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What has changed (and what has not)

The mining industry has undergone radical change in the past few years as the global economy has blossomed, leading to increased demand for raw materials, especially from emerging nations such as China. David Humphreys examines these changes and their implications for the future.

It seems a long time ago (but is not) that the mining industry operated under a siege mentality. The real prices of its products seemed condemned forever to decline; the only means to make money was through a perpetual war on costs; governments appeared intent on making life ever more difficult through mounting regulation; and investors were increasingly disposed to view the sector as a quaint piece of history. Five years of global economic upswing have changed a lot. Persistent demand growth, notably from China, and rising prices have forced a switch in the focus of management attention away from costs towards volumes. In doing so, it exposed an industry whose capacity to grow was calibrated to a different, slower growth, era. Such things are not easily turned around in mining.

The effect of everyone trying to crank up investment at the same time has been an unprecedented escalation in project costs as the prices of equipment, services and skills have been bid up. The revival in the fortunes of the industry also seems to have exposed a shortage of high quality resource opportunities available for development. The exploration sector may have rediscovered its pioneering spirit as juniors have found investors once more receptive to funding their projects but the effect of this activity takes years to work through to production.

Their pockets lined with cash, but constrained in their ambitions for organic growth, the larger companies have sought to expand their production through acquisition. According to Metals Economics Group, M&A soared to US\$42.8bn in 2005 and to a record

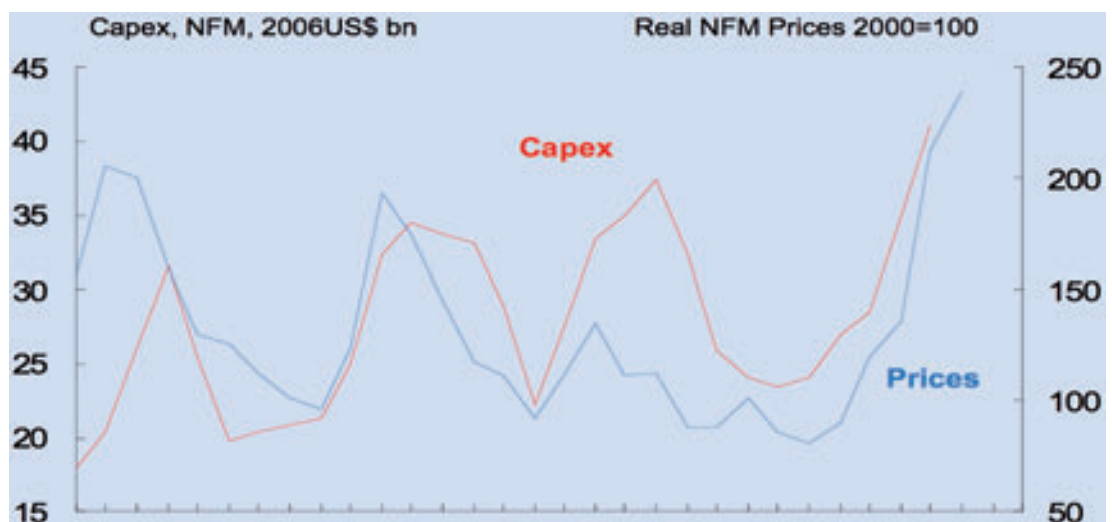
US\$94.5bn in 2006. The average for 1997-2004 was just US\$7.4bn a year. 2007 will be another strong year for M&A, not least because of Rio Tinto's proposed acquisition of Alcan Inc.

This emphasis on growth has also facilitated the emergence into the global arena of mining companies based in emerging market economies. Often benefiting from good domestic resources, these companies are showing an increasing ability to tap global capital markets and to invest in projects abroad. Four of the world's ten largest mining companies, measured by value of production, are now headquartered in emerging markets, including the largest company, Brazil's CVRD. Norilsk Nickel, headquartered in Moscow, ranks seventh.

A less welcome consequence of the commodities boom has been the re-emergence of government interest in the sector. This has taken many forms, from increased taxes and royalties to the threat of outright nationalisation, notably in Latin America. China has been using state corporations to invest in mining assets off-shore to secure supplies for its domestic manufacturing industries in the same manner that it has been pursuing offshore opportunities in oil and gas. A consequence of this increased intervention by government is, perversely for an industry which needs investment, to add to investment risk amongst private investors.

Despite these constraints, production growth has momentum and this will lead in time to restoring better balance to metals markets. The rebalancing will also likely be assisted by a slowing in the rate of growth in

Right: Metals prices and capital expenditure by nonferrous mining and metals industries. Sources: CRU Group, Industry estimates, the Economist (price data to August 2007)



demand for metals as the global economy slows, as it appears likely to do in the wake of the turmoil in financial markets. Historically it has been the fate of the mining industry to be gearing up when the world economy is gearing down.

A consequence of this will be to reveal, after all the hyperbole stirred up by the interest of investors in commodities over the past few years, what actually has changed and what has not. It seems likely that some of the factors which underpinned the downward trend in real costs and prices of metals during the earlier era – including increased economies of scale, falling energy prices and reforms in industrial relations – have worked themselves out and may even have gone into reverse. As a result, metals prices in the next cyclical downturn will very likely bottom out at a higher point than they did in the previous one. It also seems likely that the role of the emerging market economies will be much more prominent in the future of the industry, not just because of the impact on demand of their rising living standards but also because of the growing role of their resources and of their companies on the supply side. Consider that some three-quarters of world's land surface lies in developing countries. At the same time, their scale relative to the size of the market as well as the diminishing pool of attractive large-scale targets, make it likely that the larger mining companies will find it progressively more difficult to expand by means of M&A.

Some other things in the industry will transpire to

have changed much less, maybe not at all. Mining will remain a competitive and capital-intensive activity. The concentration of global production has changed surprisingly little since much of the recent M&A has been across metals, not within them. Success in the business will continue to depend on companies' ability to identify and efficiently bring on large-scale projects. The fact that the next generation of mines will tend to be inferior in quality to those already in production, and be located in higher risk locations, suggests that this aspect of the business will be as tough as ever.

Things will be made easier for mining companies undertaking large investments where they can be confident that metals prices will be substantially higher than in the past. Many analysts believe this will be the case but there are wide variations in what they understand by 'substantially higher'. Moreover, to the extent that higher prices are simply the product of higher costs in the industry they do not necessarily imply higher margins, which is ultimately what is important for mine economics.

Some aspect of the increase in industry costs may prove structural but much will turn out to be cyclical. Exactly how much it will probably take an economic recession for us to find out for certain. In the meantime, mining companies can do worse than remind themselves of a couple of enduring truths, namely that there is no substitute for being embedded at the bottom end of the cost curve and that it is as well not to go into a cyclical downturn with too much debt on the books. 🌐

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