Base Metals Market Update

by NAB Group Economics

July 2014

National Australia Bank

Key Points:

- On the demand side, industrial activity has improved in 2014, but recent indicators have been mixed. In China, the industrial sector appears to have stabilised following signs of moderation in recent months. Mini stimulus measures may have assisted the improvement. However, a tightening of credit conditions has kept the real estate sector contained, impacting demand for construction materials such as copper. Elsewhere, conditions are mixed. US industrial activity, as demonstrated by the ISM PMI, remains in recovery mode, while Europe and Japan seem to be losing steam. Japan is likely still experiencing fallout from a hike in consumer taxes earlier in the year.

- Copper inventories remain low, and while stocks of some other metals are more elevated, physical supply remains tight – keeping premiums buoyant.

- Average prices across the base metals complex were up in the month, with zinc, aluminium and lead posting the strongest gains. Following strong price rises in 2014, the complex is expected to see more moderate gains in coming years, although the demand environment is uncertain.

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

Economic overview

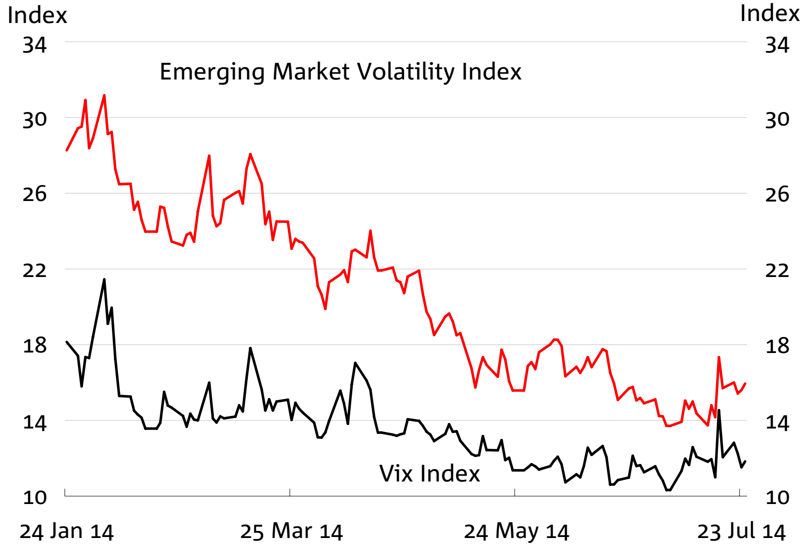
- Financial market volatility spiked amid the downing of MH17 and geopolitical tensions in Ukraine and the Middle East. Despite posting its largest daily gain (above 32%) since April 2013, VIX remains below the 20 year average. The movement emphasized that it's going to take a lot to shake the financial markets as the global search for yield continues.

- This year's political events have contributed largely to increased demand for a safe haven asset, but the impact on most industrial commodities has been relatively limited – outweighed by demand/supply fundamentals and some distortions stemming from tight credit conditions in China. The Federal Reserve has made it clear that QE tapering will be completed by October, raising bets that US interest rates hikes are on the horizon (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 larger than expected at an annualised rate of 4.0%. The FOMC continued to taper by $10bn, reducing the bond buying program to $25bn – with Quantitative Easing on track to conclude in October. Markets continue to anticipate a rise in interest rates nearing, albeit the FOMC declaring unemployment remains "elevated". Inflation is getting closer to its target rate.

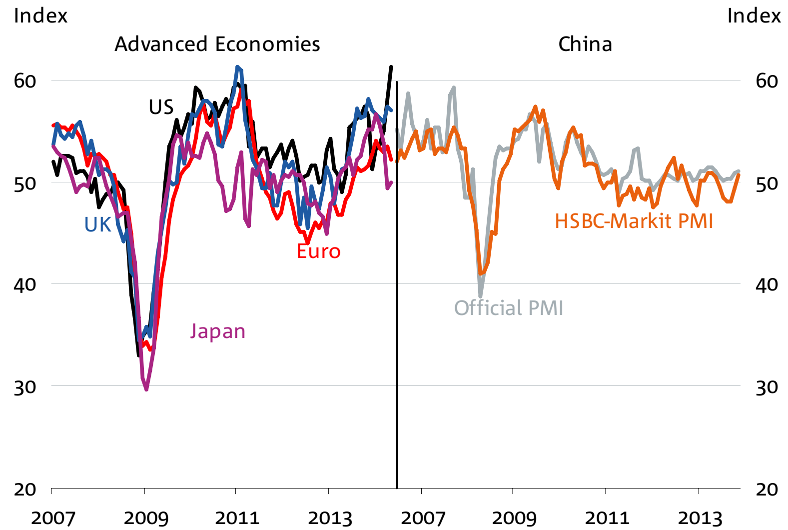
- China's National Accounts also indicate their economy grew stronger than expected in the June quarter to 2.0% qoq (7.5% yoy). The HSBC Flash manufacturing PMI hit an 18 month high, expanding to 52 in June (from 50.7 previously), with new orders and export orders expanding at a faster rate. In contrast,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

Figure 1: CBOE Market Volatility Index (VIX)



Source: CBOE, Thomson

Figure 2: China official PMI at six month high

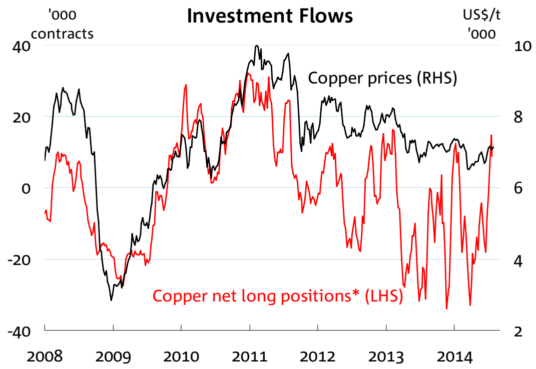


Sources: Markit Economics, NBS, NAB Economics

Copper: Market surplus to weigh on prices

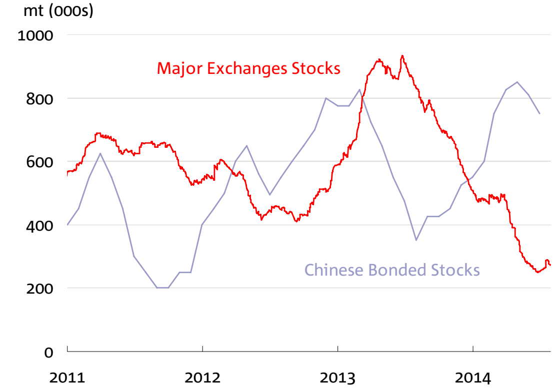
- Copper prices have fluctuated since a rally in late June that was driven by tightening physical markets. Average copper prices rose over 4% in July, to be around 3% higher over the year. However, at US$7,160 per tonne, the current spot price is only 1.7% higher than end-June.
- Global copper exchange 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 the 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.

Figure 3: Copper Prices & Investment



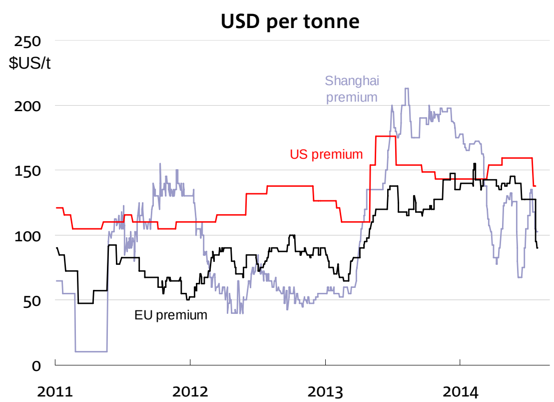
* Combined futures and derivatives net long positions for non-commercial traders

Figure 4: Chinese Copper Bonded Stocks



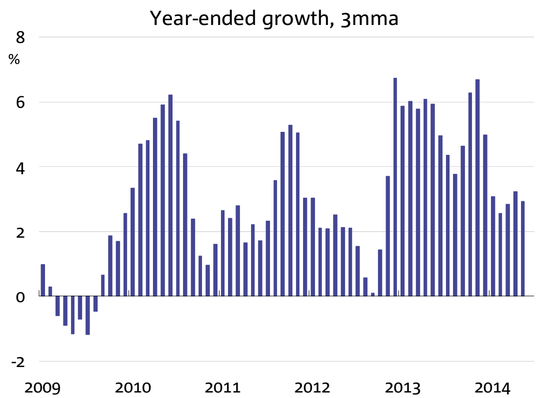
Source: Bloomberg, NAB

Figure 5: Copper Premiums



Sources: Bloomberg Industries

Figure 6: Refined copper production

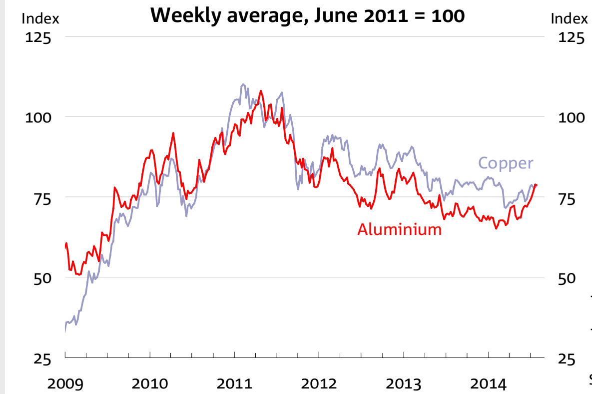


Sources: Bloomberg Industries

Aluminium: Demand Improving

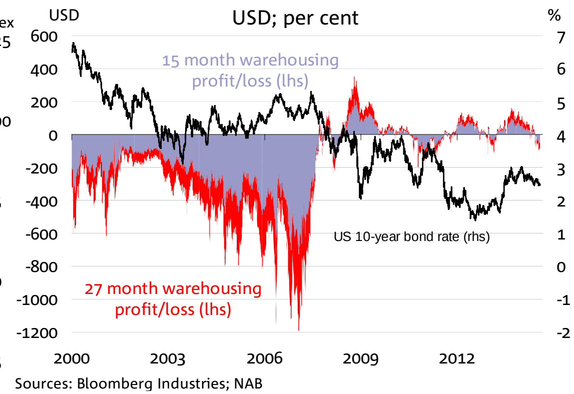
- Average aluminium prices rose 5.9% in July, to be 10% higher over the year. Spot prices held steady in late July, following a strong increase early in the month, to be 8¼% above end-July levels. Nevertheless, elevated inventories and steady production rates (although ex-China production has been in 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 7: Copper & Aluminium Price (LME)



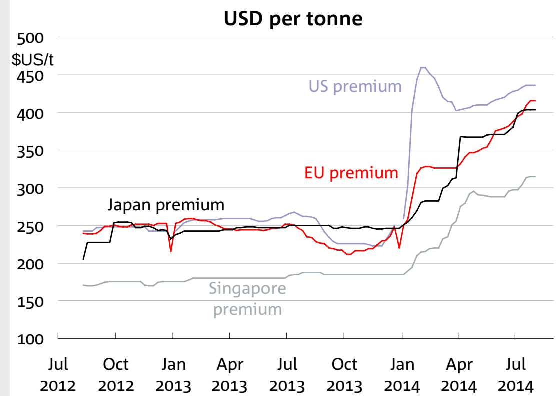
Sources: NAB: Thomson Reuters

Figure 8: Aluminium Warehouse Incentives



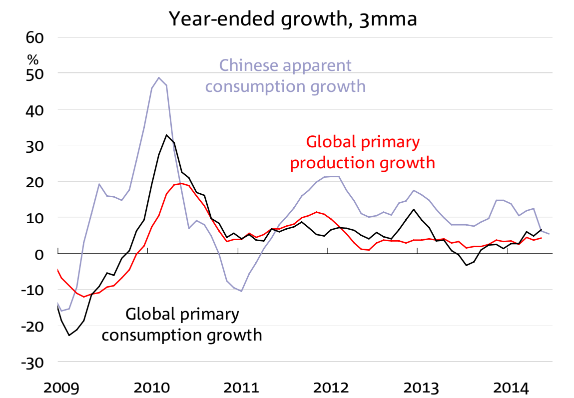
Sources: Bloomberg Industries; NAB

Figure 9: Aluminium Premiums



Sources: Bloomberg Industries

Figure 10: Aluminium Production & Consumption

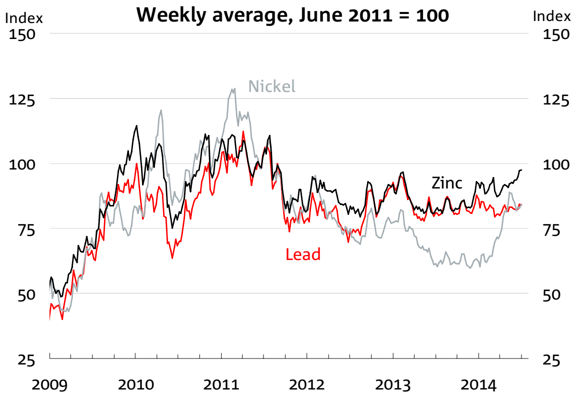


Sources: Bloomberg Industries

Nickel:

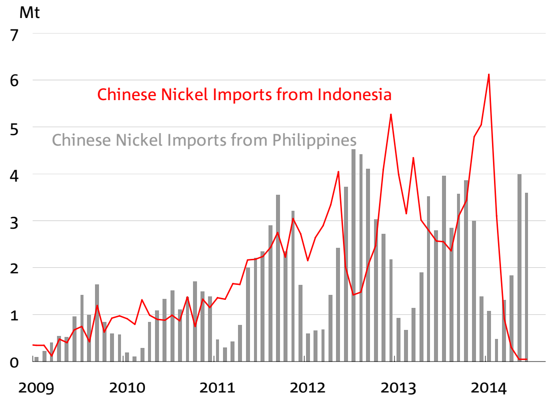
- Average nickel prices posted the weakest gains in June relative to the rest of the base metals complex, up 2.8%, following their first monthly decline in June. Nevertheless, prices are still up almost 40% over the year, largely driven by supply side constraints.
- Nickel market fundamentals have been overshadowed this year by the ore export ban in Indonesia, which has seen spot prices surge by more than a third since the start of the year. However, with inventories continuing to rise, the softer fundamentals have seen prices ease a little from their most recent peak; spot prices have already eased around 10% from their May highs. Very elevated levels of refined nickel stocks will likely limit price gains until the market eventually moves into deficit (possibly 2015).
- Chinese producers are now also starting to source more nickel ore and concentrate from producers other than Indonesia. Imports from the Philippines jumped sharply in the months to June (Graph 12).
- 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, the most likely outcome at this point is that the ore ban will remain in place for some time. In this environment, we expect that prices are unlikely to break out further until stockpiles accumulated in China before the ban are worked through. The market is likely to move into deficit in 2015, driving prices higher.

Figure 11: Nickel, Lead, Zinc Prices (LME)



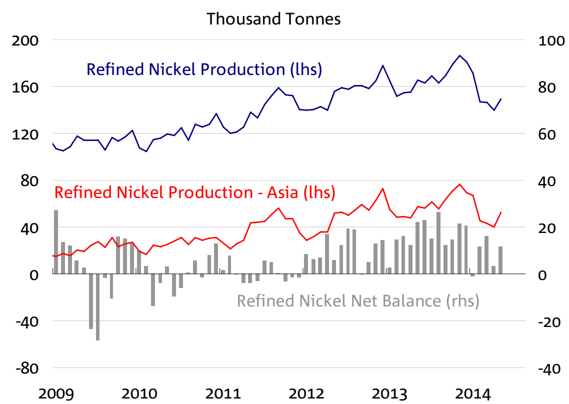
Sources: NAB; Thomson Reuters

Figure 12: Chinese Nickel Imports



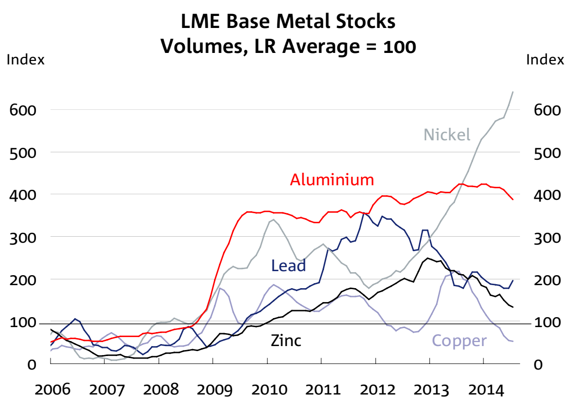
Source: Bloomberg; NAB Economics

Figure 13: Refined Nickel Market Supply



Sources: Bloomber; NAB Economics

Figure 14: Nickel Inventories (LME)

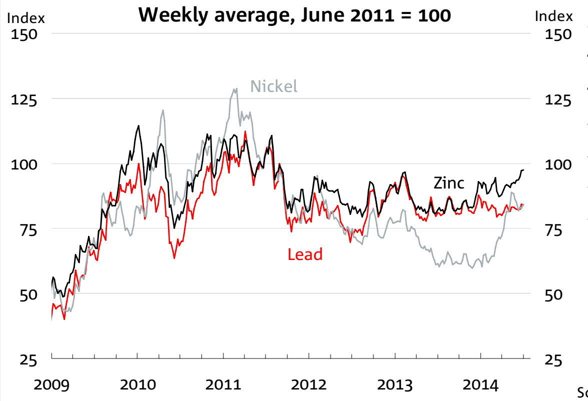


Sources: Datastream; NAB

Lead & Zinc:

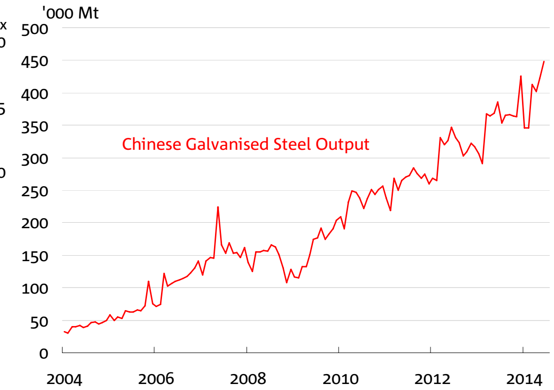
- Zinc was the best performer in the month of July, with average prices up around 8½% in the month and up more than a quarter over the year. Signs of improvement in China's industrial sector are supportive given its significance to zinc demand. Persistently soft conditions in Chinese real estate on the other hand are likely to provide some drag, although not as much as for other metals that are more closely tied in with the sector.
- Strong price gains for zinc reflect the comparatively positive fundamentals for the metal, which is also increasing its appeal to investors. The market balance for the year shifted into deficit in recent months (Graph 18) and exchange inventories have been in steady decline. The closure of old mines, declining grades and better demand – along with improving conditions for steel producers – are helping to drive these trends. Chinese galvanised steel production has increased steadily to hit record highs
- Lead prices also recorded good gains in July, with average prices rising around 4% (up 7% over the year). 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.
- Soft supply growth and an improving demand outlook should tighten the market further from H2 2014.

Figure 15: Nickel, Lead, Zinc Prices (LME)



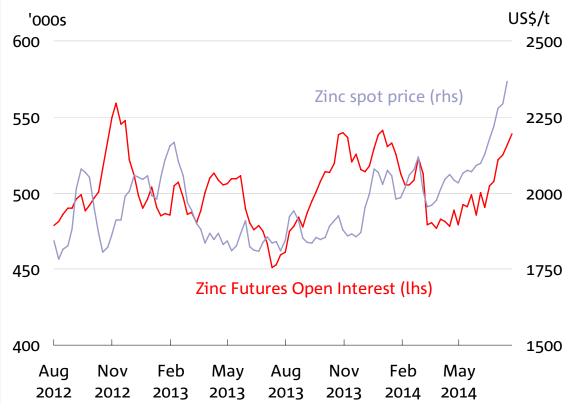
Sources: NAB; Thomson Reuters

Figure 16: Chinese Galvanised Steel Output



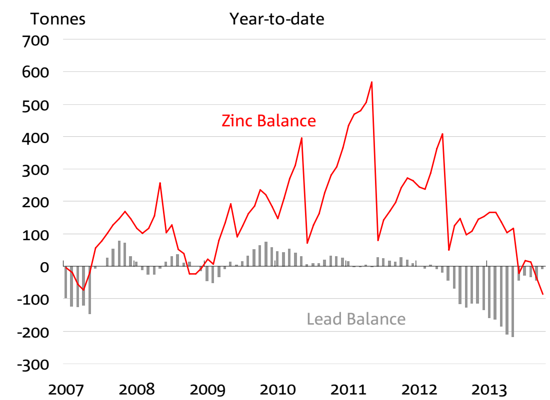
Sources: Bloomberg; NAB Economics

Figure 17: Zinc Futures Open Interest



Source: Bloomberg; NAB Economics

Figure 18: Market Balance (lead & zinc)



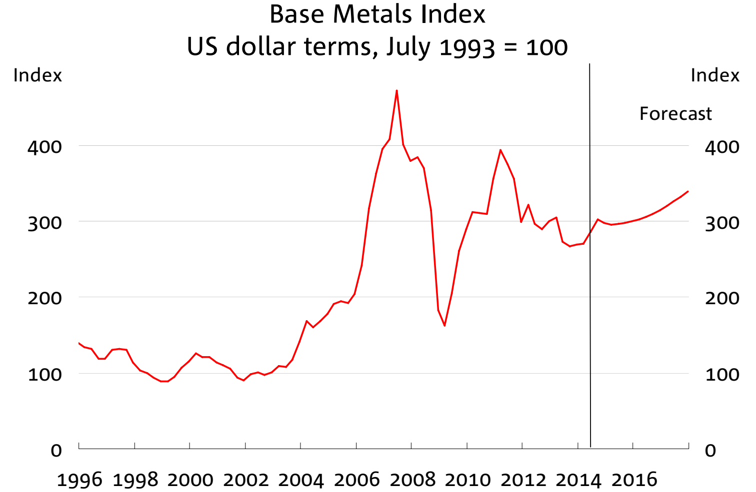
Sources: Bloomberg; NAB Economics

Outlook

- Physical markets for some metals have become tighter than previously expected due to a combination of both demand and supply side factors. Prices for aluminium, zinc and lead in particular have risen more than we had previously forecast and look set to remain elevated. Consequently, we have brought forward the price rises we previously had forecast for later in the year. Nevertheless, the uncertain economic and political environment pose significant risks to the outlook. Similarly, the volume of metals being held in and out of official exchange warehouses is creating distortions in physical markets that are difficult to predict.

- In aggregate, the NAB Base Metals Price Index rose by 0.6% over the March quarter 2014 and 5.8% in the June quarter 2014, with large increases in nickel, and smaller rises for aluminium and zinc, only partly offset by a fall in copper prices. Following strong growth in base metals prices over 2014 (up around 10%), prices are forecast to grow much more gradually over 2015 and 2016 (see Graph).

Figure 19: Tighter market balances for most of the complex to see prices drift higher



Sources: Datastream; NAB Group Economics

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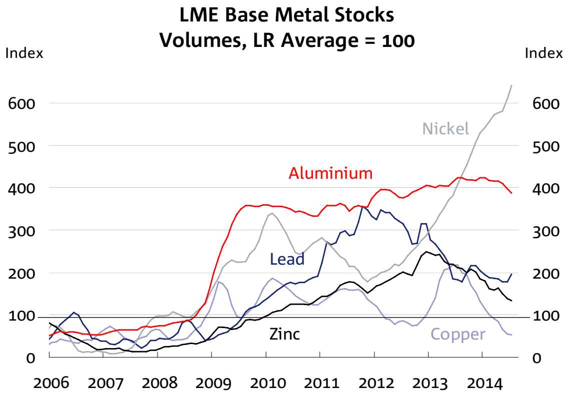
Base Metal Forecasts - Quarterly Average Terms

	Spot	Actual	Forecasts							
US$/MT	Current	Jun-14	*Sep-14*	*Dec-14*	*Mar-15*	*Jun-15*	*Sep-15*	*Dec-15*	*Mar-16*	*Jun-16*
Aluminium	2011	1801	1990	1930	1950	1980	1990	2000	2000	2000
Copper	7157	6795	7050	6940	6840	6770	6700	6640	6640	6640
Lead	2248	2098	2200	2190	2180	2200	2210	2240	2240	2240
Nickel	18899	18469	19210	18820	18450	18770	19100	19670	19670	19670
Zinc	2391	2072	2320	2330	2340	2360	2370	2380	2380	2380
Base Metals Index	n.a.	286	300	300	290	300	300	300	300	300

Sources: Thomson Reuters; NAB Economics

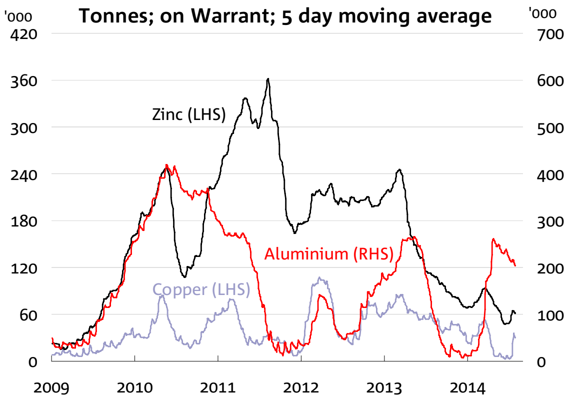
Supplementary Charts: Exchange Stocks

Figure 20: Metal Inventories (LME)



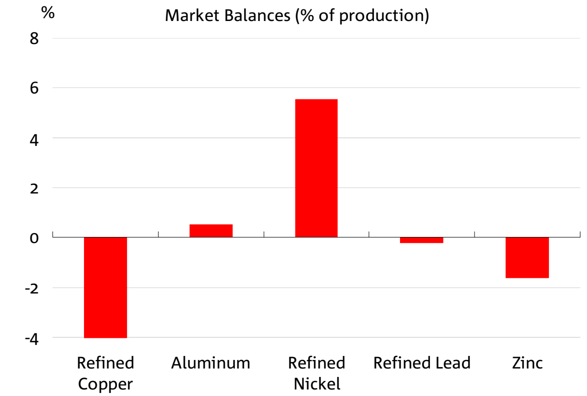
Sources: Datastream; NAB

Figure 21: SHFE Inventories



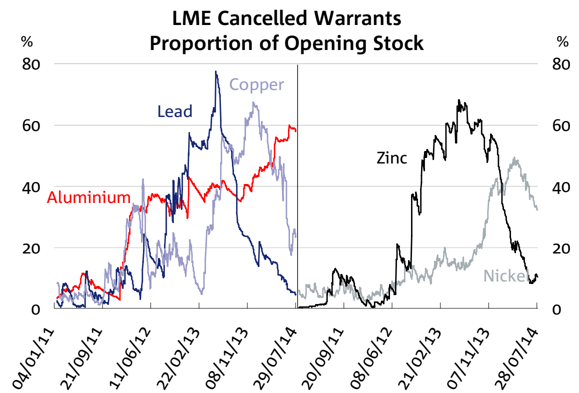
Sources: Bloomberg; NAB

Figure 22: Market Balances (year-to-date)



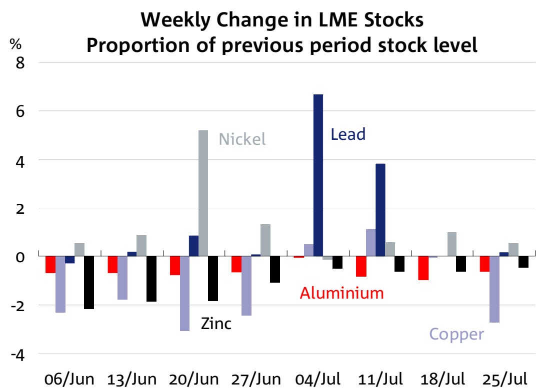
Sources: Bloomberg; NAB Economics

Figure 23: LME Cancelled Warrants



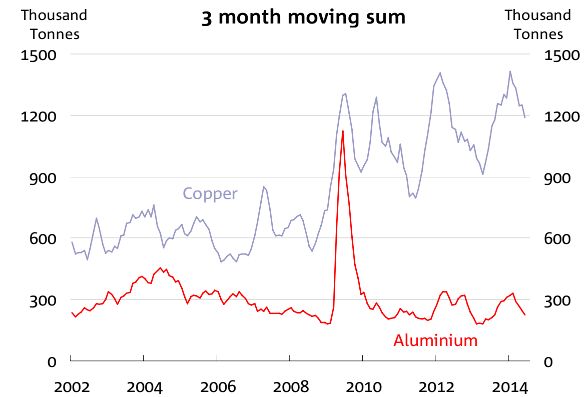
Sources: LME; NAB

Figure 24: Weekly change in LME stocks



Sources: LME; NAB

Figure 25: Chinese import volumes of copper and aluminium



Source: CEIC Database, NAB Group Economics

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