

Minerals and Energy Commodities Update – May 2014



Key Points:

- *Bulk commodity markets recorded another relatively weak month – with iron ore prices continuing to ease (falling below US\$100 a tonne), thermal coal prices remaining weak, while metallurgical coal eased higher – away from particularly low levels. These markets appear to be well supplied, with metallurgical coal producers responding with production cuts.*
- *Oil prices continue to garner support from the ongoing tensions between Ukraine and Russia, which persisted ahead of the Ukrainian presidential election on 26 May, from which billionaire Petro Poroshenko emerged as a clear winner with a decisive majority. Meanwhile, escalating violence in Libya following a coup attempt by a military general also drove oil prices higher, particularly for Brent.*
- *Prices for the base metals complex generally rose in the month, but nickel continued to outperform (followed by copper). Supply factors are largely driving nickel markets, but better economic data and expectations for Chinese stimulus is helping to support the rest of the complex. Aluminium was the main exception recording a dip in average prices, although prices lifted in line with the complex during the course of the month.*
- *Gold prices were relatively range-bound for much of the past month, but have come under pressure more recently as strong performing equity markets weigh on investor demand for the shiny metal. Asian demand has also been notably absent. Markets have shifted attention away from geopolitical tensions, refocussing on macroeconomic factors, reducing gold's risk premium, while benign inflation pressures are detracting from gold's appeal as an inflation hedge.*



Economic overview

- The trends in commodity markets were divergent in May – reflecting market fundamentals rather than outside factors. Political tensions between Russia and the Ukraine have reduced to a simmer, contributing to the lower financial market volatility of late.
- China’s economy appears to be stabilising, following a weakening trend since late last year. Both the official PMI and the HSBC-Markit PMI improved in May, however there remains considerable uncertainty around prospects for stimulus (given mixed commentary from Chinese policy makers), the weakness in property markets and subdued levels of investment – with these factors having significant influence on commodity demand.
- In the US, economic conditions appear to be improving, following weather related disruptions at the start of the year. The US PMI rose to a three month high in April (55.4 points), with the flash reading for May expanding further to 56.2 points. The Federal Reserve’s tapering is set to continue, with the quantitative easing program likely to end later this year.
- Tensions between Ukraine and Russia remain, with the newly elected Ukrainian President vowing to strengthen ties with the European Union. Trilateral negotiations are underway to settle the outstanding multi-billion dollar gas debt, with risks that Russia could cut supplies. Despite ongoing geopolitical tensions, the price of European gas has exhibited little volatility.
- Financial market volatility remains below 10-year averages, reflecting accommodative monetary policy settings from major Central Banks, supported by 'forward guidance'. Expectations of trend world growth, without any significant near-term headwinds, either in China or the Emerging Markets, and range-bound financial markets are also driving this current low volatility environment.
- In summary, data for the month of May was relatively mixed. Prices of bulk commodities have remained relatively weak (particularly iron ore and thermal coal), however the price of metallurgical coal trended marginally upwards. The prices of base commodities varied. Despite tensions between Russia and Ukraine, gold retreated to a 16 week low on signs of an improving US and Chinese economy.

Figure 1: PMI surveys generally improving

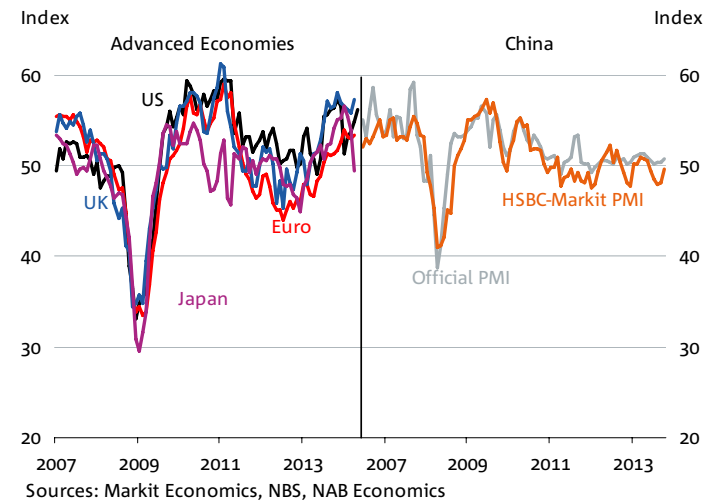
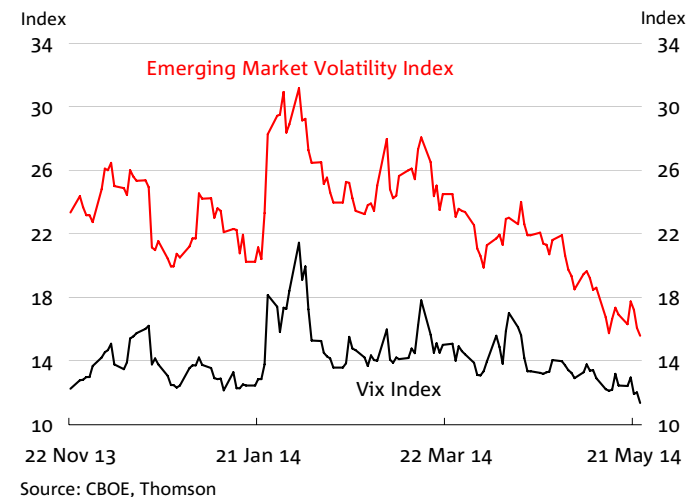


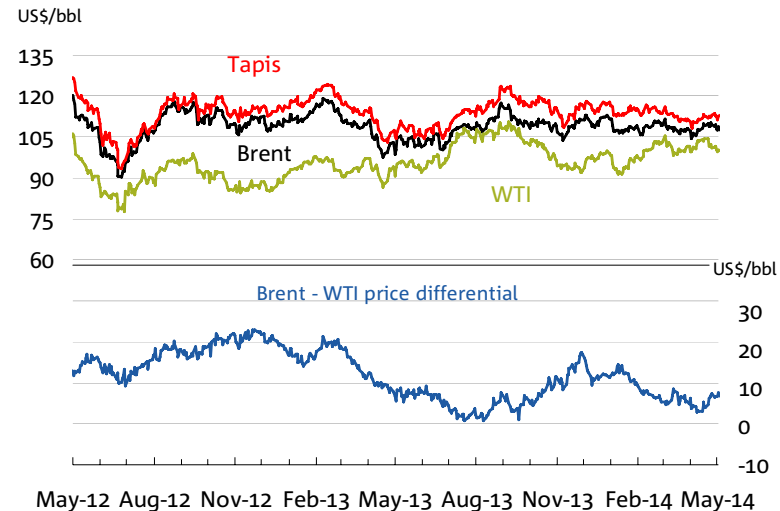
Figure 2: Financial market volatility in decline



Global Oil Market

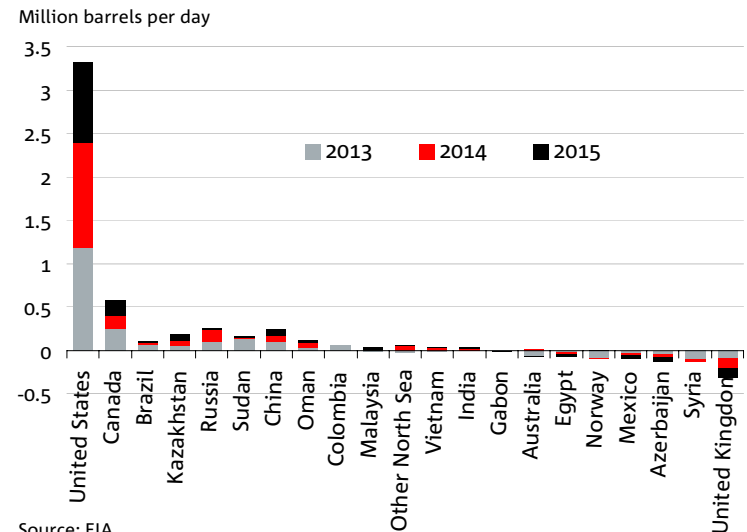
- Global oil prices recorded broad-based rises in the month, led by a 1.6% increase in Brent, followed by 1.3% in Tapis and 0.1% in West Texas Intermediate (WTI) Index.
- Oil prices continue to garner support from the ongoing tensions between Ukraine and Russia, which worsened ahead of the Ukrainian presidential election on 26 May, from which billionaire Petro Poroshenko emerged as a clear winner with a decisive majority. Meanwhile, escalating violence in Libya following a coup attempt by a military general also drove oil prices higher, particularly for Brent.
- Libyan oil production has slumped by more than a million barrels a day since the nation's oil fields and ports were halted by violent clashes between armed rebels and authorities since the second half of last year. Libyan production has fallen to just around 200,000 bbl/d from 1.4 million bbl/d just before the conflicts erupted. Exports from the ports of Zueitina and Hariga are expected to resume after their re-openings in April but are expected to do so soon.
- Also bolstering WTI has been the dwindling crude stockpiles at the delivery hub of Cushing, which has recorded 16 falls in 17 weeks to the lowest point since late 2008, according to the US Energy Information Administration. The stocks at Cushing are now approaching the long-run pre-glut level, after the significantly expanded takeaway capacity of the southern leg of the Keystone XL pipeline began to move crude to the Gulf Coast refineries in January. Total commercial inventories have accumulated to historically elevated levels, which serves as a counteracting force on prices. This suggests that WTI may be reaching a plateau.
- Rapid growth in US crude oil production and non-crude liquid fuel supply growth in OPEC member countries are likely to exceed demand for global liquid fuels demand in 2014 and 2015. As such, EIA has forecast OPEC countries' surplus capacity to increase from an average of 2.1 million bbl/d in 2013 to 3.5 million bbl/d in 2015.

Figure 3: Oil Price Indices



Source: Thomson Datastream

Figure 4: Non-OPEC Change in Annual Crude Production



Source: EIA

Global Gas Market

- In the past month, US natural gas prices moderated slightly on milder weather, but remained around 13% more than the same time last year on extremely low inventories. The Henry Hub Index fell marginally by around 2% in the month to average around US\$4.6/Mmbtu. US natural gas storage level is currently at about 1.2 trillion cubic feet, 46% below the five-year average and at an 11-year low after a record frigid winter season. The injection season so far has been slow but is expected to pick up pace over the northern summer and autumn.
- US natural gas production continued to proceed at record pace, and traction is also building on the exports front as legislation is passed to limit the length of review time by the Department of Energy for LNG export applications to 90 days.
- In contrast, the slide in European gas prices continued in May on low heating demand on the back of a streak of warmer than usual temperatures, following the mildest winter in seven years which left the region's inventories more than half full.
- Russia's Gazprom has finally signed a landmark gas supply deal with China on 21st May, after a Memorandum of Understanding was struck in 2006. The deal would see the company supply 38 billion cubic meters of gas to China annually for 30 years, reported to be worth around US\$400 billion. This will lessen the pressure of US and EU sanctions on the energy-reliant nation.
- Ukraine and Russia continued to be locked in disputes over gas price negotiations. Ongoing geopolitical tensions between the two countries suggests that a cut in gas supplies by Russia is still a possibility, albeit minute, but a comfortable supply side should help to allay any fears of an immediate supply shock. *For further details on gas, please read our in-depth note on natural gas released this month.*

Figure 5: Gas Price Indices

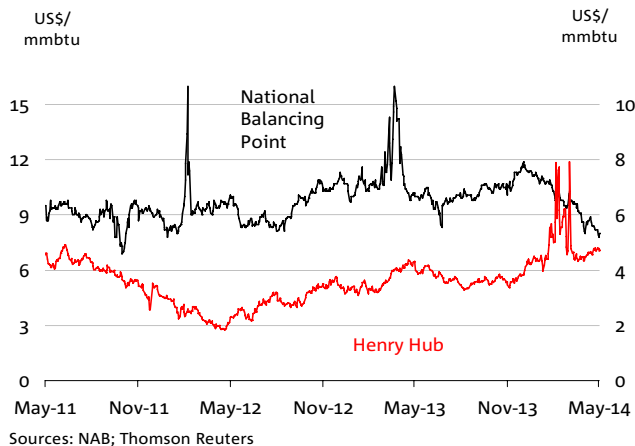
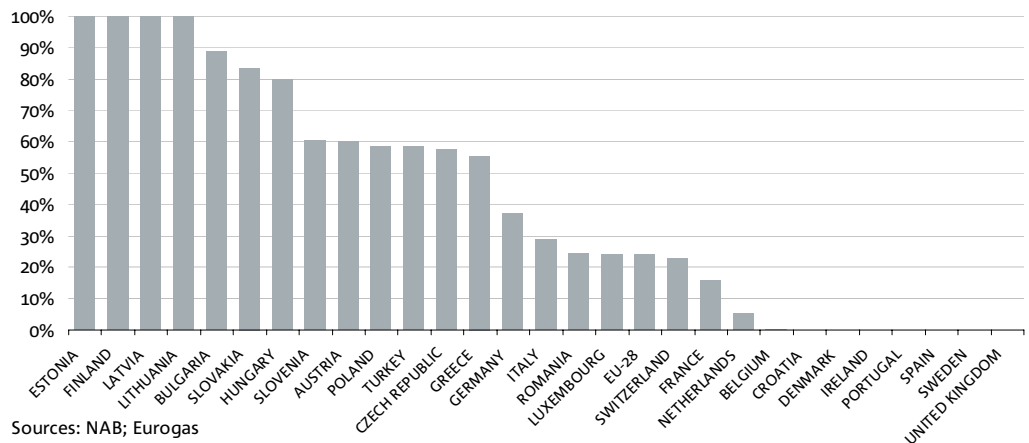


Figure 6: European Countries' Dependence on Russian Gas



Global steel market

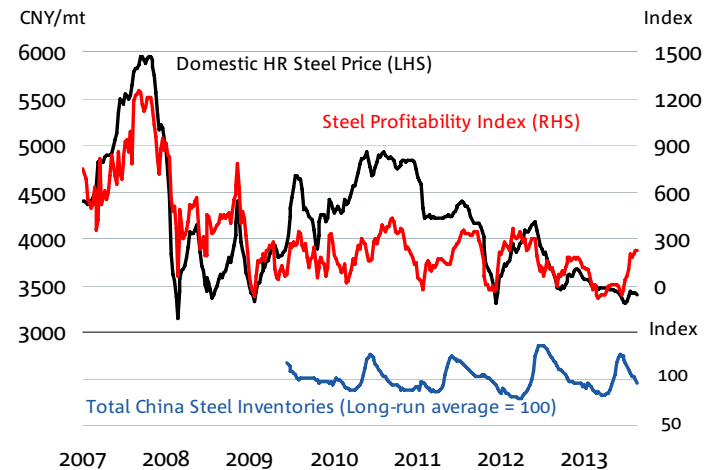
- Global steel production increased by 3.6% year-on-year over the first four months of the year – totalling 541 million tonnes (World Steel). Production was slightly weaker in the month of April (down around 3.5%), although March was the all time record. China remains the key driver of growth (despite efforts to control the industry) – with output rising by 4.9% yoy over the period, to 270 million tonnes.
- Conditions in China’s steel industry remain quite challenging. In the first quarter of 2014, the total losses of China Iron and Steel Association members were a combined RMB 2.3 billion (compared with a RMB 2.5 billion profit in the same period in 2013) – with 45% of members making losses. Profits have fallen steadily since 2011, as weaker prices began to eat into margins.
- China’s steel producers are facing increased financing constraints. Various reports suggest that the China Banking Regulatory Commission ordered banks to tighten controls around letters of credit from May 1. Tougher access to finance is likely to impact on growth within the steel industry and demand for bulk commodities longer term.
- That said, indicators of profitability for China’s steelmakers have been improving since March. Steel inventories have been falling – largely in line with seasonal trends – while domestic steel prices have appeared to stabilise. Falling domestic prices for both iron ore and metallurgical coal have been the key drivers of the improving Profitability Index.
- However, this measure only takes into account costs of production and not other business costs – with anecdotal evidence of some steel mills facing considerably higher interest costs this year. This is a major concern, given the average debt ratio for large producers is around 70%.

Figure 7: China continues to dominate global steel output



Source: World Steel, NAB Economics

Figure 8: Profitability for China’s steelmakers should start to improve

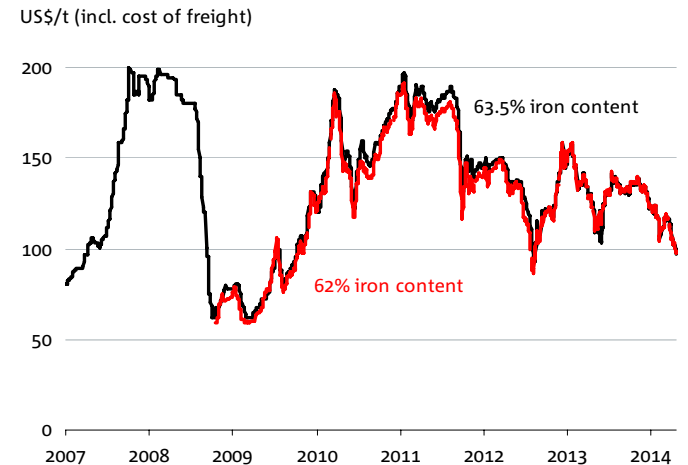


Sources: Bloomberg, NAB Economics

Iron ore

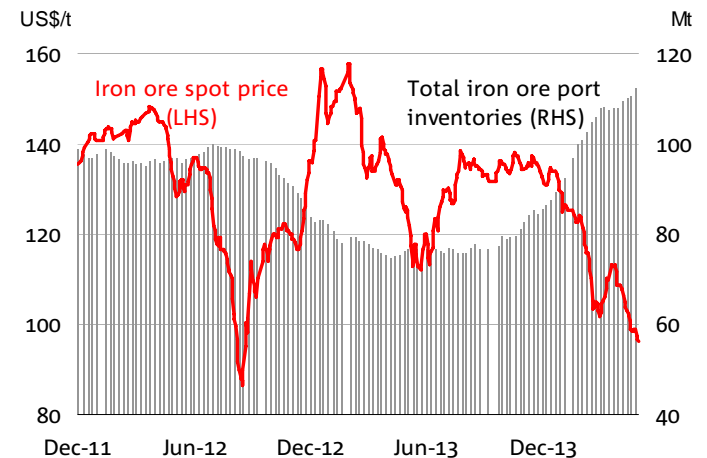
- Spot prices for iron ore fell once again in May – pushing down to US\$92 a tonne in late May (the lowest level for iron ore prices since September 2012). With the exception of a modest rebound in early March, prices have consistently trended downwards since December.
- China is the key market for iron ore trade – with the country accounting for around two-thirds of global imports in 2013. In the first four months of 2014, China’s iron ore imports were 305 million tonnes, an increase of 20% yoy.
- Stockpiles at Chinese ports have increased to record levels – at around 113 million tonnes in mid-May – with this growth in part related to collateral financing deals by steel mills and iron traders. In March, MySteel Research estimated that around 40% of stocks were connected to financing deals – adding a degree of downside risk to iron ore prices if these stocks required liquidation.
- On the supply side, there is little likelihood of major cuts to production in response to softening prices. According to estimates by Bloomberg, around three-quarters of global iron ore production would be profitable with prices closer to US\$60 a tonne. In contrast, China’s domestic iron ore sector is not as viable – with around two-thirds of output making losses at current prices.
- Continued growth in global seaborne iron ore supply will add further downward pressure to iron ore prices in the short term. Bloomberg estimate that around 104 million tonnes of new supply will be added this year (around 8% of global trade in 2013) – with the bulk of these additions coming from Australia.
- Spot prices near current levels are consistent with our current forecasts – our hybrid price consists of a weighted combination of both spot and contract prices (with contracts currently stronger). However we highlight some downside risk to our views – which see the hybrid price at US\$100 at the end of 2014 and lower to US\$95 at the end of 2015

Figure 9: Iron ore prices continue a downward trajectory



Source: Bloomberg, Thomson Datastream, NAB Economics

Figure 10: Chinese port stockpiles have risen to a new record

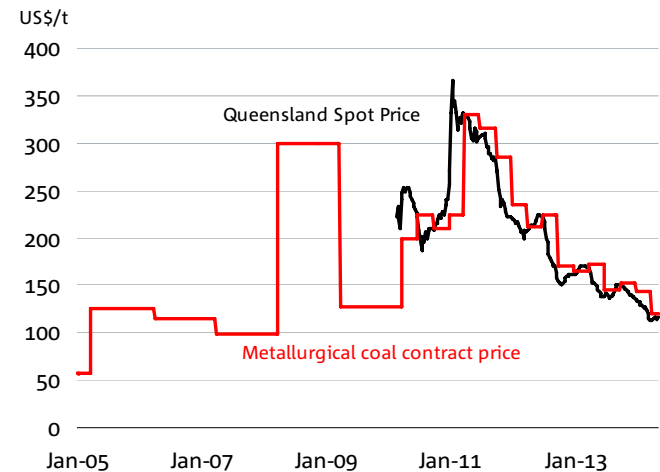


Source: Bloomberg, Steelhome, NAB Economics

Metallurgical coal

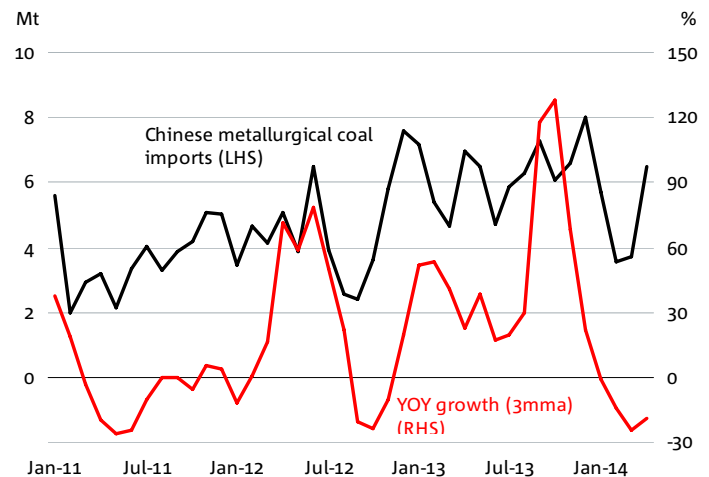
- Metallurgical coal spot prices edged back up in May – pulling away from effective all time lows in April (in the short history of active spot market trading), stabilising at around US\$116.10 a tonne in mid-May.
- Weak spot prices in part reflect growth in global supply along with weakness in China’s apparent consumption. For the first four months, imports totalled around 19 million tonnes – down 19% yoy – despite an improvement month-on-month in April. Weak imports came despite an increase in steel production of 4.9% yoy over the same period.
- This likely indicates a rundown in metallurgical coal stocks at steel mills and ports over this period, and could indicate stronger demand from the steel industry in coming months, provided that steel production remains strong.
- Producers have responded to the weaker spot prices with a range of production cuts. According to Bloomberg, since the settlement of the second quarter contract (at US\$120 a tonne), global producers have announced cuts of almost 17 million tonnes – equivalent to around 5% of global seaborne trade.
- According to cost estimates by Wood Mackenzie, around 55% of global metallurgical coal production is unprofitable at the current contract price (compared to 10-12% of supply at the first quarter price of US\$143 a tonne). The production cuts likely signal that losses for a number of producers currently exceed penalty fees under take-or-pay contracts – effectively putting a floor on prices.
- We expect that a recovery in Chinese demand will allow prices to improve from current unprofitable lows, however upward pressure will be limited by the scale of idle production capacity. Our forecast is unchanged this month – at around US\$148 a tonne by the end of 2014 and US\$160 by the end of 2015 – however the current price trends may result in a weaker profile for Q3 than we currently forecast.

Figure 11: Spot prices edge up from ‘all time’ lows at the end of March



Source: Energy Publishing, Bloomberg, NAB Economics

Figure 12: Chinese metallurgical coal imports weak in first four months

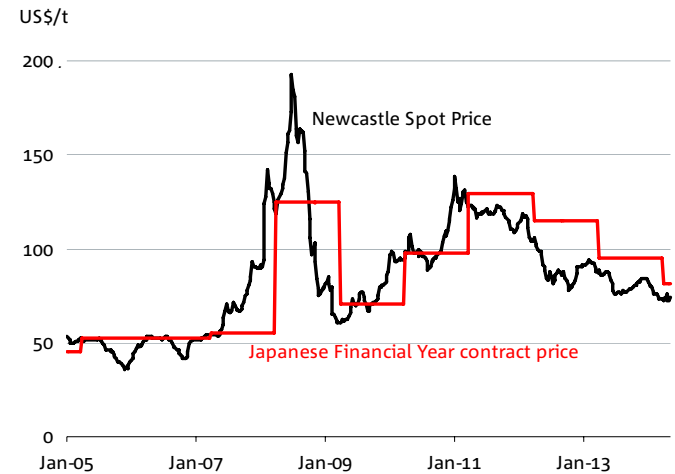


Source: CEIC, NAB Economics

Thermal coal

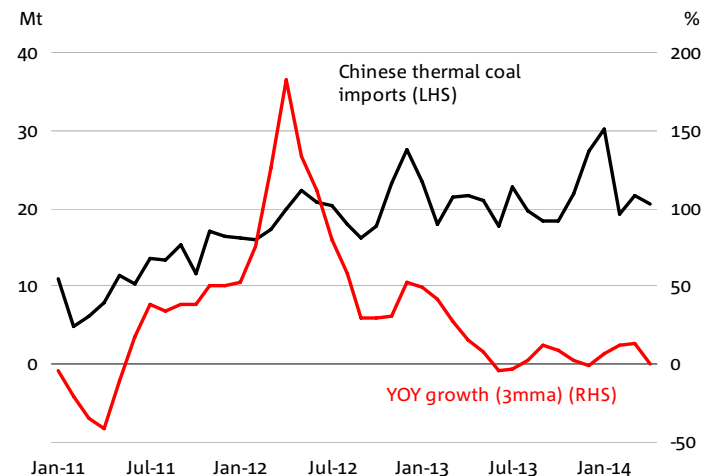
- Spot prices for thermal coal have remained weak in May – with prices at the port of Newcastle at around US\$72.95 a tonne at the end of the month. Prices have generally drifted lower since the start of the year (with prices at US\$84.25 in early January).
- Soft prices indicate a market that remains well supplied, in a period of seasonal weakness (most purchasing ahead of the northern winter now complete). Chinese thermal coal imports have slowed in recent months – down around 5% yoy in April.
- Efforts to combat pollution provide some uncertainty around long-term Chinese demand – with plans to close older and less efficient power plants, bans on new plants in high pollution zones and proposals to ban the use of lignite and low energy value coal.
- Weaker prices have impacted on the profitability of producers. Morgan Stanley estimate that at the current contract prices, around 13% of global production is unprofitable, while this level rises to around 25% at current spot prices.
- Thermal coal markets generally remain well supplied – with idle production capacity in a range of key producers (in part reflecting the weakening profitability conditions). Producers in the United States, Canada and Australia have reduced output at higher cost mines – although as is the case with metallurgical coal producers, take-or-pay contracts with infrastructure providers limit the capacity of some miners to cut production.
- Reflecting the level of spare production capacity to limit any upside pressure, along with potential cutbacks if prices fall further, we expect prices to remain range bound in the short term.

Figure 13: Thermal coal prices drift to a new plateau



Source: McCloskey's, BREE, NAB Economics

Figure 14: Growth in Chinese thermal coal imports slows sharply in April

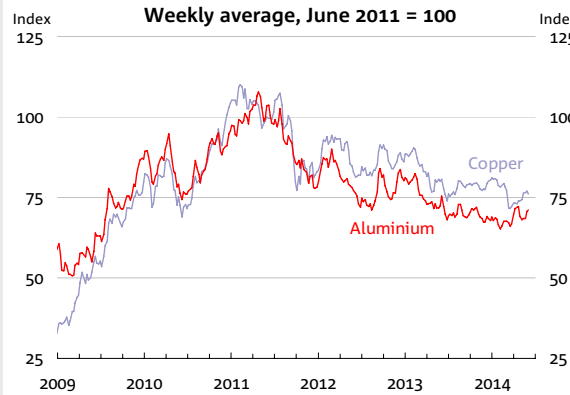


Source: CEIC, NAB Economics

Base Metals: Copper & Aluminium

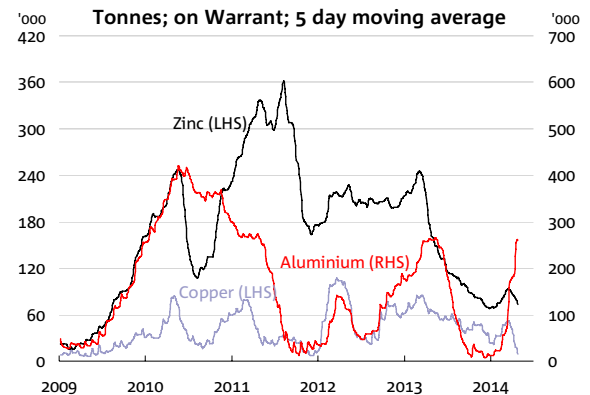
- Average copper prices rose 3.3% in May, to be around 5% lower over the year. Spot prices generally tracked higher over the month, rising 4.7%, despite a drop in the last week of May.
- Copper prices have lifted from this years lows that were triggered by concerns over Chinese demand and related commodity financing deals. The rise in prices since April has been fuelled by some more positive economic news, including expectations for stimulus measures in China, seasonal demand, as well as a return of risk appetite. However, it is still not clear how much (if any) stimulus has taken place in China to date; PMI measures of Chinese manufacturing remain soft.
- A drop in exchange-monitored copper copper inventories also added to the apparent tightening in physical markets – suggesting significant volumes are still tied up in financing deals. Premiums remain elevated in most markets and picked up from recent lows in Shanghai; SHFE stocks remain very low despite higher copper imports in April.
- Average aluminium prices dropped 3½% in May, to be around 5% lower over the year. Spot prices dipped late April/early May, but have more than recovered recently, rising 3.1%. Nevertheless, inventories are elevated and could limit any price rally and dampen the initial impact from a supply response to low prices, although large volumes are still tied up in financing deals and logjams.

Figure 15: Copper & Aluminium Price (LME)



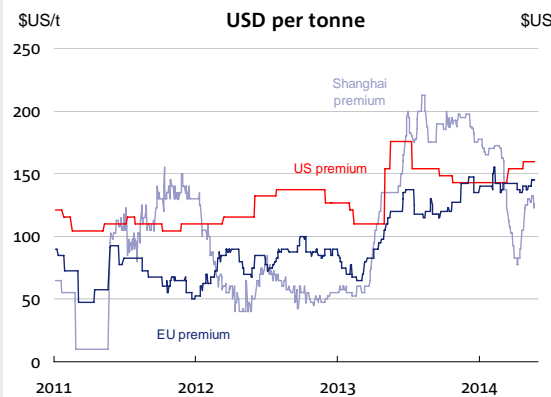
Sources: NAB; Thomson Reuters

Figure 16: SHFE Stocks on Warrant



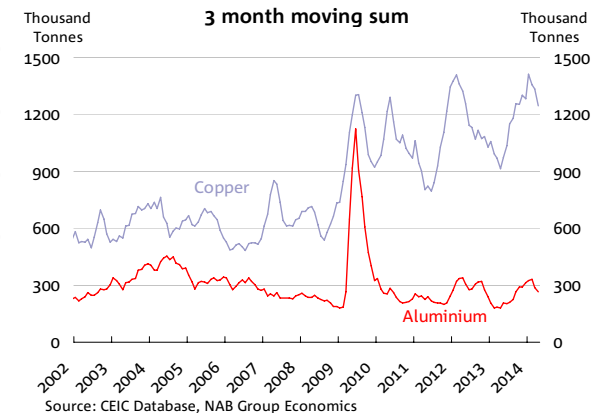
Sources: Bloomberg; NAB

Figure 17: Copper Premiums



Sources: Bloomberg Industries

Figure 18: China Import Volumes



Source: CEIC Database, NAB Group Economics

Base Metals: Nickel, Lead, Zinc

- Nickel markets continue to garner great interest as the Indonesian mineral export ban persists longer than many had expected and exacerbates other supply issues in recent weeks. Indonesian nickel exports to top consumer China have dropped heavily since the ban, following signs of significant 'pre-emptive' buying in the lead up to the ban (Figure 20). Average nickel prices recorded strong growth again in May, rising more than 11%, to be up almost a third over the year.
- The outlook for the nickel market remains quite uncertain, and the upcoming Indonesian elections (scheduled for July 9) are yet another factor that could potentially impact the current mining law. Nevertheless, the strong rally in prices now appears to be losing some steam. Having peaked at just over US\$20,000 per tonne in May, prices have ebbed down to around US\$18,900 more recently. This could be an indication that the market is starting look away from the ban and focus more on the (somewhat unfavourable) fundamentals. In particular, there continues to be an abundance of refined metal stocks to meet physical demand in the near-term, while reports suggest growing support in Indonesia for reviewing the export policy.
- Lead and zinc prices have lacked any clear price direction over the past month, although average prices are up 0.4% and 1.5% in May respectively. Better demand from US auto manufacturing and European construction has been supportive, along with previous supply consolidation. Inventories appear to be drawing down, although stocks off-exchange have probably risen.

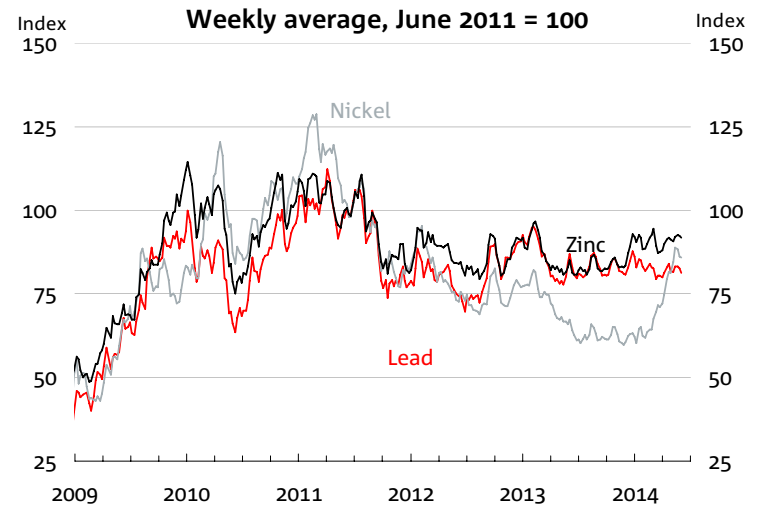
Table 1: Base Metal Prices*

	Avg Price (US\$/tonne)	Monthly % change	May-13 - May-14
	May-14	May-14	% change
Aluminium	1749	-3.5	-5
Copper	6890	3.3	-5
Lead	2099	0.4	3
Nickel	19364	11.2	30
Zinc	2059	1.5	12
Base Metals Index		4.0	6

* Prices on an LME cash basis.

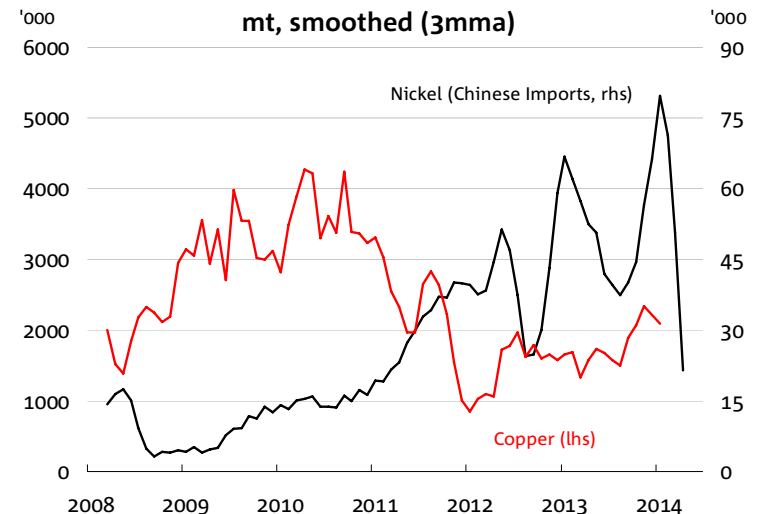
Sources: LME; NAB

Figure 19: Nickel, Lead, Zinc Prices (LME)



Sources: NAB; Thomson Reuters

Figure 20: Indonesian Mineral Exports



Gold Market

- Tensions between the Ukraine and Russia have been less disruptive than a month ago, reducing market volatility and bringing down gold's risk premium – allowing gold markets to refocus attention on macroeconomic drivers.
- Reasonably positive economic data out of the US, and some recent good company results, have helped US and global equity prices rally. Similarly, the US Fed's QE tapering is largely unfolding as expected, putting aside recent falls in bond yields, while relatively benign inflation pressures are limiting demand for gold as an inflation hedge.
- This has all weighed heavily on investor demand for the shiny metal. Exchange traded fund (ETF) holdings of gold have again started to decline, having experienced a period of stabilisation since around the start of the year. Net-long positions in gold are also down from recent peaks.
- Physical demand indicators are also a little softer, contributing to a rise in Comex gold inventories. Chinese net imports of gold from Hong Kong have fallen 40% from their most recent peak in February, and are 50% below last year's all time high.
- Consequently, after remaining relatively trade bound for much of the past month, gold prices dropped almost 4% since the end of May to around US\$1,245 per ounce.
- Aside from the risks from geopolitical tensions, a potential unwinding of India's gold import restrictions, post the recent election, poses a significant upside risk to gold prices. A partial liberalisation of imports has already taken place, which could reportedly double average monthly imports by India. Relaxation of restrictions are likely to help ease elevated domestic gold premiums in India, which may fall further, although the impact on exchange prices has so far been limited. Unofficial imports to India are still reported to be strong and may help offset some of the rise in official imports. *For further details on gold, please read our gold market update released this month.*

Figure 21: Other Gold Demand Factors

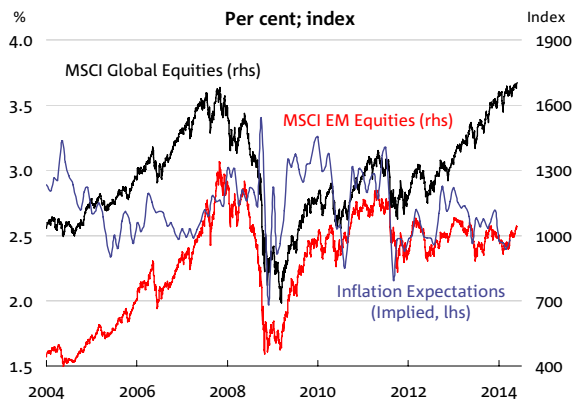


Figure 22: Exchange Traded Fund Holdings

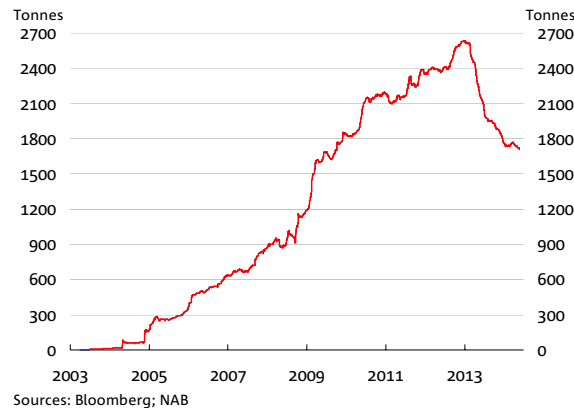
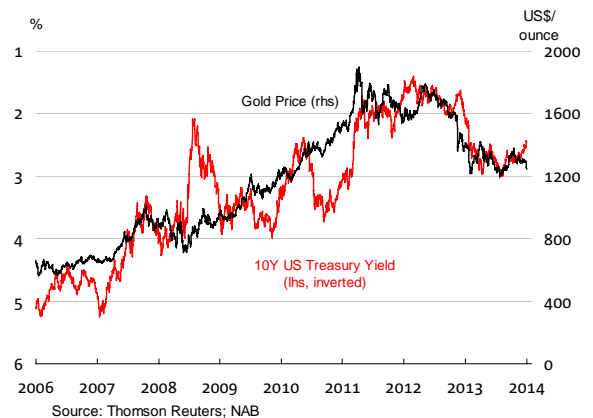


Figure 23: Gold Price & US Treasury Yield

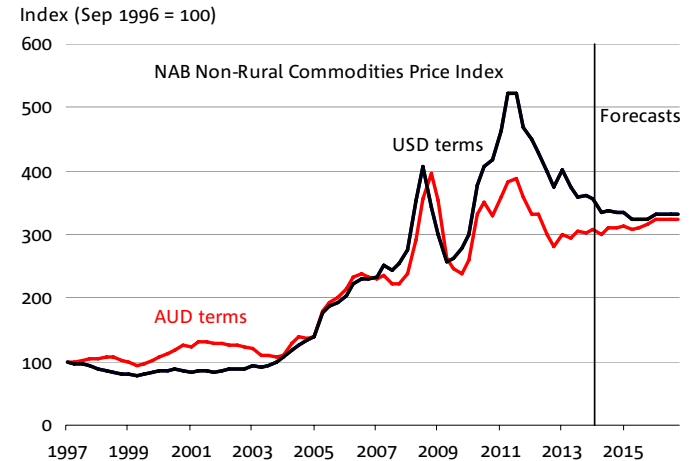


Outlook

- In US dollar terms, NAB's non-rural commodity price index is expected to fall by around 5.8% quarter-on-quarter in June, driven by weaker price trends for iron ore and metallurgical coal. Further declines are expected across the year, with average prices in 2014 forecast to be around 8.9% lower.
- Reflecting our forecast for further depreciation of the AUD over the forecast horizon, we expect AUD prices to trend marginally higher across the year – resulting in an increase of around 2.1% in 2014. Further modest gains are expected in 2015, as the Australian dollar continues to soften.

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Figure 24: USD commodity prices to trend lower



Sources: ABARES, ABS, Bloomberg, Thomson Datastream, NAB Economics

	Unit	Spot	Actual		Forecasts						
		Current	Mar-14	Jun-14	Sep-14	Dec-14	Mar-15	Jun-15	Sep-15	Dec-15	Mar-16
WTI oil	US\$/bbl	103	114	113	111	109	109	109	109	109	109
Brent oil	US\$/bbl	110.2	108	109	107	105	105	105	105	105	105
Singapore gasoil	AUc/litre	0.81	0.86	0.84	0.84	0.86	0.88	0.90	0.91	0.92	0.93
Tapis oil	US\$/bbl	113	108	109	107	105	105	105	105	105	105
Gold	US\$/ounce	1245	1290	1280	1260	1270	1210	1120	1060	1060	1060
Iron ore*	US\$/tonne	93	117	108	105	100	100	95	95	95	95
Hard coking coal*	US\$/tonne	n.a.	143	120	143	148	150	153	157	160	170
Semi-soft coal*	US\$/tonne	n.a.	104	85	102	106	107	109	112	114	125
Thermal coal*	US\$/tonne	74	95	82	82	82	82	80	80	80	80
Aluminium	US\$/tonne	1824	1710	1800	1810	1860	1900	1920	1930	1930	1930
Copper	US\$/tonne	6933	7031	6890	6940	6990	6990	6990	6920	6860	6860
Lead	US\$/tonne	2114	2102	2090	2100	2110	2130	2140	2160	2180	2180
Nickel	US\$/tonne	19016	14657	18540	17800	17090	16750	17040	17340	17640	17640
Zinc	US\$/tonne	2096	2027	2010	2030	2050	2090	2130	2170	2220	2220
Henry Hub	US\$/mmbtu	4.59	5.10	4.50	4.20	4.20	3.90	4.10	3.90	3.90	3.90
Japan LNG**	US\$/mmbtu	n.a.	16.75	16.00	15.50	15.50	15.30	15.00	14.50	14.35	14.35

* Data reflect NAB estimates of US\$/ tonne FOB quarterly contract prices (thermal coal is JFY contract). Actual data represent most recent final quarterly contract price.

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