RIO TINTO

News release…

Date: 26 November 2007
Ref: PR582g

Outlook for metals and minerals – Investor seminar

The following paper from Rio Tinto chief economist Vivek Tulpulé has been issued today to coincide with the Rio Tinto Investor seminar.

Executive summary

- Commodity markets are entering a fifth straight year of growth with mineral and metal prices at levels well above their long term average and in many cases above levels at the start of this year.
- Firm global economic activity led by China is expected to support strong increases in demand for most metals and minerals over 2008 and 2009.
- With low stocks and a likely continuation of supply side difficulties, most commodity prices are expected to remain well above their long run trend over the short and medium term.
- It is too early to suggest that the current price cycle has peaked across the range of commodities.
- While the central case is positive, we are mindful of the short term risks associated with the predicted slowdown in the US economy.
    - But, it is important to recognise that the United States is now significantly less important in world commodity demand than it was just five years ago.
    - Additionally our analysis suggests that even a sharp slowing in the US economy would have only a small impact on Chinese and Indian economic growth and consequent demand for commodities.
- Viewed from a longer run perspective recent history and the IMF's forecasts suggest that we are currently going through a period of global growth not seen since the period of fast growth and reconstruction in OECD economies following World War 2.
- Specifically, there has been a structural shift favouring rapid growth in developing countries with large populations such as China and India. Growth in these economies will be resource intensive as they industrialise and urbanise.
- The implications for commodity markets are nothing short of profound. Projections for iron ore, aluminium and copper suggest that demand could double and even triple over the next 25 years.

Cont…/

- In time production can be expected to expand to meet faster growth in demand at more sustainable prices. But that pricing environment is expected to be significantly stronger than would be implied by historical trends.
    - It is expected that prices of many minerals and metals will remain elevated above trend for longer than has been the case in the past because of constraints on the speed with which production capacity can be expanded over the next few years.
    - Also most prices are expected to assume significantly higher average levels over the very long run than has been the case historically due to structural increases in industry costs.
- We present case studies relating to markets for aluminium, copper and iron ore – three commodities that are expected to be drivers of the industrialisation and urbanisation process in developing countries.

Iron ore

- Substantial growth is expected in the demand for iron ore reflecting expected strong growth in steel demand related to the processes of ongoing industrialisation and urbanisation in the developing world.
- Reflecting the current tight market spot prices have risen sharply over the last few months with Indian ores currently selling in China at around $190/tonne double their price at the beginning of 2007. Australian and Brazilian ores are selling at a substantial discount to this spot rate given current freight rates.
- A substantial amount of high cost production will be required to meet growing demand over the long term. This strongly suggests the possibility of higher long run prices & higher margins for traditional lower cost producers.

Aluminium

- Prices are currently in the range of $2450-2550/t - levels supported by industry cost structures.
- Aluminium consumption has grown the fastest of all non-ferrous metals over the last 5 years and is forecast to grow rapidly over the next 20 years.
- There has been enormous recent growth in Chinese consumption and production but aluminium has benefited from increasing intensity in many other regions including the OECD.
- Constraints on China's domestic bauxite production suggest that the country's massive investment in aluminium capacity will remain reliant on imported bauxite. This combined with China's high power cost environment mean that Chinese aluminium capacity will continue to be high cost on a global scale.
- Additionally, Chinese production will also be disadvantaged by a stronger currency as the RMB edges toward fair value over time.
- The implied increase in the marginal cost of production for alumina and aluminium means that their prices are unlikely to revert to the lower levels implied by historical trends

Copper

- Reflecting the tight market situation, copper prices are currently in the range of $6400/t-$7000/t - about three times higher than their average level through the 1990s and well above levels achieved in the early part of this decade.
- Prices could remain near current levels as long as production growth continues to under-perform against the underlying demand trend creating a need to ration supplies.

- Strong Chinese demand growth is expected next year and on the supply side the likelihood of ongoing disruptions and possible constraints on the availability of sulphuric acid affecting SxEw operations are issues.
- The importance of investment funds in exchange traded commodity markets means that large price movements could take place on the back of commodity specific speculative shifts or broader shifts in investor sentiment - well in advance of any fundamental change in physical markets.
- Looking to the long run, strong demand growth prospects are based on the expected resource intensive development of economies such as China and associated investment in power distribution networks and other infrastructure.
- On balance, we believe that, as for many other commodities, there has been a structural shift in copper costs supporting the expectation of significantly higher long run prices than would be implied by historical trends.

A fundamental shift toward fast and resource intensive growth

As 2007 draws to a close, resource markets are entering a fifth straight year of cyclical strength with virtually all minerals and metals prices at levels significantly above their long run historical trends and in many cases above start of year levels.

Looking forward, global GDP growth is expected to be firm in 2008 and 2009 with rapid growth in China and other developing countries expected to reduce any drag from slower growth in OECD countries. Such conditions should create a basis for continued strong underlying commodity demand over the medium term. At the same time, growth in production for a number of commodities is expected to remain relatively constrained. In this context, it is entirely possible that some commodity prices may not have reached their cyclical peaks as yet.

Indeed, illustrating the significance of current commodity market developments in a historical context, if as expected, most prices remain well above trend over 2008 and 2009 then prices will have been above trend for 6 years. This would be a 3-in-100 year event for many commodities.

Viewed in a broader setting, the current strength in most resource markets can be seen as the result of a fundamental shift in economic forces that is leading to rapid growth in developing economies with large populations. For example, recent history and the International Monetary Fund's projections for future growth would suggest that we are currently going through a period of global growth not seen since the period of rapid economic development and reconstruction that followed the Second World War.

China and India provide the most significant recent examples of the current growth phenomenon but they are not alone. For instance, many countries in the Middle East and ASEAN are also on fast growth paths. In such economies growth tends to be resource intensive. In particular, the processes of urbanization and infrastructure development that accompany early-mid stage productivity growth and industrial development require increasing utilisation of resources such as steel (and therefore raw materials such as iron ore), aluminium, copper and energy. At a global level such a resource intensive development pattern is expected to persist for at least another two decades leading to sustained strong global demand growth for many commodities.

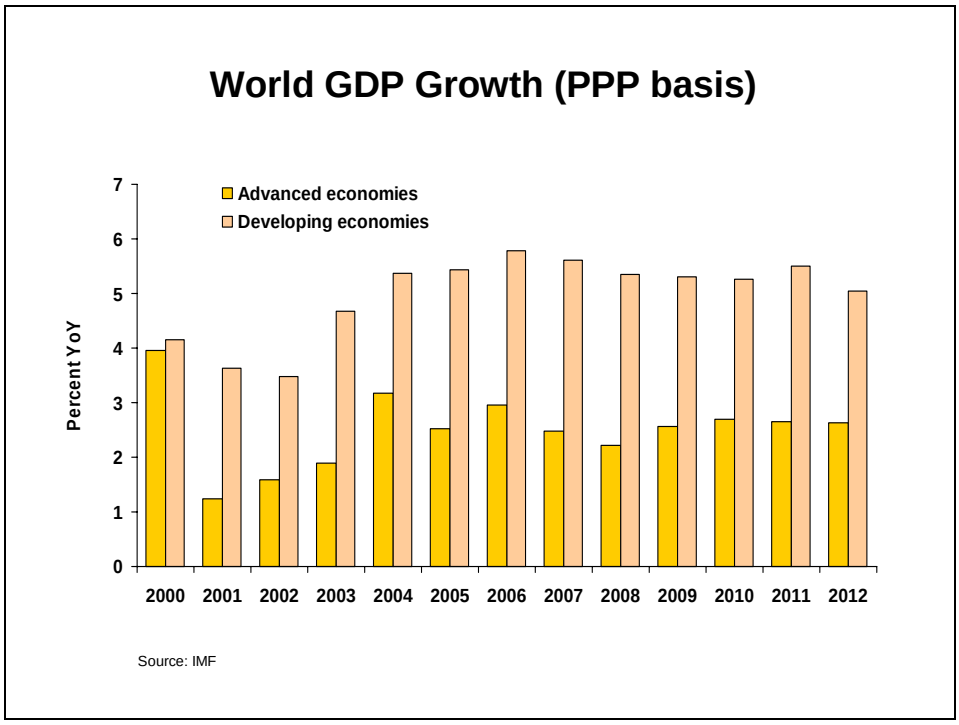
Prices are determined by both demand and supply and by its nature minerals and metals production can be difficult to accelerate. But accelerating production in cyclically high markets can also be very profitable causing a 'rush' to meet demand. The current 'rush' has manifested itself in a number of forms including: increasing construction costs and project

delays; higher levels of disruption as existing production systems are stretched; higher average production costs due to labour and other input cost increases; and higher industry marginal costs as increasingly expensive production is drawn in to meet demand.

In time, it is expected that sufficient commodity supply growth will be induced to cause prices to revert down toward more sustainable long-run levels. But the demand and supply phenomena just described suggest that it will most likely take longer for commodity prices to return to long-run levels than would have been the case if historical reversion rates had applied. At the same time long-run prices and in some instances margins are expected to be significantly higher than would be implied by historical trends.

Medium term expectations are for strong global GDP growth

Against a backdrop of record high oil prices, a rapidly slowing US housing market and a credit crunch precipitated by the US sub-prime mortgage crisis, the IMF is nevertheless projecting **global GDP** growth in 2008 of about 4.8 per cent (in PPP terms)[1]. This projection accounts for slowing growth in advanced economies but relatively fast growth in the developing world. In 2009 a recovery in activity in advanced economies and continued strong growth in developing economies are projected to generate global growth of around 5 per cent[1]. Viewed in a historical context such growth rates are high and therefore provide a positive setting for underlying commodity demand in the medium term.



China's GDP has continued to surge, growing at 11.5 per cent (y-o-y) in the first three quarters of 2007. In this period industrial production grew by about 18 per cent, nominal fixed asset investment grew by about 26 per cent and the trade surplus soared to about US$200bn. At the same time inflationary pressures, mainly related to food and energy prices, have been increasing with consumer and producer price inflation in October at 6.5 per cent and 3.2 per cent respectively. In this setting the government has introduced measures to restrain liquidity. But even with this tightening, GDP is expected to grow rapidly at between 10 per cent and 11 per cent in 2008 and around 10 per cent in 2009 based on strong domestic demand and a strong but moderating contribution from net trade[2].

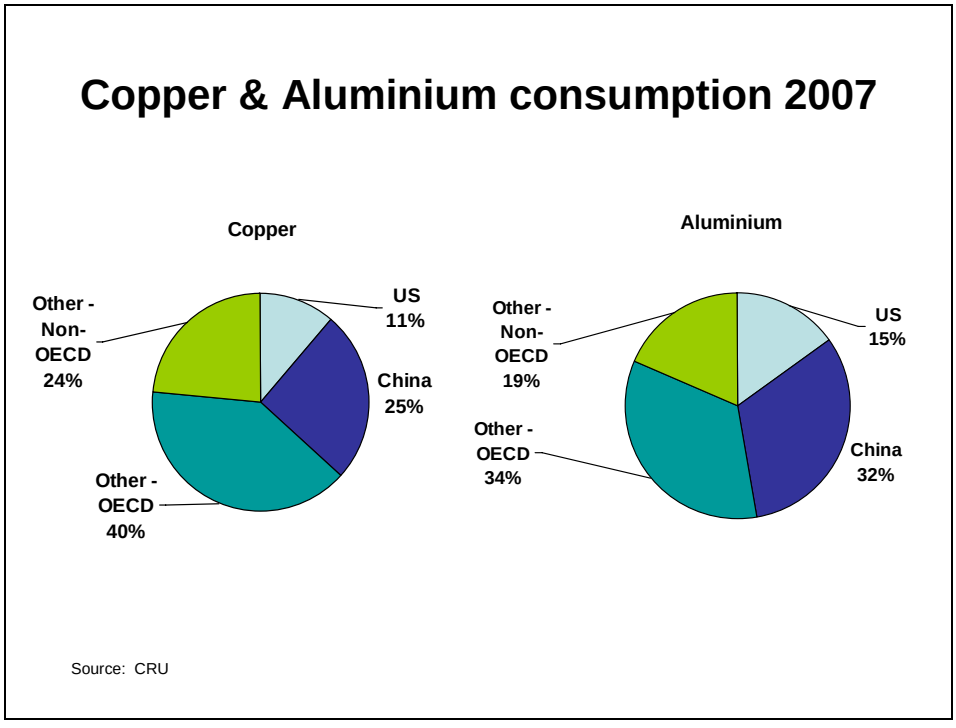
The **US** economy is expected to grow at around 2 per cent in 2008 as residential construction continues to fall and private consumption growth slows. On the other hand, a weaker dollar is expected to generate an improved contribution to GDP from trade. In 2009 residential construction is expected to start growing again and the positive effects of recently lowered interest rates on investment and disposable incomes should lead to a recovery in economic activity; GDP growth in the range of 2.5 per cent to 3 per cent is expected in that year[3].

Japan's growth has been volatile during 2007. It grew strongly by 0.7 per cent (q-o-q) during Q1, declined by 0.4 per cent in Q2 and then beat analysts' expectations to grow by 0.6 per cent in Q3[4]. The contraction in Q2 was partly attributable to reduced residential construction resulting from the implementation of a stricter building code. In 2008 and 2009 steady growth in consumer demand and a rebound in residential construction are expected to offset slower net exports to see overall GDP grow at around 2 per cent[5].

The **Indian** economy grew by more than 9 per cent in each of the first two quarters of 2007 and growth of between 8 per cent and 9 per cent is expected in 2008 and 2009[6]. Capacity constraints in many parts of the economy are creating inflationary pressures and in response the Central Bank has tightened monetary policy. While this reduced inflation it probably also contributed to reduced industrial production growth during the second half of this year.

Expected limited global economic risk from a further US slowdown

Markets have been nervous about the impact of slowing US growth on commodity markets and speculation about this has had negative effects on exchange traded prices. But in terms of commodity demand generally, the importance of the United States has declined substantially relative to that of China since 2000 and in the specific case of seaborne iron ore, the US is a negligible market participant. In that context, the key issue for the health of commodity markets over the medium term is the magnitude of any negative spillover effect from a slowing US economy on economic activity in the rest of the world and China in particular.



One macroeconomic linkage is clear. With slower US private consumption and a weaker currency, US demand for exports from other regions can be expected to decline and its own exports to increase. In terms of GDP accounting, this would reduce the net contribution of the United States to aggregate demand in the rest of the world. But it is easy to exaggerate the potential flow on effects of this possibility on global economic activity including in Asia.

For example, modelling suggests that a sharp reduction in US consumption and residential investment during 2008 to levels consistent with a US recession and a weaker US exchange rate would be expected to reduce Chinese growth by less than a percentage point. This would still leave scope for Chinese growth at levels approaching 10 per cent. For India, the impact of any further slowdown in the US would be expected to be smaller because of India's more limited exposure to world trade.

The modelling captures the likelihood that, governments and central banks in countries affected by any US slow down could boost economic activity through monetary and fiscal responses. Some commentators have noted that such economic pump priming would favour construction and infrastructure development, which in turn is likely to be a positive for commodity demand.

Moreover shifts in trade flows and policy responses are only part of the picture. A focus on these aspects alone ignores any shift in financial flows favouring countries with better investment prospects. For example modeling based on a framework that focuses on international financial dynamics suggests that the flow on effects of any slowing in US growth could be reduced substantially as financial resources shift away from the United States toward other locations including developing Asia.

Some commodity specific examples further illustrate the point. Chinese consumption of steel is believed to be affected only marginally by fluctuations in external demand as China's steel industry is overwhelmingly focused on meeting needs from the domestic construction sector.

Even in the case of copper, consumption is mostly driven by domestic construction and infrastructure development which together account for the majority of China's copper consumption. Exposure to external conditions arises from China's position as a major global supplier of household appliances containing copper components. China has also grown its exports of semi-fabricated products and copper tubes in recent years, although it remains a net importer of semis.

It is difficult to put a precise figure on the amount of copper embodied in Chinese trade to the United States. But even if 20 per cent of total Chinese copper consumption were related to exports and given that the United States generally accounts for around 20 per cent of China's total merchandise exports, the direct exposure of China's total copper demand growth to any slowing in US economic activity would be very limited.

Currencies

Since the start of this year the US dollar has weakened appreciably against most other currencies. Recent falls in the greenback have been driven by perceptions of increased riskiness in US asset returns in the wake of the sub-prime mortgage crisis; and expectations that the US Federal Reserve may cut interest rates to address growth concerns while other central banks may raise rates to combat inflationary pressures.

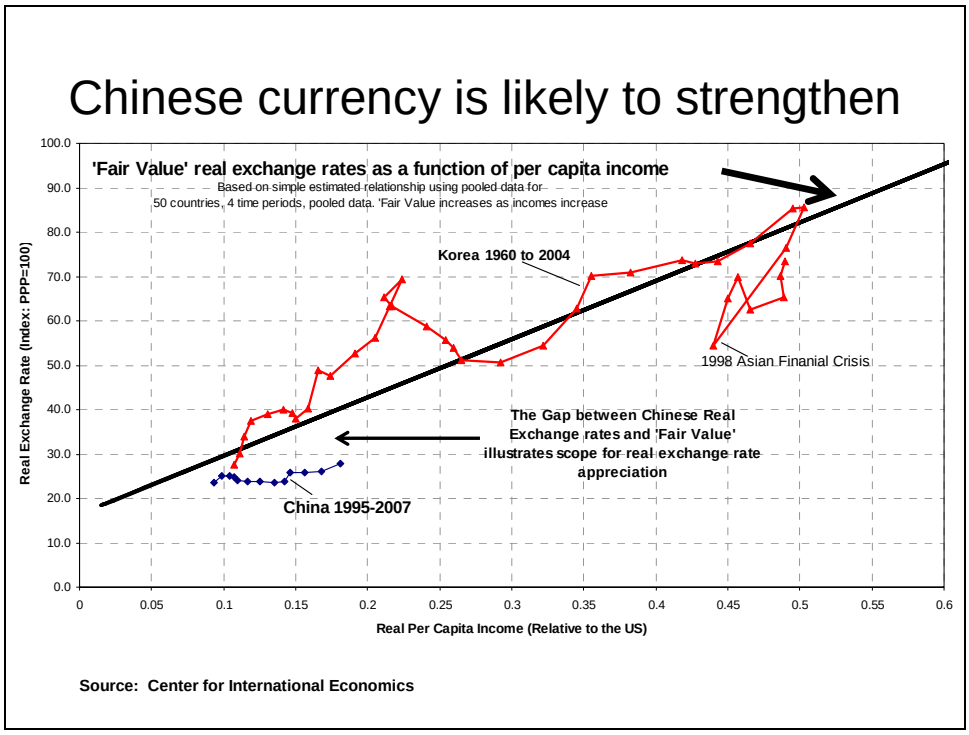
The currencies of many commodity exporting countries have also been affected by upgrades to market expectations about future commodity prices and M&A activity. The Australian

dollar has gained about 13 per cent against the US dollar since the start of the year. The Chilean Peso has gained about 5 per cent, the Brazilian Real has gained about 16 per cent and the Canadian dollar has appreciated by about 19 per cent[7]. Such exchange rate shifts have increased average US dollar production costs for many commodities. But at the same time, US dollar weakness provides support to prices of commodities that are denominated in US dollars but with large non-US consumption and cost bases.

Over time, market based exchange rates are likely to fluctuate on ever-shifting speculation about relative interest rate policies and ongoing concerns about risk and structural imbalances and commodity prices in the case of large commodity exporters. In the case of managed currencies, policy and economic pressures on governments or the emergence of unsustainable foreign exchange flows will have the greatest influence on outcomes. Future rates of appreciation in the Chinese RMB are of special importance for commodity markets.

Chinese RMB expected to continue to strengthen providing a basis for higher long run prices

A range of empirical analyses and the evidence of burgeoning trade surpluses and foreign exchange reserves suggest that the RMB is significantly undervalued. The extent of possible undervaluation is shown in the following chart based on research commissioned by Rio Tinto. The straight line labeled 'Fair Value' shows a statistically determined relationship between real exchange rates and per capita incomes. This empirical analysis backs the theoretical argument (known as the Balassa Samuelson effect) that as developing countries become richer their real exchange rates can be expected to strengthen relative to those of the richest countries. The Chinese real exchange rate has been and remains below the estimated fair value line suggesting substantial scope for ongoing revaluation.



The Chinese authorities have progressively allowed the currency to appreciate in nominal terms against the US dollar. Pressure on the RMB to strengthen further is expected to continue, both to address political frictions associated with the trade surplus and constraints on monetary policy associated with a managed currency.

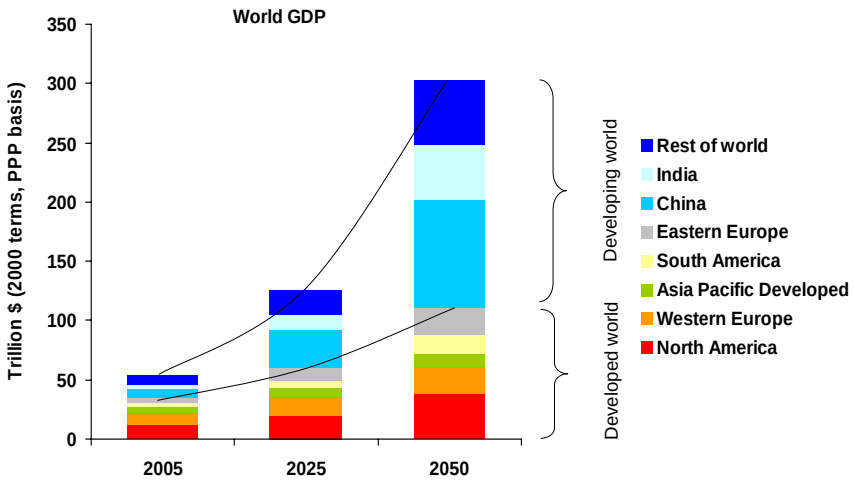
Importantly this process of revaluation has been increasing the US dollar costs incurred by trade exposed industries including metals and minerals producers. In aluminium and iron ore Chinese producers are already among the highest cost producers in the industry and therefore any currency appreciation would tend to increase marginal industry costs for those commodities over time. In turn, this cost increase provides a basis for higher global prices.

Long run economic developments and implications for commodity markets

Long Run Growth and Development Entering a New Elevated Phase

It is important to reiterate that the IMF's growth projections for 2008 and 2009 are high when viewed in a historical context. This results from an expected structural shift (rather than cyclical move) in global economic activity based on the ongoing economic emergence of China and other developing economies such as India. Indeed, the expected shift would take world growth to levels not seen since the period of rapid growth and reconstruction in OECD countries just after the Second World War. The longer term implications of this shift for commodity markets are potentially profound.

Developing world's share of the world economy is expected to almost double



Source: *World Bank for base 2005 data; Global Insight for growth estimates to 2025; Rio Tinto estimates for 2050 data*

Our revised analysis of longer run Chinese growth prospects suggests that GDP growth can be expected to average levels approaching 9 per cent per annum in the period to 2015 providing a sustained basis for strong commodity demand growth. In a similar vein, a recent study carried out by the Development Research Centre under China's State Council concluded that China's industrialization stage will last into the 2020's with potential GDP growth rate at around 10 per cent in the period to 2015 and 8 per cent from 2015 to 2020. A study by Australian National University academics, Garnaut and Song, suggests that China is reaching a 'turning point' in its growth creating potential for highly resource intensive growth in excess of 10 per cent over the next two decades.

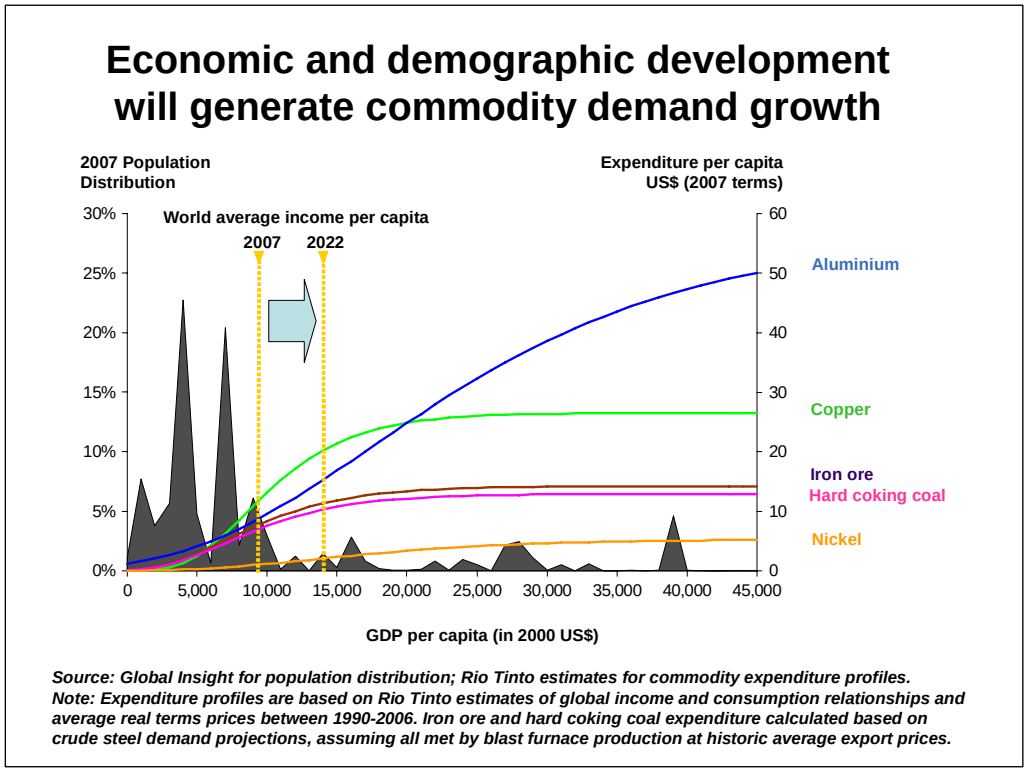
Indian growth has lagged behind China's despite both countries having had similar per capita incomes in 1980. In more recent years Indian growth has accelerated and importantly it has become less variable. Studies by Rio Tinto suggest that India has the potential to grow

at a sustained rate of around 10 per cent for at least a decade if key economic reforms are undertaken. Studies by banking research groups produce similar results with long run growth potential estimated to be in the 8 per cent-10 per cent range[8]. Most of this research points out that continued reforms that free up the ability of Indian industry to respond to price signals remain crucial both to allow more rapid allocation of resources to their most profitable uses and reduce inflationary risks. In India's case it is arguable that the turning point favouring highly resource intensive growth, identified for China by Garnaut and Song, is still to be reached.

Commodity demand expected to grow strongly

The shift toward faster and more resource intensive global growth led by developing countries has led to strong rises in commodity demand over recent years. But per capita consumption remains relatively low in those countries suggesting scope for strong growth well into the future. For example, while China accounted for 60-90 per cent of the increase in global demand for steel, aluminium and copper between 2000 and 2006 its per capita consumption of those metals remains well below that of many OECD countries[9]. For example in 2006 Chinese per capita steel consumption was about 60 per cent of that in the OECD average while its per capita copper and aluminium consumption was at around one-third of OECD levels. The implication is that Chinese demand for these commodities – and associated raw material inputs - has substantial scope to continue to grow rapidly for some time. Indian per capita consumption is a fraction even of China's consumption, suggesting scope for rapid sustained demand growth over the longer run.

Empirical analysis based on historical patterns of commodity consumption and differences in commodity consumption between countries shows a relationship between per capita incomes and commodity consumption – typically known as 'commodity S-curves'. The S-curves suggest that as incomes grow per capita consumption of commodities increases. At first growth is more rapid as economies industrialise, build urban environments and commercial infrastructure and then growth slows for rich countries as consumption per head approaches saturation. Such S-curves are shown for a range of commodities in the graph below.



The analysis shows that per capita consumption of aluminium, copper and steel making raw materials tend to pick up at a relatively early stage of industrial development. For aluminium the empirical analysis also suggests that demand in developed countries has not yet achieved saturation implying scope for more broadly based future per capita global consumption growth. For commodities such as iron ore and coking coal it is important to recognise that the S curves are for total consumption and not for consumption of seaborne material. So, for countries in which domestic production of raw materials is constrained, growth prospects for imports of seaborne materials may be greater than for demand in aggregate.

The chart shows that the largest proportion of the world's population has low average per capita rates of commodity consumption consistent with relatively low incomes. As per capita incomes grow larger numbers of people will consume increasing commodity volumes and aggregate global consumption of commodities can be expected to rise at a fast rate. For example, based on the S-curve analysis and assuming a plausible positive scenario for global growth over the next 2 to 3 decades, the seaborne iron ore market could triple in size relative to today's level.

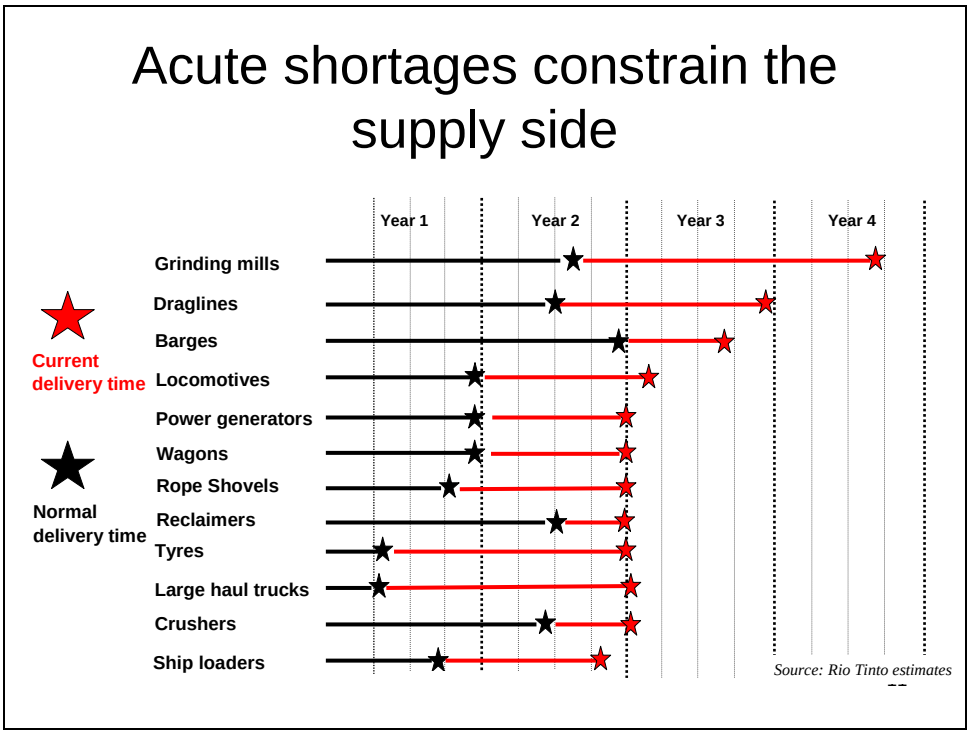
Of course the analysis does not suggest that demand will increase at a steady rate over time. Macroeconomic cyclicality along with stocking and destocking patterns can be expected to play major roles in determining demand outcomes for different commodities in any given year. For example, in China's case with virtually all sectors of the economy growing rapidly, there is a chance that developments in some parts of the economy could move out of phase with developments in other parts. This suggests a possibility that at times economic imbalances could emerge, generating cycles of strong growth and capacity building followed by periods of slower growth, catch up and consolidation. The implication is that Chinese growth and associated commodity demand growth can be expected to have a cyclical pattern over time.

Supplies are stretched and capacity expansions have been delayed

The supply side of the mining industry continues to face challenges in its response to fast demand growth. These challenges have been exacerbated by a prolonged period of underinvestment throughout the sector due to slow demand and low prices during the 1990's and into the early 2000's. As a result, the industry entered the current cycle with reduced capabilities at all stages of project development, from exploration through to construction and operations. In this setting, the industry has become increasingly stretched in its attempt to meet stronger demand and in many cases there is little slack in the system to compensate for disruptions such as those related to events of nature and downtime for maintenance.

There are few signs that constraints faced by the supply side are easing in the short term - as indicated for example by shipping freight rates which have reached new record levels in recent months. Operating and capital costs have continued to rise in 2007 and supply has once again underperformed significantly especially in the copper market.

Some of the supply challenges are medium term in nature. These are typically related to: increased demand for materials and equipment, leading to higher input costs and longer lead times; and bottlenecks in supporting infrastructure (ports, rail and shipping).



Other constraints will take much longer to address. First, the industry is moving increasingly toward the development of resources that in the past were either considered to be too complex or low-grade or in regions with high country risks and poor infrastructure. This is presenting challenges to mining companies not only because new skills and technologies are required to develop those resources, but also because of the increased capital intensity and delivery risks associated with many such projects. Second, the industry and its suppliers and contractors are facing acute shortages in the labour market - especially in relation to skilled professionals such as experienced mining engineers with project management experience - leading to increased project costs and delays.

Importantly the mining industry is not alone in the struggle to access material and human resources. The upstream and downstream oil sector as well as the chemical industry have also stepped up their capital spending plans in recent years and are competing for similar parts and equipment, construction workers and the services of EPCM contractors. The competitive environment for such inputs has led to capital cost escalation for mining projects and longer lead times to deliver new capacity. As a result, the commodity prices required to induce development of future resources are likely to face upward pressure.

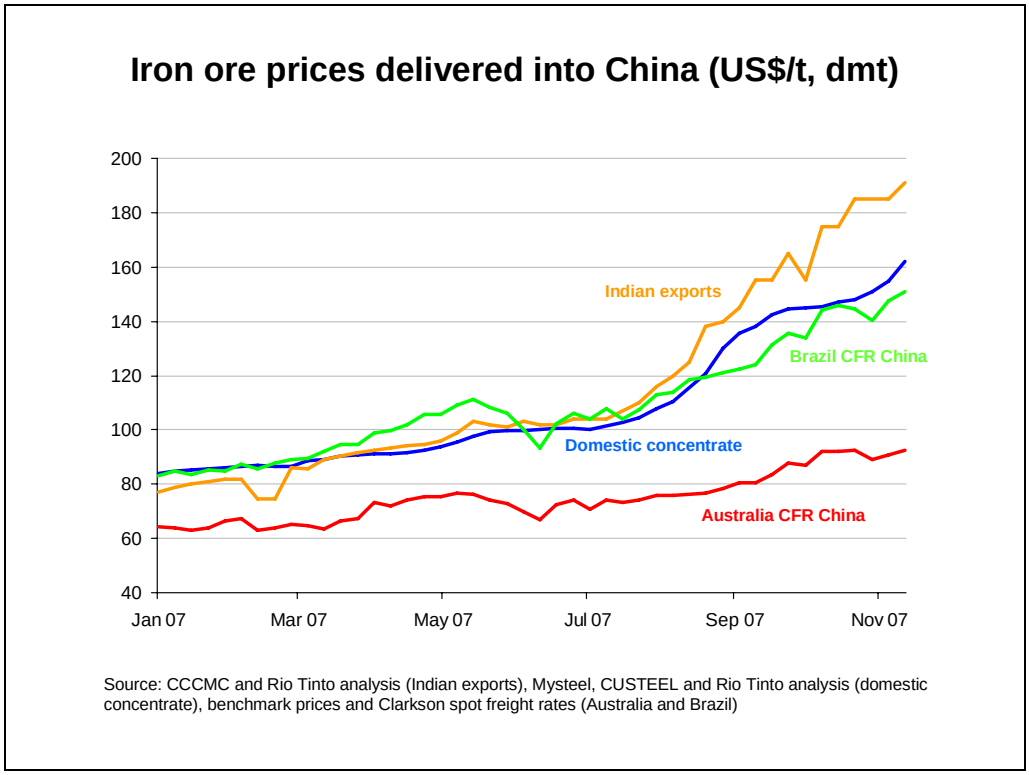
Natural resources constraints facing the mining industry extend to its access to supporting resources such as energy and water. In this context, environmental considerations in the development of new projects present a key set of long-term resource related challenges. Additionally, it is becoming apparent that regulatory approvals are becoming an increasingly significant barrier to rapid supply expansion. Such constraints are likely to persist and perhaps become more significant over the longer term.

Commodity case studies

We present case studies relating to markets for aluminium, copper and iron ore – three commodities that are expected to be drivers of the industrialisation and urbanisation process in developing countries.

Iron ore

Current pressures in the iron ore market are intense as reflected by spot prices, which have increased sharply over the last several months. Spot Indian ores are currently selling in China at now at around $190/tonne, double their price at the start of the year. After taking into account current freight rates, Australian fine ores sold at benchmark prices (of around $50/tonne) trade at a substantial discount to these spot prices. Brazilian ores, which have significantly higher transportation costs to the growing Asian market, sell at a lower but still significant discount[10].



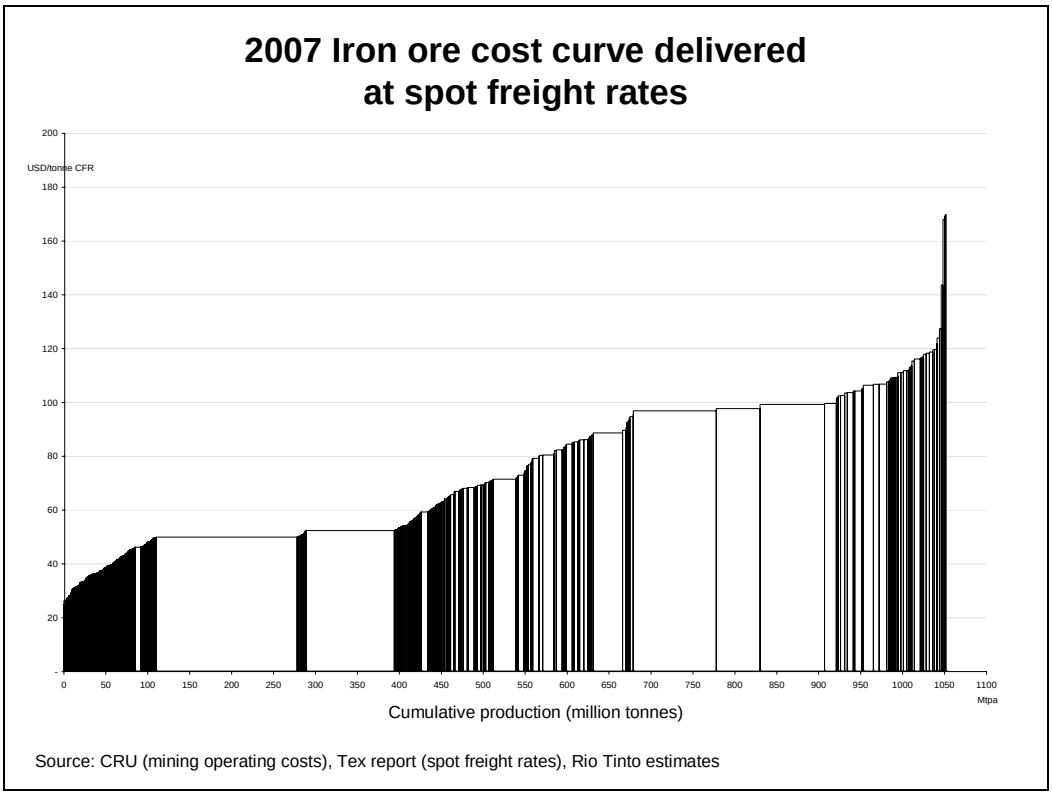
Source: CCCMC and Rio Tinto analysis (Indian exports), Mysteel, CUSTEEL and Rio Tinto analysis (domestic concentrate), benchmark prices and Clarkson spot freight rates (Australia and Brazil)

On the demand side, steel production has grown rapidly leading to strong growth in iron ore trade. Chinese crude steel production has continued to rise by over 18 per cent y-o-y despite the levying of export taxes[11]. While these taxes and the weaker US economy have discouraged exports, this has been more than offset by renewed strength in domestic demand. Evidence of this is suggested by domestic Chinese steel prices which reached a new high in mid-October.

Strong demand for iron ore is not limited to China, however. Annual Japanese crude steel output this year is expected to hit a new record level for the first time in 33 years and the German Steel Federation has recently raised its forecast of domestic steel production for this year. While North American steel producers have cut back output this has little impact on the seaborne iron ore market as nearly all domestic production relies on either domestic ores or scrap.

Increases in demand for iron ore have continued to outpace the ability of low cost producers to add additional supply. Over the first three quarters of the year Chinese iron ore imports rose by 15 per cent[12] – less than the rise in steel production This means that in high-grade equivalent terms the amount of Chinese iron ore production required to meet domestic demand is expected to be around 350 million tonnes this year. Much of this is produced at a relatively high cost. Chinese costs (in US dollar terms) have also been affected by a strengthening RMB and this pressure is expected to persist while the RMB remains

undervalued. At the same time, as well as having to mine lower grade ores, there is an increasing reliance on new more remote and therefore more expensive supply from the far north eastern parts of China. Costs of Indian ores have also increased due to new taxes and a progressively strengthening rupee. There has only been limited progress on the major infrastructure investments required in India to make its exports more competitive and at the same time exports compete against strongly rising domestic demand for ores. Most importantly the escalation in freight rates has substantially increased the cost of landing ore in Asian markets from all destinations. The overall implication is that current high prices have, in all probability, been supported by a rising and steepening industry marginal cost structure.



Over the longer run, continued strong growth in demand for steel in developing countries and developed parts of the Middle East is expected to result in substantial growth in seaborne iron ore trade over the next two decades. Given the large volumes of high cost production currently in operation and expectations for continued demand growth, any reversion of prices to lower long run levels can be expected to take place over an extended period. Additionally it is expected that a substantial amount of high cost production from China and India will continue to be required to meet growing demand over the long term. This strongly suggests the possibility of higher long run prices and margins for the traditional lower cost producers.

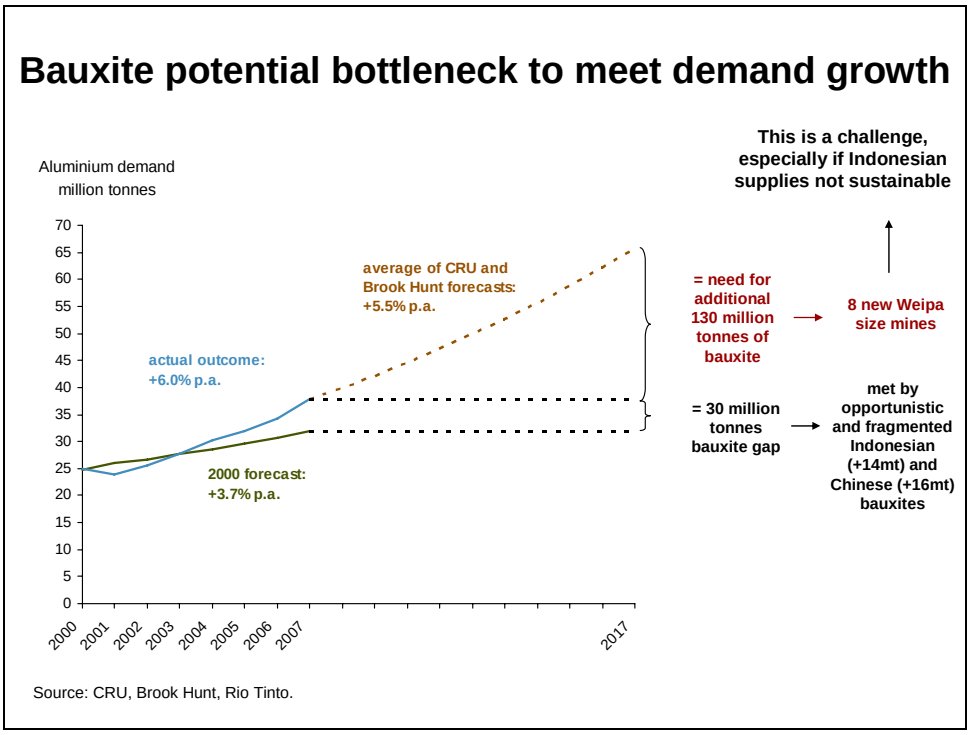
Aluminium

Spot aluminium prices have moderated by about 10 per cent since the middle of 2007 and are currently moving in the range of $2450/t-$2550/t[13]. Prices at around these levels are supported by production costs at the highest cost smelters. Forward prices have increased in relation to spot prices reflecting a market expectation that production with high marginal costs could be required to meet demand for primary metal over the medium term.

Aluminium has experienced the fastest consumption growth of all non-ferrous metals over the past five years and it is forecast to continue to enjoy one of the most rapid growth profiles over the next two of decades. CRU projects consumption to grow by more than 140 per cent over the period to 2030[14]. One reason for the recent growth is that China's economic development is highly aluminium intensive. But at the same time there have been worldwide gains in intensity of use and favorable substitution across a wide range of applications.

The strong and sustained growth in aluminium demand is starting to stretch the resource base that has been the foundation of the development of the aluminium industry - large-scale good-quality bauxite deposits and competitively priced stranded energy.

In the case of bauxite the escalation in demand for aluminium is being met increasingly from high cost and low-scale bauxite deposits in China and opportunistic mining operations in Indonesia. Such sources of supply are unlikely to provide a long term solution for the industry's rapidly growing bauxite needs and have already led to stronger prices for traded ore. This implies that significant investment in new large scale bauxite mines are likely to be required if the industry is to meet demand projections.



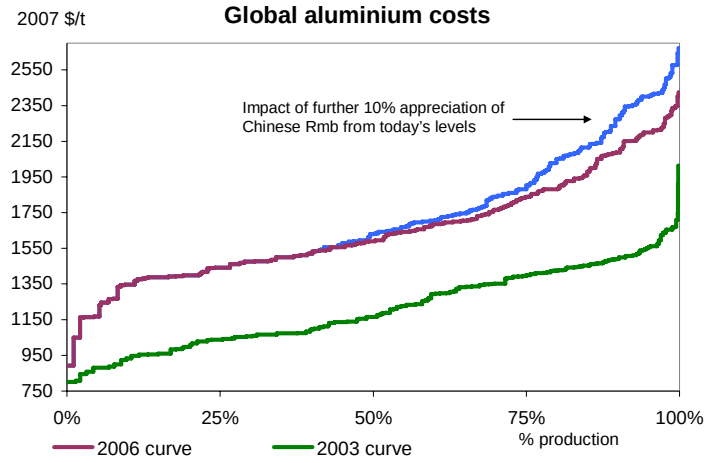
Meanwhile, high energy prices combined with a greater integration between regional energy markets through the development of LNG and gas-to-liquids projects could increase the costs of power available to greenfield smelters around the world. Together with a likely growing trend towards the introduction of pricing mechanisms or tax regimes for carbon emissions, sustainable stranded hydropower sources have become more valuable. This in turn may increase the value of existing aluminium capacity linked to such power sources.

In the context of growing demand and constrained supply, the long run pricing environment for the industry will be heavily influenced by the evolution of costs. Turning first to alumina, refineries relying on imported bauxite supplies, such as in Europe and the US Gulf coast, have traditionally occupied the top-end of the alumina cost curve. High energy prices and rising delivered bauxite costs have increased the competitive disadvantage of these refineries over the past five years. The Chinese industry is currently adding significant non-

integrated alumina capacity drawing on its capital cost advantage. These refineries are rapidly joining US and European alumina refineries toward the top of the cost curve. The resulting increase in the marginal cost of production means that alumina prices are unlikely to revert to the lower levels implied by long run historical trends even if some higher cost integrated capacity is eventually replaced by lower cost production.

As with alumina, in the case of aluminium new Chinese smelters are fundamentally changing the shape of the industry cost curve. The rapid increase in Chinese smelting capacity since the start of this decade reflects the moderate barriers to entry in building smelters in China due to low capital costs and short build times. However, this new capacity has come in at the top-end of the operating cost curve mainly reflecting relatively high power costs. Consequently, the industry aluminium cost curve has shifted up since 2003 and become steeper. This has provided a new significantly higher base for prices.

Aluminium costs under upward pressure



Source: CRU for 2003 and 2006 cost estimates, Rio Tinto estimates of 10% Rmb appreciation impact.

A key point to note is that the gradual appreciation of the Chinese currency should also translate into higher US dollar production costs for Chinese smelters – all other things being equal. To illustrate this point, the effect of a further 10 per cent appreciation of the Chinese RMB on the aluminium cost curve is shown on the chart above. With Chinese smelters predominantly in the third and fourth quartiles, the top end of the curve would shift up in such a scenario creating an even higher basis for aluminium prices and higher margins for smelters in the lower cost quartiles.

Copper

Copper stocks have been at critically low levels since a surge in consumption in 2004 depleted available inventories. From that point, stocks have been constrained by supply's inability to match a stronger underlying demand growth trend related mainly to Chinese growth. Reflecting the tight market situation, copper prices are currently moving in the range of $6400/t-$7000/t[15] or about three times higher than their average level through the 1990s and well above levels achieved in the early part of this decade.

Unlike for iron ore and aluminium, the scope for opportunistic and high-cost sources of supplies to help bridge supply shortages has been limited for copper. Current prices are therefore significantly above marginal costs of supply. Short term copper prices are instead supported by the need to induce those with the least 'willingness to pay' for copper to reduce their consumption. In this context most of the switch away from copper has so far occurred in the plumbing sector to the advantage of plastics. This means that prices could remain near current levels as long as production growth continues to under-perform against the underlying demand trend creating a need to ration supplies.

In terms of demand, most analysts are projecting flat copper consumption outside of China in 2007. But within China copper consumption growth is projected to grow by 15 per cent this year. Calculations of apparent demand are pointing to growth well in excess of that number, although this is thought to reflect the reversal of a destocking phase in China during 2006. Overall global demand is expected to record its strongest growth since 2004, rising this year by about 3.5-4.0 per cent[16]. Looking forward, even with a projection of high underlying average demand growth in China, demand for material can be expected to fluctuate unpredictably over periods of months on stocking and destocking cycles generating price volatility.

On the supply side copper miners have faced many of the challenges and bottlenecks discussed earlier. Strikes and unforeseen disruptions from weather related events and accidents have also affected the performance of existing copper mines. It is estimated by Brook Hunt that actual global mine output over the past three years has underperformed market expectations by a cumulative 2.5 to 3 million tonnes of copper. This is equivalent to annual losses of 4 per cent to 6 per cent which compare with losses in normal years closer to 2 per cent.

The medium term outlook for copper will be highly dependent on whether disruptions continue to run at high levels. Third quarter production reports from copper mining companies suggest that this remains an ongoing issue. In addition recent reports have pointed to potential shortages of sulphuric acid which could constrain SxEw operations in the short term. This source of supply has accounted for a high proportion of primary production growth over the past two years.

The influence of investment funds activity could also be a factor affecting medium term prices in the copper market. In particular, some analysts are suggesting that additional demand associated with long only funds means that stocks levels associated with a market in equilibrium will need to be higher than in the past. In any case, the likely continued importance of investment funds in exchange traded commodity markets means that large price movements could take place on the back of commodity specific speculative shifts or broader shifts in investor sentiment - well in advance of any fundamental change in physical markets.

Looking to the long run, CRU projects that copper demand will more than double over the next 25 years. Growth prospects are based on the expected resource intensive development of economies such as China and the associated investment in power distribution networks and other infrastructure. Additionally, in a high-energy price and carbon conscious world copper can be expected to benefit from any global drive for increased energy efficiencies and any shift towards the development of local distribution networks around sources of renewable energy.

Ultimately, the industry should be able to surmount bottlenecks in equipment and supplies. However, some of the supply challenges are likely to be of a longer-term nature. These include declining ore grades, an increasing shift towards underground operations and the need for the industry to access and develop deposits in countries with higher risk profiles

such as the DRC. Meanwhile upward pressure on capital costs for copper projects is likely to remain. This suggests that future long run prices and margins may be sustainable at levels well above long run historical averages without encouraging excess capacity.

Historically copper prices have tended to trend towards the industry's marginal cash cost of production. But reflecting the cointegrated nature of costs and prices, cash costs have continued to move up driven by higher labour rates and bonuses, increased royalty payments, and stronger prices for supplies, services and energy. Exchange rate changes have also been significant in key copper mining regions, exacerbating the upward pressure on cost. Overall, cost increases have been felt more strongly at the margin and we estimate 9th decile costs to be back near or even above levels last seen at the start of the previous decade. While some of the recent cost pressures are likely to subside in the longer term, we believe that, as for many other commodities, a structural shift in the copper cost curve has occurred supporting an expectation of significantly higher long run prices than would be implied by historical trends.

Conclusion - faster long run average demand growth, extended medium term price elevation and higher long run prices

Continued firm global economic activity led by rapid resource intensive growth in China is expected to support strong increases in demand for most metals and minerals over 2008 and 2009. At the same time with low stocks and a likely continuation of supply side difficulties, most commodity prices can be expected to average well above their long run trend over this period. It is too early to suggest that the price cycle has peaked across the range of commodities.

While the central case is positive, it is important to remain mindful of macro-economic risks especially relating to US housing and credit markets. However it is also important not to exaggerate these risks as our modelling suggests that they may not have a significant impact on the developing economies that have been the growth engines of commodity demand. It is also important to keep in mind that price movements from month to month will be influenced by stocking and destocking and investment funds' activities that may be only indirectly related to economic growth.

Over the longer run strong resource intensive growth from China, India and other developing countries should continue to provide momentum to commodity demand. Indeed, recent history and the IMF's projections for future growth would suggest that we are currently going through a period of global growth not seen since the period of fast growth and reconstruction in OECD economies following the Second World War. The implications for commodity markets are profound.

In time production can be expected to expand to meet faster growth in demand at more sustainable prices. However, it is expected that prices of many minerals and metals will remain elevated above trend for longer than has been the case in the past because of constraints on the speed with which production capacity can be expanded over the next few years. Also most prices are likely to assume higher levels than has been the case historically due to structural increases in industry marginal costs.

Sources:

1: IMF World Economic Outlook, October 2007

2: Global Insight, Interim China forecasts, November 2007

3: Global Insight, Interim USA forecasts, November 2007

4: Cabinet Office, Government of Japan for historical quarterly GDP growth estimates, Development of real GDP, November 2007

5: Global Insight, Interim Japan forecasts, November 2007

6: Global Insight, Interim India forecasts, November 2007

7: Data downloaded from Ecowin database, November 2007

8: Lehman Brothers, India: Everything to play for, October 2007; Goldman Sachs, India's Rising Growth Potential, January 2007

9: References to steel from IISI, World Steel in Figures, September 2007; for references to aluminium CRU The Long Term Outlook for Aluminium, 2007 Edition; for references to copper CRU Copper Quarterly, October 2007

10: CCCMC and Rio Tinto analysis (Indian exports), Mysteel, CUSTEEL and Rio Tinto analysis (domestic concentrate), benchmark prices and Clarksonspot freight rates (Australia and Brazil).

11: IISI Media Release, November 2007

12: CRU Steelmaking raw materials Monitor, November 2007

13: LME data downloaded from Ecowin database, November 2007

14: CRU The Long Term Outlook for Aluminium, 2007 Edition

15: LME data downloaded from Ecowin database, November 2007

16: CRU Copper Quarterly, October 2007

About Rio Tinto

Rio Tinto is a leading international mining group headquartered in the UK, combining Rio Tinto plc, a London listed company, and Rio Tinto Limited, which is listed on the Australian Securities Exchange.

Rio Tinto's business is finding, mining, and processing mineral resources. Major products are aluminium, copper, diamonds, energy (coal and uranium), gold, industrial minerals (borax, titanium dioxide, salt, talc) and iron ore. Activities span the world but are strongly represented in Australia and North America with significant businesses in South America, Asia, Europe and southern Africa.

For further information, please contact:

Media Relations, London

Christina Mills
Office: +44 (0) 20 8080 1306
Mobile: +44 (0) 7825 275 605

Nick Cobban
Office: +44 (0) 20 8080 1305
Mobile: +44 (0) 7920 041 003

Media Relations, Australia

Ian Head
Office: +61 (0) 3 9283 3620
Mobile: +61 (0) 408 360 101

Amanda Buckley
Office: +61 (0) 3 9283 3627
Mobile: +61 (0) 419 801 349

Media Relations, US

Nancy Ives
Mobile: +1 619 540 3751

Media Relations, Canada

Bryan Tucker
Office: +1 514 848 8511

Investor Relations, London

Nigel Jones
Office: +44 (0) 20 7753 2401
Mobile: +44 (0) 7917 227 365

David Ovington
Office: +44 (0) 20 7753 2326
Mobile: +44 (0) 7920 010 978

Investor Relations, Australia

Dave Skinner
Office: +61 (0) 3 9283 3628
Mobile: +61 (0) 408 335 309

Investor Relations, North America

Jason Combes
Office: +1 (0) 801 685 4535
Mobile: +1 (0) 801 558 2645

Email: questions@riotinto.com

Website: www.riotinto.com
High resolution photographs available at: www.newscast.co.uk

Forward looking statements

This article includes “forward-looking statements”. All statements other than statements of historical facts included in this article, including, without limitation, any regarding Rio Tinto’s financial position, business strategy, plans and objectives of management for future operations (including development plans and objectives relating to Rio Tinto’s products), are forward-looking statements. Such forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of Rio Tinto, or industry results, to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements.

Such forward-looking statements are based on numerous assumptions regarding Rio Tinto’s present and future business strategies and the environment in which Rio Tinto will operate in the future. Among the important factors that could cause Rio Tinto’s actual results, performance or achievements to differ materially from those in the forward-looking statements include, among others, levels of demand and market prices, the ability to produce and transport products profitably, the impact of foreign currency exchange rates on market prices and operating costs, operational problems, political uncertainty and economic

conditions in relevant areas of the world, the actions of competitors, activities by governmental authorities such as changes in taxation or regulation and such other risk factors identified in Rio Tinto's most recent Annual Report on Form 20-F filed with the United States Securities and Exchange Commission (the "SEC") or Form 6-Ks furnished to the SEC. Forward-looking statements should, therefore, be construed in light of such risk factors and undue reliance should not be placed on forward-looking statements. These forward-looking statements speak only as of the date of this article. Rio Tinto expressly disclaims any obligation or undertaking (except as required by applicable law, the City Code on Takeovers and Mergers (the “Takeover Code”), the UK Listing Rules, the Disclosure and Transparency Rules of the Financial Services Authority and the Listing Rules of the Australian Securities Exchange) to release publicly any updates or revisions to any forward-looking statement contained herein to reflect any change in Rio Tinto’s expectations with regard thereto or any change in events, conditions or circumstances on which any such statement is based.

Nothing in this article should be interpreted to mean that future earnings per share of Rio Tinto plc or Rio Tinto Limited will necessarily match or exceed its historical published earnings per share.

Subject to the requirements of the Takeover Code, none of Rio Tinto, any of its officers or any person named in this article with their consent or any person involved in the preparation of this article makes any representation or warranty (either express or implied) or gives any assurance that the implied values, anticipated results, performance or achievements expressed or implied in forward-looking statements contained in this article will be achieved.