Minerals & Energy Commodities Update

by NAB Group Economics

July 2014

National Australia Bank

Key Points:

- Commodity prices remained divergent in July, reflecting broadly positive but somewhat mixed economic data as well as flaring geopolitical tensions in Ukraine and the Middle East.
- Crude prices fell in early July as concerns about a disruption to Iraqi oil supplies dissipated. Brent and Tapis have been flat since mid-July whereas WTI increased on the back of falling inventories at Cushing Oklahoma to almost reach parity with Brent by late July before falling in early August.
- US natural gas prices continued to decline over July as mild weather reduced demand for gas fired electricity generation, whereas European prices ticked up in late July in response to heightened tensions in Ukraine.
- Iron ore was volatile during the month but edged lower towards the end before increasing marginally – slowing Chinese real estate demand and increased Australian domestic production may have contributed.
- The Australian Government approved what is speculated to be the largest domestic coal mine – Carmichael. It is forecast to produce 60 million tonnes of thermal coal per annum, which may further drive down already subdued prices. Thermal and metallurgical coal closed lower on higher supply capacity.
- Base metals (zinc, copper, aluminium and lead) all trended upwards on improving Chinese and US economic data. In comparison, nickel rose early in the month and then trended downwards. Meanwhile, geopolitical tensions in the Middle East intensified causing the index of volatility (VIX) to spike before reverting back to recent subdued levels. Investors flocked to gold, but lived a short rally as demand was offset by better US economic data.

Economic overview

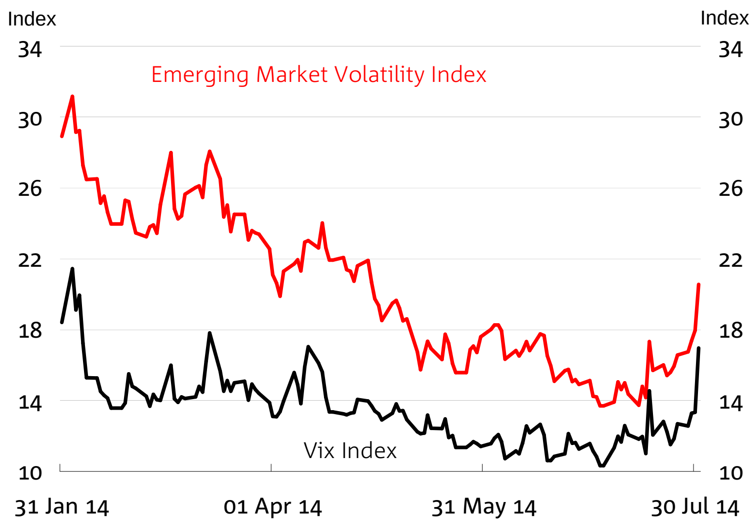
- Prices of commodities continued their relatively mixed performance in July, largely attributed to heightened geopolitical turmoil in the Middle East and Ukraine, and an improving US and Chinese economy.

- Financial market volatility spiked amid the downing of MH17 and geopolitical tensions in Ukraine and the Middle East. Despite posting its largest daily gain (above 32%) since April 2013, VIX remains below the 20 year average. The movement emphasized that it's going to take a lot to shake financial markets as the global search for yield continues. This year's political events have largely contributed to gold prices surging by more than 8% as investors fuelled demand for a safe haven asset. However, the most recent rally has stalled on speculation that the Federal Reserve will raise interest rates earlier than expected as the US economy gains traction (see below). This has implications for financing deals that are keeping large volumes of commodities (such as Aluminium) off market.

- June quarter economic data reveals US GDP grew more strongly than expected at an annualised rate of 4.0%. US ISM PMI also expanded to 57.1 (from 55.3 previously). The FOMC continued to taper by $10bn, reducing the bond buying program to $25bn – with Quantitative Easing on track to conclude in October. The FOMC declared unemployment remains "elevated", despite data showing a decrease in jobless claims. Inflation is getting closer to its target rate and the AUD fell as the USD gained momentum.

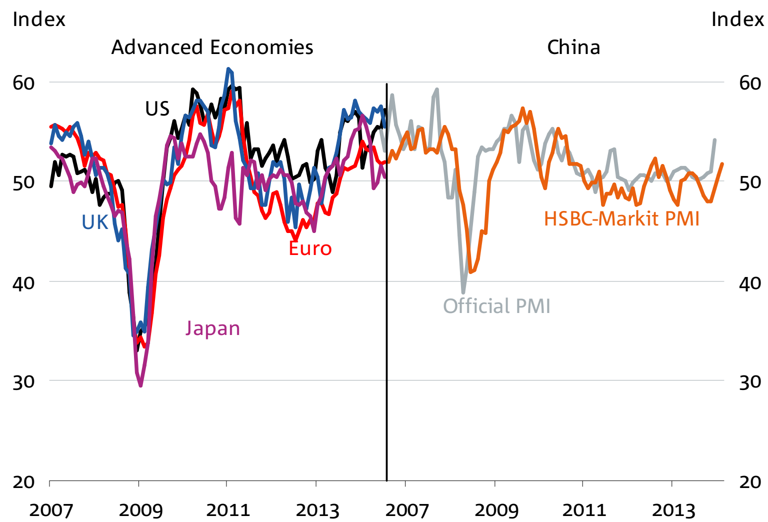
- China's National Accounts also indicated their economy grew more strongly than expected in the June quarter by 2.0% qoq (7.5% yoy). The HSBC Flash manufacturing PMI hit an 18 month high, expanding to 52 in June (from 50.7 previously), with new orders and export orders expanding at a faster rate. In contrast, real estate investment continued to slow, dampening demand for domestic steel. Softer demand for iron ore, coupled with a short term oversupply weighed on prices.

Figure 1: CBOE Market Volatility Index (VIX)



Source: CBOE, Thomson

Figure 2: China official PMI at a six month high



Sources: Markit Economics, NBS, NAB Economics

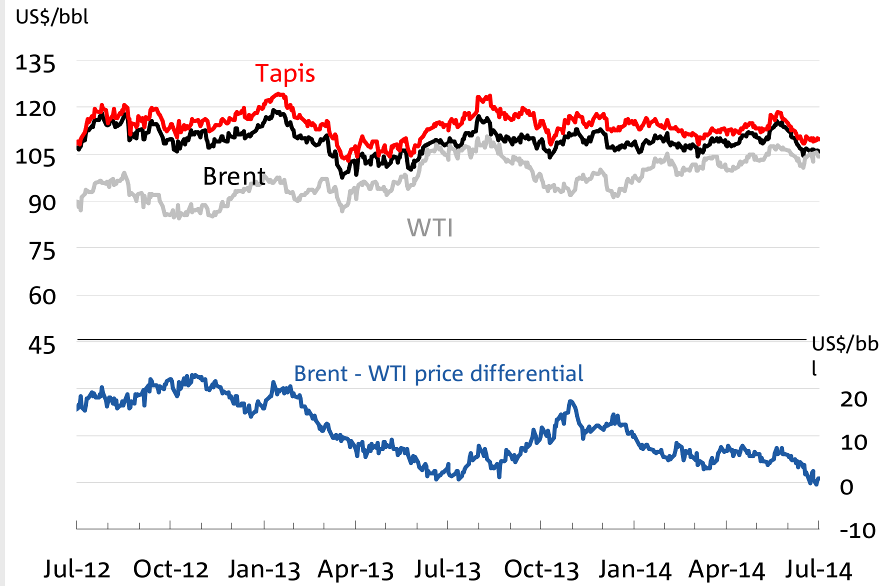
Oil

- Brent and Tapis prices fell in early July before stabilising mid-month, and closed the month at US$105/bbl and US$108/bbl respectively. Meanwhile WTI began to appreciate from mid July and almost reached parity with Brent in late July before falling in early August. WTI prices have been consistently lower than Brent since 2010 but falling inventories at Cushing, Oklahoma and increasing US exports have eroded this differential.

- Geopolitical tensions continue to weigh on the minds of investors. Fighting in the Middle East continues to rage, with the situation in Gaza, Libya, Iraq and Syria highly volatile. While the June price spike caused by sectarian unrest in Iraq dissipated by early July as it became clear that crude production concentrated in the south of the country remained unaffected, a deterioration in the situation could send prices higher.

- The crisis in Ukraine has deteriorated considerably since June with the downing of Malaysia Airlines Flight MH17. This has seen the US and EU impose further sanctions on Russia which limit the ability of Russian banks to raise capital in the US or EU and prevent Russia from purchasing specialist European equipment used for deep sea drilling, Arctic exploration and shale oil projects. If sustained, these sanctions are likely to lead to lower levels of investment in Russian oil and gas projects in the medium term.

Figure 3: Daily oil prices



Source: Thomson Datastream

Basra Oil Terminal, Iraq

US Navy photo by Photographer's Mate 1st Class Richard J. Brunson

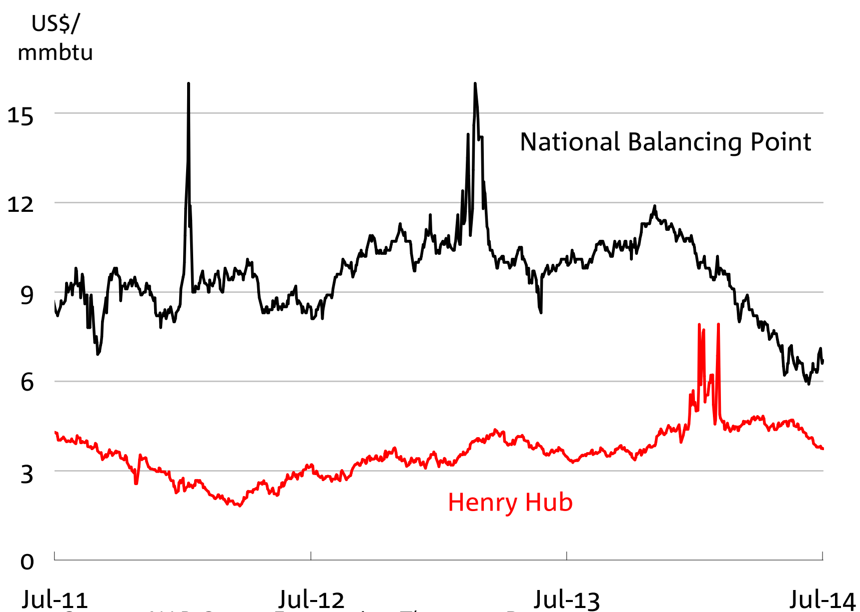
Natural Gas

- US prices declined in July in response to mild summer weather which tempered demand for gas fired electricity generation. The daily Henry Hub spot price finished the month at US$3.74/mmbtu – down 15% from the end of June. Inventories have not fully recovered from the harsh US winter, although they are rebuilding at a faster rate than in previous years. Working gas in underground storage in the lower 48 states stands at 2,307bcf – down 18.7% on the same time last year.

- European gas prices edged up in July as the worsening crisis in Ukraine raised concerns of disruptions to winter gas supplies. The daily National Balancing Point spot price finished the month at US$6.70/mmbtu – up 2% from the end of June but still well down on the same time last year as the effects of the mildest winter in Europe in seven years left inventories buoyant coming into summer.

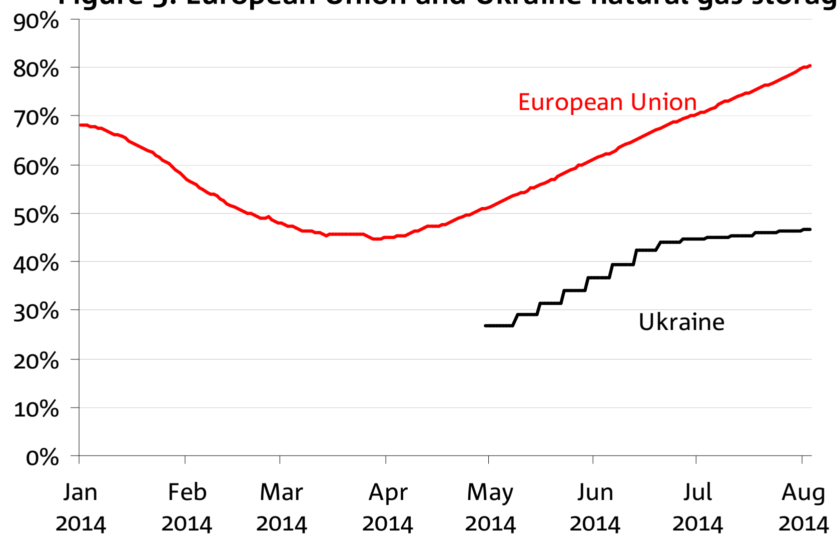
- While the EU has imposed further sanctions on Russia, they will not affect Russian gas supplies to Europe. Nonetheless, there is a possibility that Russia could restrict gas supplies to the EU in retaliation. A gas cut-off to Europe would be costly to both the EU and Russia and would likely further depress the already weakened Russian economy. It is for this reason that we consider a cut-off unlikely in the short term. However, should the Russian political climate favour a nationalistic response to the sanctions, a gas cut-off remains a possibility. EU natural gas storage stands at just above 80% of capacity, providing a short term buffer to any restriction of gas supplies.

Figure 4: Daily gas spot price



Source: NAB Group Economics, Thomson Datastream

Figure 5: European Union and Ukraine natural gas storage



Source: Gas Infrastructure Europe

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).

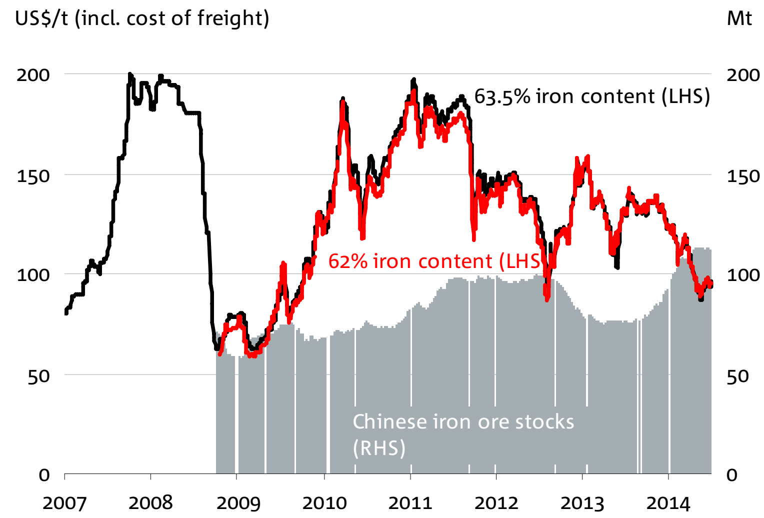
- The strong growth rate of China's imports has driven stockpiles at the country's ports to record levels – almost 114 million tonnes in early July, before easing slightly lower. There remains some considerable uncertainty around stocks – particularly ownership given the connection to commodity financing.

- 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).

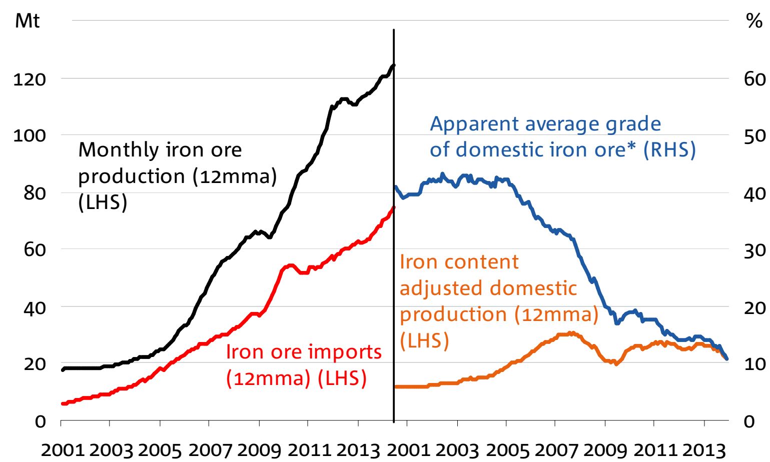
- *For further details on bulk commodities, please read our in-depth note released this month.*

Figure 6: Iron ore prices recovered marginally from mid-June lows, but stocks are still high



Source: Bloomberg, Thomson Datastream, NAB Economics

Figure 7: 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).

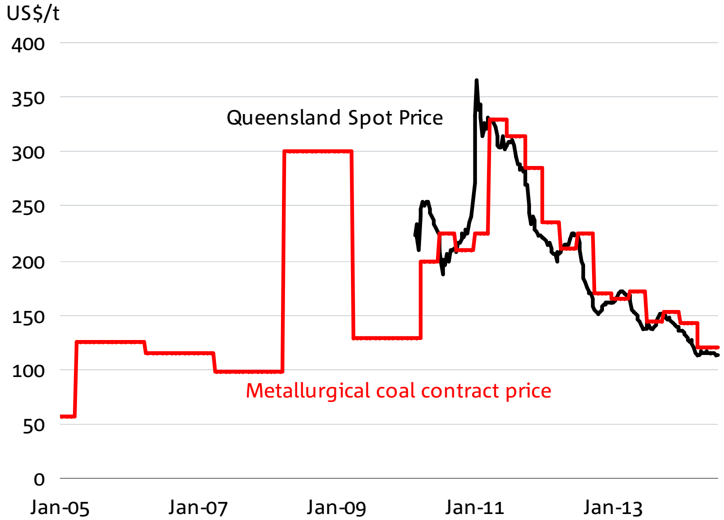
- Contract prices for the third quarter were rolled over at US$120 a tonne – slightly ahead of our expectations of US$117 (based on trends in spot markets in the June quarter). This may have reflected an increase in demand for contracted volumes, given announced production cuts.

- 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.

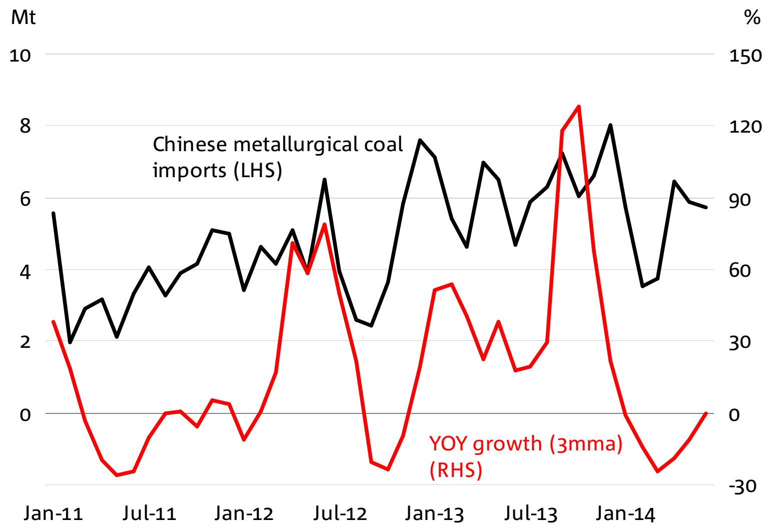
- Reports suggest that some producers in Queensland are attempting to renegotiate the existing take-or-pay contracts with infrastructure providers as well as contracts with mining services firms. In the case of the former, these contracts limit the potential for production cuts for otherwise unprofitable capacity.

Figure 8: Spot prices remaining relatively stable, but seemingly minimal trade in July



Source: Energy Publishing, Bloomberg, NAB Economics

Figure 9: Chinese metallurgical coal imports have recovered after weak first quarter

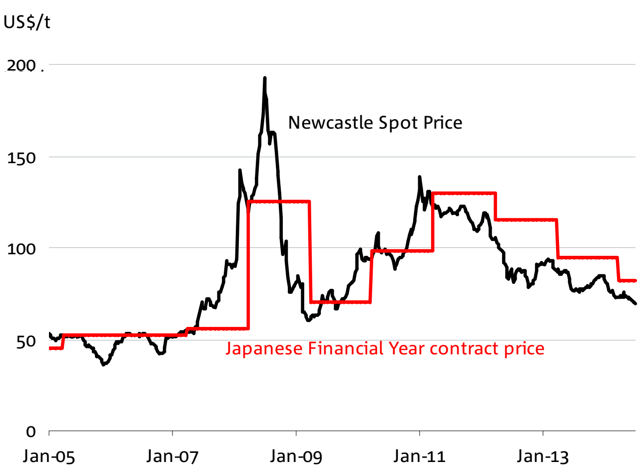


Source: CEIC, NAB Economics

Thermal coal

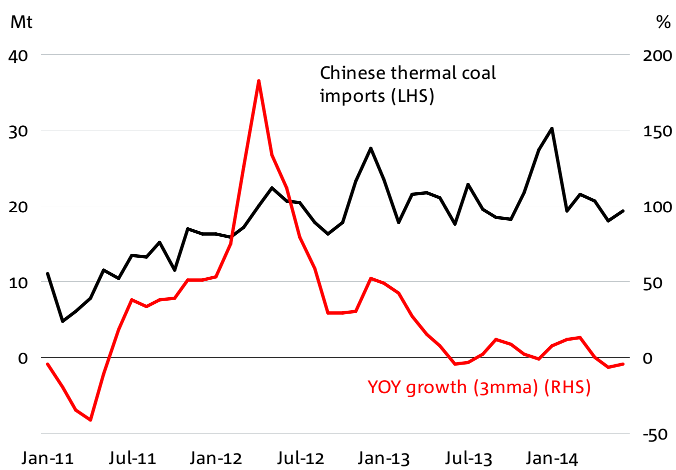
- Spot prices for thermal coal have continued to ease in July, with prices at the port of Newcastle falling to US$68.15 a tonne mid month – the lowest level since September 2009 (as coal markets were recovering from the GFC).
- China's imports of thermal coal have been relatively weak in recent months – 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 10: Thermal coal prices have continued to drift lower – below US$70 a tonne



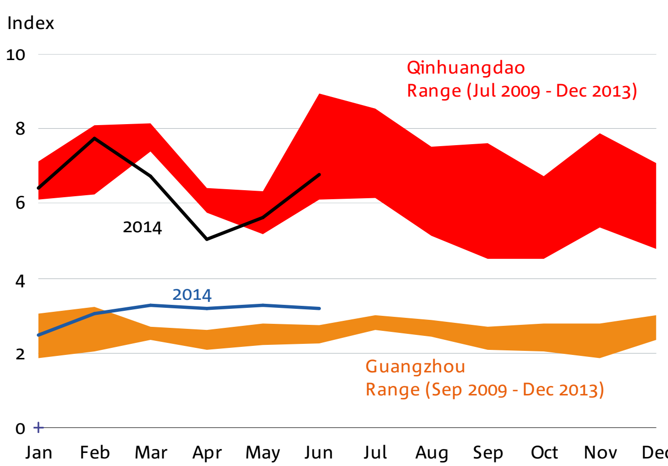
Source: McCloskey's, BREE, NAB Economics

Figure 11: Growth in China's thermal coal imports have been particularly weak



Source: CEIC, NAB Economics

Figure 12: Adequate stockpiles at China's major ports contributing to soft prices

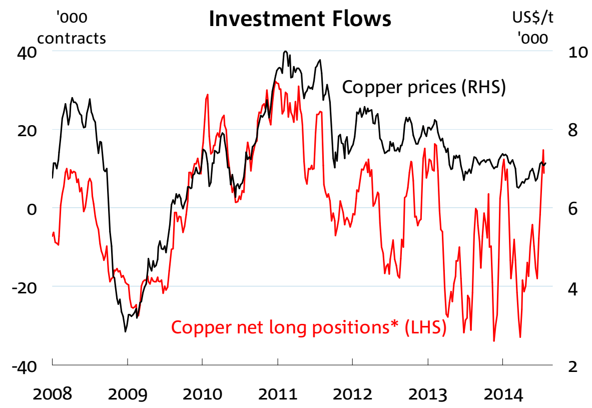


Source: CEIC, NAB Economics

Base metals: Copper

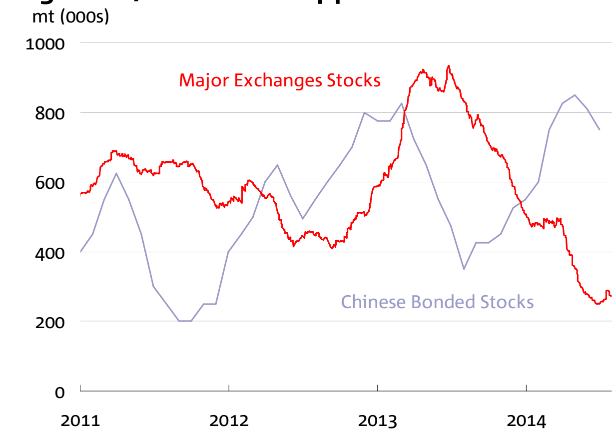
- Copper prices have fluctuated since a rally in late June that was driven by tightening physical markets. Average copper prices rose over 4% in July, to be around 3% higher over the year. However, at US$7,160 per tonne, the current spot price is only 1.7% higher than end-June.
- Global copper exchange stocks are low, but look to have stabilised, and started to lift slightly – largely a reflection of sharp increases in SHFE inventories in the second half of month. Backwardation in the SHFE forward curve (prompting physical settlement of short positions) appears to be a major driver, although concerns over softer Chinese construction activity is a contributing factor. There is potential for inventories to lift further in coming months in response to higher production rates and a potential (gradual) shift of bonded Chinese stocks following the recent Qingdao scandal. Chinese copper imports fell again in June, also suggesting limited growth in physical demand.
- Entering the soft demand season means that premiums have eased, although Shanghai premiums have fluctuated in response to the mixed bag of Chinese economic data, and as banks step back from commodity financing.
- New production capacity is expected to come on line during H2 that will exert some downward pressure on copper prices. However a reasonably positive demand outlook and a variety of potential supply constraints will keep the market tight and prices close to current levels. A disruptive unwinding of financing deals is a risk, but remains unlikely.
- *For further details on base metals, please read our in-depth note released this month.*

Figure 13: Copper Prices & Investment



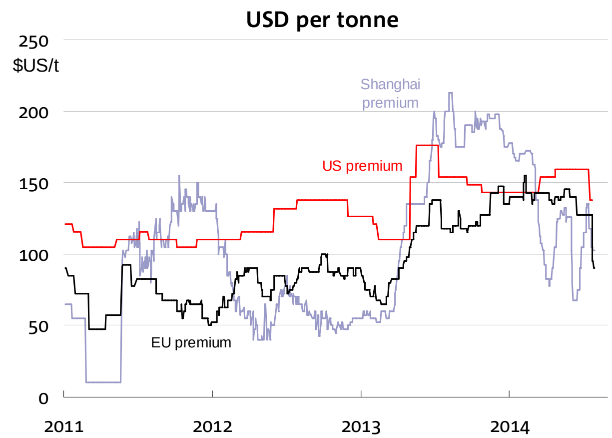
* Combined futures and derivatives net long positions for non-commercial traders

Figure 14: Chinese Copper Bonded Stocks



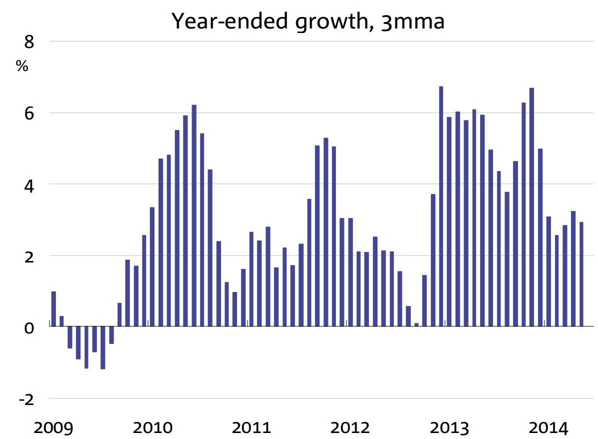
Source: Bloomberg, NAB

Figure 15: Copper Premiums



Sources: Bloomberg Industries

Figure 16: Refined copper production

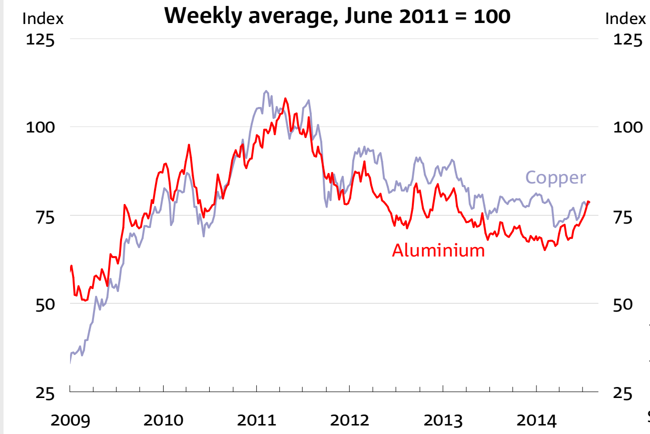


Sources: Bloomberg Industries

Base metals: Aluminium

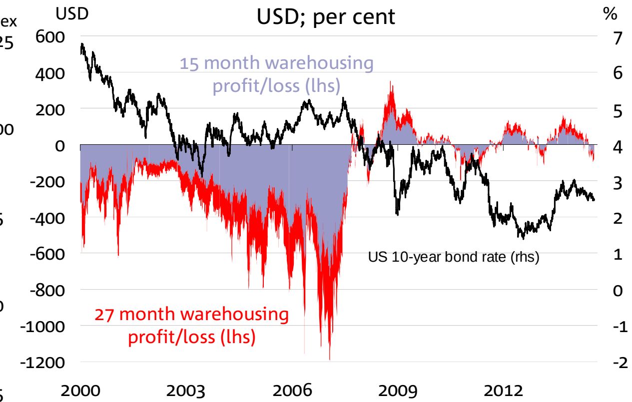
- Average aluminium prices rose 5.9% in July, to be 10% higher over the year. Spot prices held steady in late July, following a strong increase early in the month, to be 8¼% above end-July levels. Nevertheless, elevated inventories and steady production rates (although ex-China production has been in decline) may limit any price rally in the near-term, although large volumes are still inaccessible.
- Exchange inventories of aluminium remain elevated due to overcapacity, volumes locked into financing deals and backlogs at warehouses. However, with US interest rates up from their previous lows and contango easing slightly, aluminium warehousing incentives are slowly being eroded, which could help to alleviate tightness in spot markets. However, the US Fed continues to emphasise its intentions to keep interest rates lower for longer, suggesting financing deals will remain. It is also possible that solid price rises to date may prompt restarting previously curtailed capacity.
- Improving demand and limited ex-China supply is keeping physical markets tight, pushing premiums up to new record highs in some markets. Tightness in physical markets, higher bauxite prices and some improvement in demand could push aluminium prices a little higher in the medium-term, although potential supply responses are a key risk.
- Chinese production capacity curtailments, to address overcapacity, slowed down in June and subsidies returned to Chinese smelters, which is likely to keep the Chinese market in surplus.

Figure 17: Copper & Aluminium Price (LME)



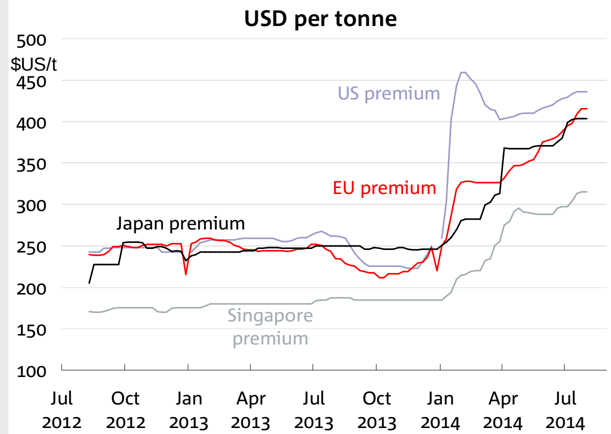
Sources: NAB: Thomson Reuters

Figure 18: Aluminium Warehouse Incentives



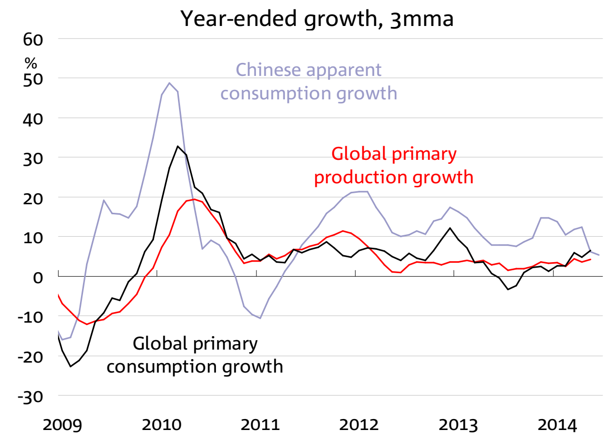
Sources: Bloomberg Industries; NAB

Figure 19: Aluminium Premiums



Sources: Bloomberg Industries

Figure 20: Aluminium Production & Consumption



Sources: Bloomberg Industries

Base Metals: Nickel, Lead, Zinc

- Average nickel prices posted the weakest gains in June relative to the rest of the base metals complex, up 2.8%, following their first monthly decline in Jun. Nevertheless, prices are still up almost 40% over the year, largely driven by supply side constraints. Nickel market fundamentals have been overshadowed this year by the ore export ban in Indonesia. However, inventories are continuing to rise, suggesting it is yet to have a material impact on availability. The outlook for the nickel market remains quite uncertain, and the unstable political situation in Indonesia is fuelling speculation about the longevity of the current ore export ban. Nevertheless, a continuation of the ore ban seems most likely.
- Zinc was the best performer in the month of July, with average prices up around 8½% in the month. Signs of improvement in China's industrial sector are supportive given its significance to zinc demand. Strong price gains reflect the comparatively positive fundamentals for the metal. The market balance for the year shifted into deficit in recent months and exchange inventories have been in steady decline.
- Lead prices also recorded good gains in July, with average prices rising around 4%. Fundamentals look relatively balanced. Adequate supply growth and mixed demand (eg. buoyant battery demand for new vehicles, but more subdued replacement demand) is driving this trend, with the market becoming more balanced following a widening deficit over 2013. Nevertheless, inventories continue to draw down, keeping physical markets tight and premiums elevated.

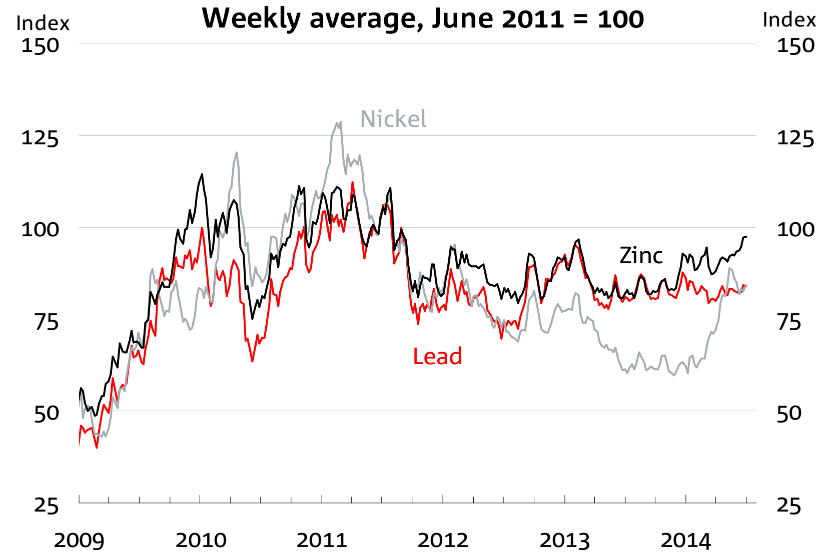
Table 1: Base Metal Prices*

	Avg Price (US$/tonne) Jul-14	Monthly % change Jul-14	Jul-13 - Jul-14 % change
Aluminium	1947	5.9	10
Copper	7112	4.3	3
Lead	2192	4.0	7
Nickel	19149	2.8	39
Zinc	2308	8.4	26
Base Metals Index		4.5	15

* Prices on an LME cash basis.

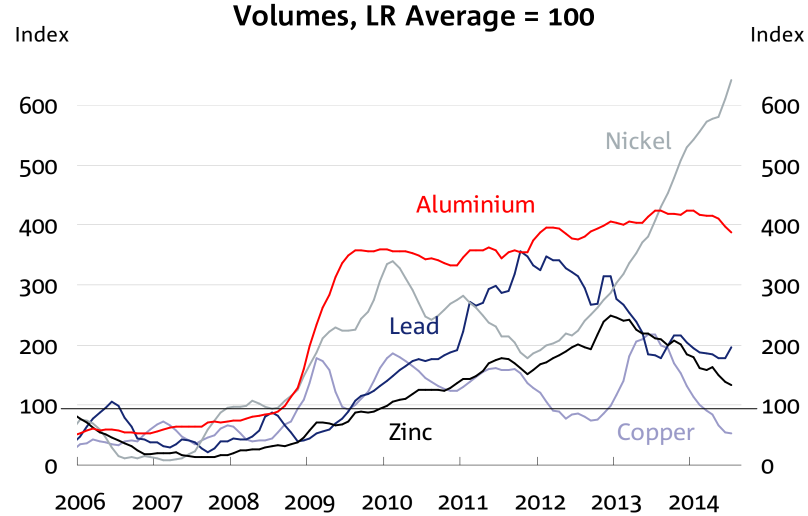
Sources: LME; NAB

Figure 21: Nickel, Lead, Zinc Prices (LME)



Sources: NAB: Thomson Reuters

Figure 22: LME Base Metal Stocks

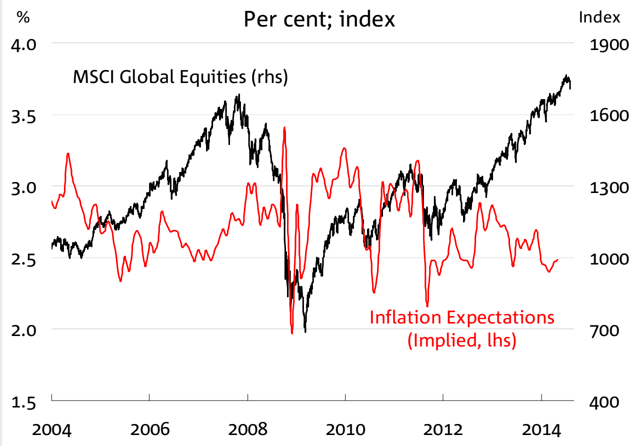


Sources: Datastream; NAB

Gold Market

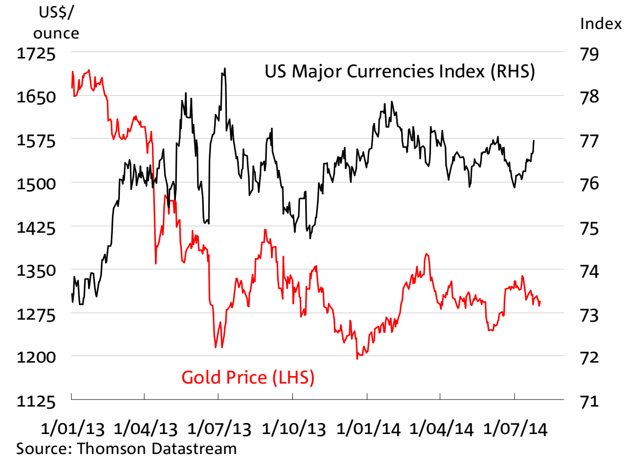
- Despite seeing some interest from safe haven demand follow recent geopolitical events, the gold price back tracked in the second half of the month to be around 1.7% over June. The spot gold price is currently around US$1,295 per ounce, down from almost US$1,430 per ounce earlier in the month.
- A generally stronger than expected Q2 GDP result for the US and more confirmation from the Fed that they will most likely complete QE tapering by October, kept the market focussed on the interest rate outlook. Consistent with these events, the USD saw renewed strength in the month, while inflation expectations also remain relatively low, tempering demand for gold as an inflation hedge.
- Investor/safe-haven demand appears to be relatively stable. Exchange traded fund (ETF) holdings of gold have now held steady relative to the sharp falls since last year, while net long positions of gold in July rose to levels not seen since the start of the year. Asian demand appears to be relatively contained. Chinese net imports of gold from Hong Kong eased further in May, while Indian premiums continued to ease as well.
- Aside from the risks related to geopolitical tensions, a potential unwinding of India's gold import restrictions poses an upside risk, but at this stage we expect this to be outweighed by western selling. In the medium term, we continue to expect gold prices to ease to below US$1,100 per ounce as global interest rates normalise.

Figure 23: Other Gold Demand Factors



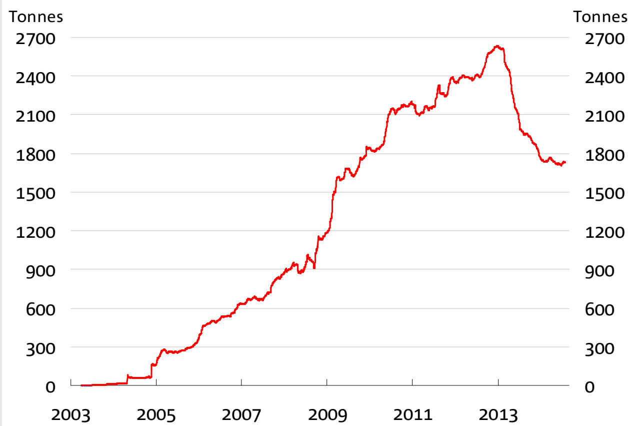
Note: Inflation expectations are for US consumers

Figure 24: Gold & USD Index



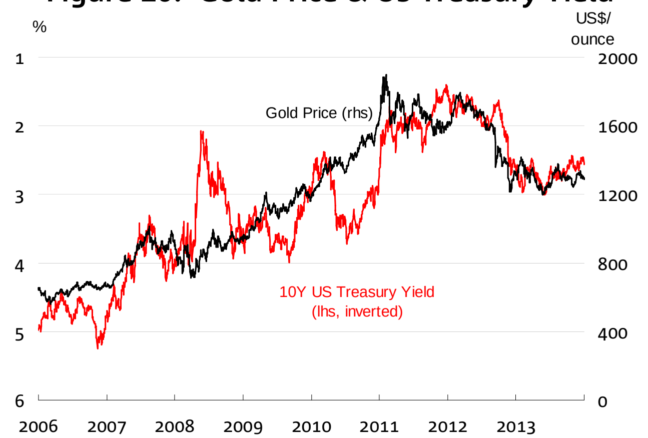
Source: Thomson Datastream

Figure 25: Exchange Traded Fund Holdings



Sources: Bloomberg; NAB

Figure 26: Gold Price & US Treasury Yield



Source: Thomson Reuters; NAB

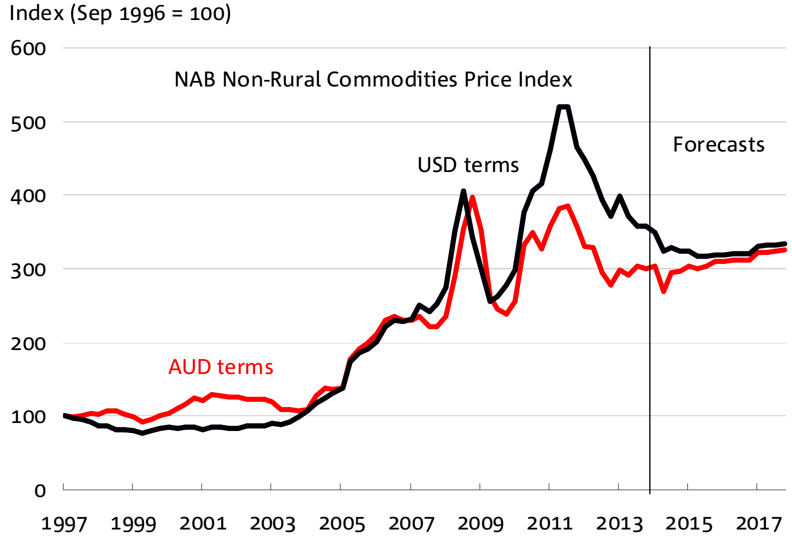
Outlook

- NAB's non-rural commodity price index is expected to rise by around 1.7% quarter-on-quarter in September (in US dollar terms) – following a 7.3% decline in June. Stabilisation of prices for iron ore and metallurgical coal – Australia's largest commodity exports – are the main drivers, while strong increases in some base metal prices in recent months are also making solid contributions.

- In Australian dollar terms, commodity prices are forecast to rise a little across the remainder of 2014, before edging higher in 2015 (up by around 4¾ %) – largely reflecting depreciation of the Australian dollar as global interest rates (particularly in the US) start to normalise.

james.glenn@nab.com.au
Phin.Ziebell@nab.com.au
gerard.burg@nab.com.au
karla.bulauan@nab.com.au
rob.brooker@nab.com.au

Figure 27: Lower bulk commodity prices lead US index down, before stabilising in 2015



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

		Spot	Actual				*Forecasts*				
	Unit	Current	Jun-14	Sep-14	Dec-14	Mar-15	Jun-15	Sep-15	Dec-15	Mar-16	Jun-16
WTI oil	US$/bbl	104	103	103	101	100	100	101	102	102	102
Brent oil	US$/bbl	103	110	111	107	105	105	105	105	105	105
Singapore gasoil	AUc/litre	0.80	0.82	0.79	0.76	0.75	0.76	0.76	0.76	0.76	0.76
Tapis oil	US$/bbl	108	113	114	111	109	109	109	109	109	109
Gold	US$/ounce	1295	1290	1300	1300	1220	1120	1060	1060	1060	1060
Iron ore*	US$/tonne	95	103	105	100	100	95	95	95	95	95
Hard coking coal*	US$/tonne	n.a.	120	120	125	135	140	145	150	150	150
Semi-soft coal*	US$/tonne	n.a.	85	85	89	96	100	103	107	107	107
Thermal coal*	US$/tonne	74	82	82	82	82	80	80	80	80	80
Aluminium	US$/tonne	1963	1801	1990	1930	1950	1980	1990	2000	2000	2000
Copper	US$/tonne	7089	6795	7050	6940	6840	6770	6700	6640	6640	6640
Lead	US$/tonne	2213	2098	2200	2190	2180	2200	2210	2240	2240	2240
Nickel	US$/tonne	18334	18469	19210	18820	18450	18770	19100	19670	19670	19670
Zinc	US$/tonne	2343	2072	2320	2330	2340	2360	2370	2380	2380	2380
Henry Hub	US$/mmbtu	3.75	4.66	4.50	4.20	4.20	3.90	4.10	3.90	3.90	3.90
Japan LNG**	US$/mmbtu	n.a.	15.50	15.50	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.

Group Economics

Alan Oster
Group Chief Economist
+61 3 8634 2927

Jacqui Brand
Personal Assistant
+61 3 8634 2181

Australian Economics and Commodities

Rob Brooker
Head of Australian Economics
+61 3 8634 1663

James Glenn
Senior Economist – Australia
+(61 3) 9208 8129

Phin Ziebell
Economist – Agribusiness
+(61 3) 8634 0198

Karla Bulauan
Economist – Australia
+(61 3) 86414028

Industry Analysis

Dean Pearson
Head of Industry Analysis
+(61 3) 8634 2331

Robert De Iure
Senior Economist – Industry Analysis
+(61 3) 8634 4611

Brien McDonald
Economist – Industry Analysis
+(61 3) 8634 3837

Amy Li
Economist – Industry Analysis
+(61 3) 8634 1563

International Economics

Tom Taylor
Head of Economics, International
+61 3 8634 1883

Tony Kelly
Senior Economist – International
+(61 3) 9208 5049

Gerard Burg
Senior Economist – Asia
+(61 3) 8634 2788

John Sharma
Economist – Sovereign Risk
+(61 3) 8634 4514

Global Markets Research

Peter Jolly
Global Head of Research
+61 2 9237 1406

Australia

Economics

Spiros Papadopoulos
Senior Economist
+61 3 8641 0978

David de Garis
Senior Economist
+61 3 8641 3045

FX Strategy

Ray Attrill
Global Co-Head of FX Strategy
+61 2 9237 1848

Emma Lawson
Senior Currency Strategist
+61 2 9237 8154

Interest Rate Strategy

Skye Masters
Head of Interest Rate Strategy
+61 2 9295 1196

Rodrigo Catril
Interest Rate Strategist
+61 2 9293 7109

Credit Research

Michael Bush
Head of Credit Research
+61 3 8641 0575

Simon Fletcher
Senior Credit Analyst – FI
+61 29237 1076

Equities

Peter Cashmore
Senior Real Estate Equity Analyst
+61 2 9237 8156

Distribution

Barbara Leong
Research Production Manager
+61 2 9237 8151

New Zealand

Stephen Toplis
Head of Research, NZ
+64 4 474 6905

Craig Ebert
Senior Economist
+64 4 474 6799

Doug Steel
Markets Economist
+64 4 474 6923

Kymberly Martin
Senior Market Strategist
+64 4 924 7654

Raiko Shareef
Currency Strategist
+64 4 924 7652

Yvonne Liew
Publications & Web Administrator
+64 4 474 9771

Asia

Christy Tan
Head of Markets Strategy/Research, Asia,
+ 852 2822 5350

UK/Europe

Nick Parsons
Head of Research, UK/Europe,
and Global Co-Head of FX Strategy
+ 44207710 2993

Gavin Friend
Senior Markets Strategist
+44 207 710 2155

Tom Vosa
Head of Market Economics
+44 207710 1573

Simon Ballard
Senior Credit Strategist
+44 207 710 2917

Derek Allassani
Research Production Manager
+44 207 710 1532