

# Base Metals at a Glance – July 2008

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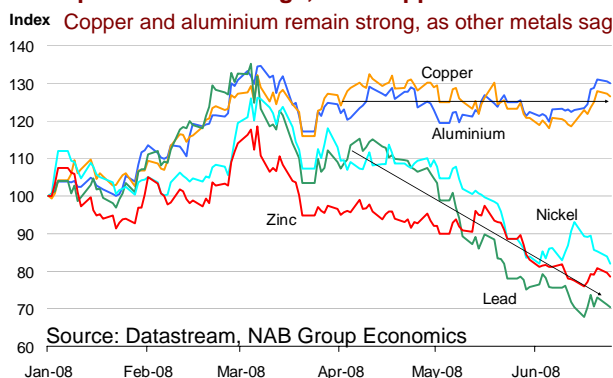
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## Summary – metal prices diverge as substitutable metals soften

- Metal prices have diverged in recent months, with relatively more substitutable metals – such as nickel and zinc – weakening considerably. End users have switched to lower cost alternatives, while supplies of these metals have increased relatively strongly – leading to the downward pressure in prices. In contrast, demand conditions for copper and aluminium have remained firm.
- Global demand for base metals remains underpinned by China's industrialisation – with manufacturing, construction and infrastructure projects requiring significant quantities of metals. China now accounts for around 30 per cent of global metal consumption.
- Broadly, metal supplies are expected to increase – as new mining and refining projects are brought on stream around the world. However, supplies continue to be threatened by disruptions at facilities – particularly due to labour disputes in South America and power disruptions.
- In aggregate terms, we expect base metal prices to fall by around 13 per cent in 2008. That said, we expect aluminium and copper to remain the stand-out performers in the complex, increasing year on year. In the first half of this year, the Base Metal Index is around 17 per cent lower – largely reflecting weaker average prices for nickel and zinc.

### Metal price trends diverge, with copper and aluminium holding firm as other metals plummet



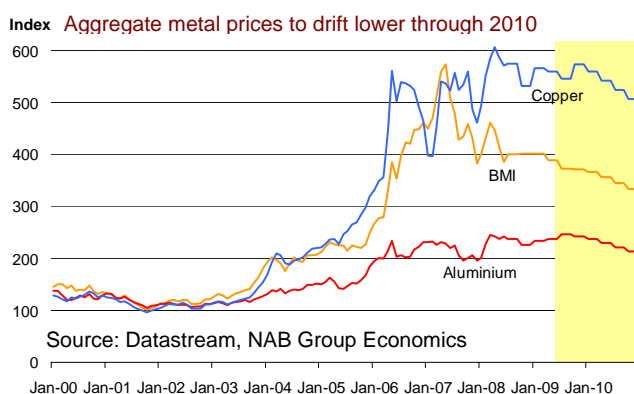
In aggregate terms, base metal prices – as measured by our base metal index – peaked in May 2007 and have trended lower since. The peak coincided with record nickel prices, as well as comparatively high prices for aluminium, copper and zinc. The value of the index in June 2008 is around one-third lower than the May 2007 peak.

The recent trends in metal markets have been highly divergent, with continued strength in both copper and aluminium – which remain near record highs – and notable weakness in the other metals – nickel, lead and zinc.

Demand conditions for nickel and zinc – primarily inputs into the stainless and galvanised steel industries respectively – have weakened considerably, with end users switching to lower cost

alternatives. At the same time, supplies of these metals have increased relatively strongly – leading to the downward pressure in prices.

In contrast, demand conditions for copper and aluminium have remained firm – primarily driven by the growth in China's manufacturing, construction and infrastructure projects. In many applications, these metals have little practical substitutes. The supply of copper and aluminium has remained tight, as labour constraints and rising energy costs have impeded growth. In the

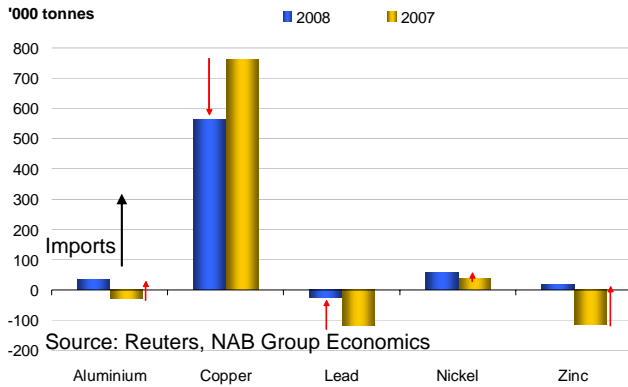


short term, these factors are likely to hold prices at relatively high levels.

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### China remains the key market for metal demand growth, as the net imports of most metals rise again in 2008



China's industrialisation has been the key driver in base metal markets for the past five years. In the first five months of 2008, China was a net importer of primary base metals – with the exception of lead. In the case of zinc and aluminium, this represented a switch from a net export position for the same period last year.

China now accounts for over 30 per cent of global demand for aluminium, lead and zinc, and just under 30 per cent for copper and nickel. As the country continues its industrial growth, this share is set to increase further.

### Energy to impact on metal supply, placing a longer term floor under prices

The rising cost of energy – and sustained longer term energy prices – is likely to impact on the energy intensive base metal sector. Aluminium in particular is likely to be affected – reflecting its high energy demands relative to the other metals. With prices for oil, natural gas and coal expected to remain high, the cost of energy is likely to sustain metal prices at historically high levels longer term.

### Quarterly price profile

|           | Q1 08 | Q2 08 f | Q3 08 f | Q4 08 f | Q1 09 f | Q2 09 f | Q3 09 f | Q4 09 f | Q1 10 f | Q2 10 f | Q3 10 f | Q4 10 f |
|-----------|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Aluminium | 2734  | 2936    | 2900    | 2750    | 2850    | 2900    | 3000    | 2950    | 2900    | 2800    | 2700    | 2600    |
| Copper    | 7771  | 8415    | 8215    | 7600    | 8100    | 8000    | 7800    | 8200    | 8000    | 7750    | 7500    | 7250    |
| Lead      | 2886  | 2311    | 1900    | 1650    | 1450    | 1300    | 1250    | 1200    | 1175    | 1150    | 1125    | 1100    |
| Nickel    | 28860 | 25721   | 25000   | 27500   | 26500   | 25000   | 22500   | 22000   | 21500   | 21000   | 20500   | 20000   |
| Zinc      | 2423  | 2109    | 2000    | 2250    | 2200    | 2050    | 1950    | 1800    | 2000    | 1900    | 1800    | 1700    |
| BMI       | 430.5 | 415.2   | 399.9   | 401.1   | 402.0   | 389.1   | 372.6   | 371.4   | 366.7   | 355.6   | 344.5   | 333.4   |

### Annual price profile

|           | 2004  | 2005  | 2006  | 2007  | 2008 f | 2009 f | 2010 f |
|-----------|-------|-------|-------|-------|--------|--------|--------|
| Aluminium | 1717  | 1900  | 2568  | 2637  | 2830   | 2925   | 2750   |
| Copper    | 2868  | 3691  | 6714  | 7117  | 8000   | 8025   | 7625   |
| Lead      | 888   | 976   | 1288  | 2581  | 2187   | 1300   | 1138   |
| Nickel    | 13852 | 14716 | 24244 | 37227 | 26770  | 24000  | 20750  |
| Zinc      | 1048  | 1385  | 3272  | 3242  | 2196   | 2000   | 1850   |
| BMI       | 161.0 | 184.6 | 307.3 | 387.6 | 338.5  | 287.6  | 287.6  |

Source: Datastream, NAB Group Economics