in September while both stocks at port and end-use consumption declined, further supports the notion that mills were restocking in the month.

Chinese Iron Ore Market

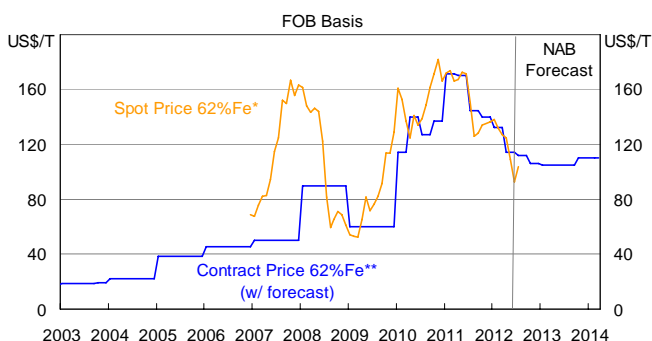


* Only imports data are available for January 2012 (but not fully adjusted for CNY).
 ** Based on pig iron production; accounts for declining domestic ore grades. Excludes changes in ore inventories.
 Source: CEIC

Major miners released their latest production reports last month, showing that iron ore production rose in the September quarter, although outcomes vary across companies. Rio reported record quarterly production at their Pilbara operations, and their total global iron ore production rising 8 per cent in the quarter. However, with demand waning, production continued to exceed sales resulting in a “measured build-up of stocks across the mines”. BHP Billiton’s West Australian iron ore operations recorded a 3 per cent reduction in output for the third quarter, although this is partly attributable to a planned shutdown associated with the Inner Harbour Expansion project. Vale production increased 4.2 per cent in the quarter although they make special note of the poor performance at their Carajas mine where issues with environmental permits necessitated continued mining of older (less productive/lower quality) pits. Fortescue reported a 4½ per cent decline in ore production over the quarter, along with a 9½ slowdown in shipments.

The major miners remain relatively optimistic over the outlook despite the significant decline in prices seen over the year. Rio Tinto once again reiterated its intention to expand operations by almost a quarter next year (to 283Mt) and reaching production capacity of 353 by 2015. Despite a relatively higher cost of production compared to the other majors (around US\$50 per tonne), and recent issues with their debt financing arrangements, Fortescue indicated that they expect to recommence expansion plans to achieving an annual run rate of 155 mtpa – so long as the recovery in iron ore prices is sustained – although expected completion has been pushed back to late 2013. Plans for additional expansions after 2013 appear to have been shelved. BHP remains cautious over the outlook for iron ore, and Vale recently announced that they were shelving their Simandou development in Guinea.

Iron Ore Prices



* Spot price is calculated on an FOB basis by subtracting Port Dampier to Qingdao shipping rates from the cost and freight price. 62% Fe spot price is an estimate from published 63.5% price.
 ** Up to Q3 2011, based on formulation that quarterly contract price equals previous quarters average spot price, lagged one month (eg. DQ = Average(Jun-Aug spot price)). Estimated spot from Q4 2011.
 Source: ABARE, Bloomberg, Thomson Datastream, NAB

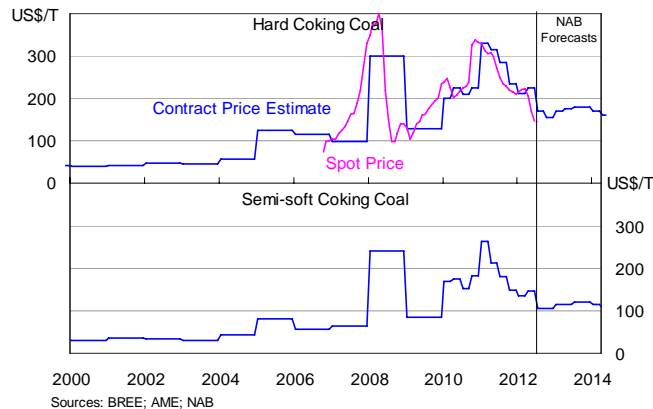
The average price for iron ore (62%) is estimated to have been around US\$109 per tonne FOB for the September quarter, and prices have return from there lows to remain at a similar level. Economic indicators suggest that demand conditions in China, and other parts of East Asia (ex Japan) have started to improve in the final quarter. While we are seeing signs that restocking in China has slowed, we could see it pick-up again this month ahead of the winter period. These factors will help support to iron ore prices over coming months, but they are likely to remain close to cash costs for the remainder of the year.

Now that growth in steel consumption is expected to soften from the lofty heights of recent years, it seems as though the days of record high iron ore prices are well and truly behind us. After growing more than 6 per cent in 2011, steel consumption is expected to grow at less than half that pace in coming years, while capacity expansions at the major mines is expected to grow at close to double digits annually during that time. Consequently, we expect to see iron ore prices dip below US\$100 per tonne FoB before the end of 2015.

Metallurgical Coal

Both iron ore and coking coal are primarily used in the production of steel products. Yet coking coal has not managed to post the same degree of recovery in prices that iron ore has. A more convincing recovery in prices is being hampered by both the continued uncertainty over steel demand and adequate supplies, helping to keep market conditions relatively loose. Nevertheless, supply appears to be gradually responding to lower prices. More recently, spot prices for premium hard coking coal have risen around 6 per cent from their recent low.

Metallurgical Coal Prices



Premium hard coking coal contracts for the December quarter were confirmed at US\$170 per tonne FOB, following an agreement between Anglo American and Korean steelmaker POSCO. Contract prices at this level are likely to encourage additional purchases in the spot market where prices have been much lower. According to AME, spot prices for premium hard coking coal drifted up to around US\$149 per tonne FOB in late October, but this is still a 1½ per cent decline from the September average. Conditions in the steel market are expected to remain subdued for some time, but the delayed impact of investment stimulus in China should assist prices back toward US\$180 per tonne late next year.

We may now be seeing a delayed supply response with reports that Chinese domestic coking coal prices are starting to rise, pointing to a tightening up of local supplies – officials have reportedly been urging coal producing regions to lower their coal production growth targets. Coal miners outside of China have also cut production. BMA announced the closure of its Gregory open cut mine (the second BMA mine to be closed) in early October,

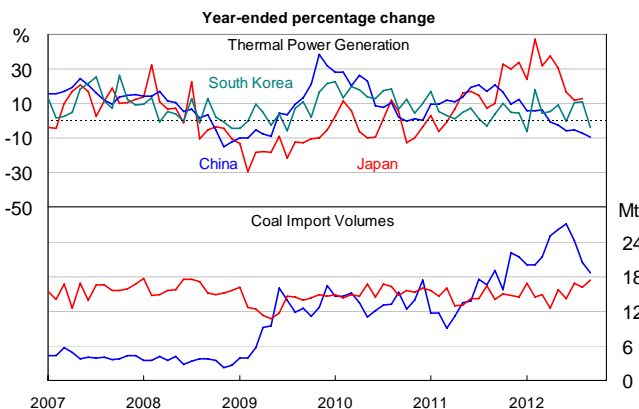
citing poor profitability due to falling coal prices, rising costs and the high Australian dollar. Similarly, Whitehaven announced later in the month that they were planning to close their Sunnyside mine near Gunnedah.

September quarter production reports show that coking coal production picked up noticeably from the previous quarter. Combined production from BHP and Rio Tinto increased 10 per cent in the quarter, due in part to the resolution of industrial disputes at BMA mines, although Rio Tinto's output was also much higher in the quarter (but down from last year due to shutdowns for maintenance and expansion projects). Industrial relations matters – a major source of supply disruptions over the past two years – came back into focus last month as workers at BMA coal mines in Queensland accepted a pay deal awarding a 15 per cent pay rise over three years. However, it appears as though the deal was a compromise in the context of the more difficult business environment facing the coal industry at present; 40 per cent of union members opposed the deal. This suggests that industrial disputes could be reignited if coal prices rise noticeably, although market conditions are expected to remain loose for the time being at least.

Thermal Coal

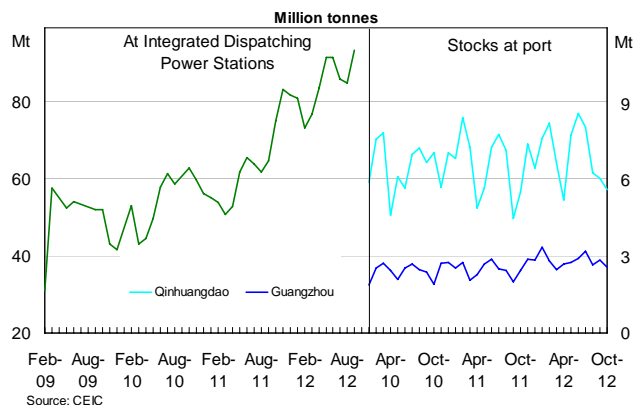
Like most industrial commodities, 2012 have not been a good year for thermal coal prices as demand evaporated from US, Europe and even Asia. Following sharp declines earlier in the year, prices appear to be stabilising to some degree, but have not shown any real sign of recovery. Demand for electricity has remained soft, in line with subdued global industrial activity, while the thermal coal market continues to look well supplied. Electricity production in Japan, China and Korea remains subdued – Chinese thermal power generation has declined nearly 10 per cent over the year to September, close to the softest rate seen during the worst of the GFC.

Thermal Coal Demand



In the northern markets, US demand for coal has remained relatively soft compared to last year (reflecting a continued trend for utilities to switch to natural gas power) which has been encouraging large volumes of coal export from the US. Stronger European demand for coal, in response to rising gas prices, is further encouraging coal exports from the US. However, export volumes have easing from the peaks seen earlier in the year due to a seasonal rise in power demand over summer. Burgeoning demand for energy in India has driven a surge of coal imports this year, despite lingering concerns over the health of the economy.

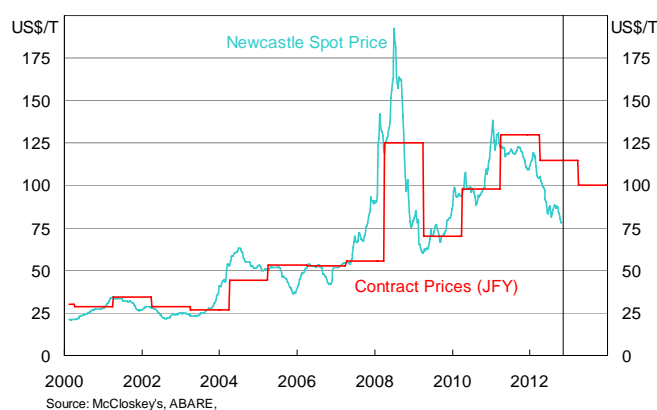
Chinese utilities remain well stocked



Chinese coal imports, while still elevated, have declined in recent months consistent with subdued power generation and a rundown of stocks held at port. Chinese thermal coal imports declined 15 per cent in the month of September, and are around 20 per cent below where they were a year ago. Elevated stocks held at Chinese utilities suggest that near-term demand may remain relatively subdued, although seasonal demand and a potential improvement in industrial activity could provide tailwinds. PMI indicators suggest that manufacturing activity in Asia may have bottomed and miners are counting on a recovery in the fourth quarter, which along with an increase in seasonal demand ahead of the northern winter, should help balance the market and support prices.

The average spot price of thermal coal shipped from Newcastle (FOB) fell by 7 per cent in September, following a decline of over 1 per cent in August. Spot prices may now start to stabilise around US\$80 per tonne (FOB), their lowest level since late 2009, as demand slowly starts to improve. Prices resumed their decline following a short lived recovery back to around US\$88 per tonne in early September. The current spot price is well below the JFY negotiated contract price of US\$115 per tonne FoB (currently at US\$79 per tonne) as well as the recently negotiated annual October contract price of US\$97 per tonne (FOB) between Xstrata and Japanese utilities. Lower prices have been contributing to job cuts and reconsideration of expansion projects.

Thermal Coal Prices



Thermal coal production by the large Australian miners rose solidly in the September quarter, with production at BHP's operations increasing by 6 per cent, while Rio Tinto reported an increase of 16 per cent. The increase reported by BHP was driven by record production at their NSW Energy coal (the RX1 project, completed in Q2 added to production during the quarter) and the resumption of longwall mining activity at San Juan Coal (USA). Over the year, BHP Billiton reported a 6 per cent increase in

output from its operations across Australia, South Africa and Columbia. Rio Tinto reported a 13 per cent rise in output from its Australian operations in the September quarter, to be 18 per cent higher over the year. They also ramped up production at their Mozambique operations in the quarter.

Outlook

We have kept our coal price forecasts largely unchanged from last month, but the much faster than expected bounce in iron ore prices has prompted us to revise our near-term iron ore contract prices higher. While we are starting to see some slightly more convincing signs of an economic recovery in parts of Asia, the US economic recovery is expected to be drawn out and the outlook remains clouded due to the looming fiscal cliff and upcoming presidential election. Also, Europe remains in recession and economic activity in the region continues to deteriorate. Similarly, Japan's economy has generally performed below expectations

this year, and leading indicators suggest the trend probably persisted into the final quarter for the year.

On balance, prices are likely to remain around current levels for the remainder of the year, although they may see additional support from seasonal restocking over coming weeks. Coal prices are expected to track higher in 2013 due to solid infrastructure investment in China, an improving global economic environment, and rapid growth in energy demand from emerging economies such as India. However, as Chinese officials attempt to rebalance growth over coming years, we expect to see noticeably slowing growth in steel consumption, which is going to cap prices for iron ore, particularly as new supplies start to come online.

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Quarterly Contract Price Profile (\$US/T)

	Actual		Forecasts						
	Sep-12	Dec-12	Mar-13	Jun-13	Sep-13	Dec-13	Mar-14	Jun-14	Sep-14
Iron Ore*	114	112	106	105	105	105	110	110	105
Hard Coking Coal	225	170	155	170	175	180	180	170	160
Semi-soft Coking Coal	147	106	105	115	115	120	120	115	105
Thermal Coal	115	115	115	100	100	100	100	90	90

Source: NAB

* Calculated using weighted average of quarterly lag formulation and spot prices. Weights reflect industry information on ongoing composition changes to the contract portfolios of major Australian miners.

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